LOCATION RESTRICTION DEMONSTRATION UNSTABLE AREAS (40 C.F.R. PART 257.64) PLANT BOWEN ASH POND 1 (AP-1) GEORGIA POWER COMPANY

EPA's "Disposal of Coal Combustion Residuals from Electric Utilities Final Rule" (40 C.F.R. Part 257.64), requires that existing CCR surface impoundments must not be located in an unstable area unless 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. The USEPA CCR Rule defines an unstable area 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." Unstable areas may include poor foundation soil conditions, areas susceptible to mass movements, and geological conditions such as karst terrains.

The USGS National Karst Map (2014) shows locations of karst and potential karst areas in soluble rocks in the contiguous United States. The map identifies the area in the vicinity of AP-1 as "carbonate rocks at or near the land surface (occurring in a humid climate)". AP-1 is underlain primarily by Knox Group dolomite and to a lesser degree, Newala limestone, which are potentially affected by karst processes. Georgia Power expects to begin closure of AP-1 in 2019. The closure plan for AP-1 includes engineering measures to ensure that the integrity of the structural components of the CCR unit will be maintained after closure.

Based on geologic and hydrogeologic data, Georgia Power's Plant Bowen AP-1, under current operating conditions, does not meet the location restriction requirements of 40 C.F.R. 257.64(a).

Cuneyt Gokmen, P.E.

Licensed State of GA, PE No. 29504

10/17/2018