INITIAL STRUCTURAL STABILITY ASSESSMENT
PLANT DANIEL ASH POND B
MISSISSIPPI 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 periodic structural stability assessments. 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.

The CCR surface impoundment located at Mississippi Power Company's Plant Daniel that is referred to as the Plant Daniel Bottom Ash Pond, or Ash Pond B, is located on Plant Daniel property, north of Moss Point and Escatawpa, Mississippi. The CCR surface impoundment is formed by an engineered perimeter embankment. The embankment foundation soils generally consist of stable medium dense to dense silty sands and stiff silts and clays.

Slope protection against surface erosion consists of the upper reaches of the synthetic liner, with grassy vegetation above on the interior dikes, with grassy vegetation and some riprap and gravel on the exterior slopes. Wave action is not a concern at this site due to the characteristics of the impoundment (limited width and length). The pond is not operated in such a manner as to normally be subjected to rapid drawdown conditions, and the interior of the pond is lined with 60-mil HDPE, so rapid drawdown would not adversely affect the embankment soils.

The perimeter embankments have been properly constructed using mechanical stabilization, compacted to a density sufficient to withstand the range of loading conditions. Embankment soils generally consist of compacted silts, clays and clayey sands.

Vegetated slopes of the dike are properly maintained to a manageable height to allow for periodic inspection.

Pond B serves primarily as a process pond for the management of bottom ash. Ash is sluiced to the north end of the pond where it is allowed to decant. Decant water is returned to the plant via a pumping

station located on the south end of the pond and/or is pumped to the Plant Daniel Discharge Canal through a permitted NPDES discharge. There are no spillways or discharge pipes over or that penetrate through the perimeter embankments. The water levels within in the pond are maintained such that there is sufficient storage to adequately manage inflow during and following the 1,000-yr design storm.

The eastern downstream slopes of the embankment are potentially subject to inundation from the adjacent plant discharge canal. However, the water level in the adjoining canal remains fairly constant, and there is little velocity fluctuation. Riprap protection has been established on the exterior surface impoundment slopes for erosion protection. Visual observations indicate the riprap is performing as intended.

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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