## LOCATION RESTRICTION DEMONSTRATION UNSTABLE AREAS (40 C.F.R. 257.64) PLANT CRIST GYPSUM STORAGE AREA GULF POWER COMPANY

EPA's "Disposal of Coal Combustion Residuals from Electric Utilities" Final Rule (40 C.F.R. Part 257 and Part 261) requires the owner or operator of an existing CCR surface impoundment to make a demonstration that the facility meets certain location restrictions. Per §257.64, the owner or operator must demonstrate that the facility is not located within an unstable area; otherwise, a demonstration must be made that recognized and generally accepted good engineering practices have been incorporated into the design of the CCR unit to ensure that the integrity of the structural components of the CCR unit will not be disrupted. An unstable area is defined as a location that is susceptible to natural or human induced events or forces capable of impairing the integrity, including structural components of some or all of the CCR unit that are responsible for preventing releases from such unit. [40 C.F.R. §257.53]. Unstable areas can include poor foundation conditions, areas susceptible to mass movements and karst terrains.

The CCR surface impoundment, referred to as the Gypsum Storage Area, is located at Gulf Power Company's Plant Crist, north of Pensacola, Florida. The lined CCR surface impoundment is formed by engineered perimeter embankments. The perimeter embankments have been properly constructed using mechanical stabilization and compacted to a density sufficient to withstand the range of loading conditions. Factor of safety assessments have indicated that the embankments meet the minimum factors of safety required under the rule. The foundations beneath the embankments and the CCR unit generally consist of stable and competent medium stiff to stiff clays and medium dense to dense clayey sands and sand. Foundation preparation prior to embankment and liner construction included removal of lower consistency fine-grained soils and loose coarse grained soils. Site geologic units consist of terrace and recent terrace sedimentary soils (including the Citronelle Formation). The CCR unit is not located within active karst terrain (limestone is 200+feet deep at this site), and the site and its surrounding areas are not subject to mass movements (e.g. landslides). Therefore, the Plant Crist Gypsum Storage Area is not located in an unstable area.

I hereby certify that the unstable area location restriction demonstration was conducted in accordance with and meets the requirements of 40 C.F.R. §257.64.

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