



**STRUCTURAL STABILITY ASSESSMENT**  
**40 C.F.R. SECTION 257. 73(d)**  
**PLANT SCHOLZ CLOSED ASH POND**  
**FLORIDA POWER & LIGHT COMPANY**

The United States Environmental Protection Agency's (EPA) "Disposal of Coal Combustion Residuals Landfills and Surface Impoundments" Final Rule (40 Code of Federal Regulations (C.F.R.) Part 257, Subpart D), requires the owner or operator of an existing coal combustion residuals (CCR) surface impoundment to conduct an initial and periodic structural stability assessment in accordance with 40 C.F.R. §257.73(d). The owner or operator must document whether the design, construction, operation, and maintenance of the CCR unit is consistent with generally accepted good engineering practices for the maximum volume of CCR and CCR wastewater which can be impounded therein.

This Structural Stability Assessment was prepared for Florida Power & Light Company's (FPL's) Plant Scholz Closed Ash Pond (Closed Ash Pond), located in Sneads, Florida. The CCR in the Closed Ash Pond has been excavated, dewatered, consolidated, relocated, and capped in the northern area of the former Ash Pond. The Ash Pond has been closed in place in accordance with 40 C.F.R. §257.102(d) and no longer receives CCR or non-CCR wastewater.

The Closed Pond is located in the Gulf Coastal Plain Geologic province, a wedge of sediments over the crystalline "basement" rock trending from zero thickness at the fall line to over 10,000 ft at the coast. Based on USGA and FGS mapping reports, the Cambrian Age metamorphic and igneous, crystalline "basement" rock is over 11,000 feet deep at the site. For purposes of this demonstration, the lowest level considered is the Miocene Age Bruce Creek Limestone, which is described as light colored, granular, partly indurated limestone. This is overlain by the Intercoastal Formation, comprised of calcareous sands and recent (Pliocene to Holocene) sandy sediments.

The embankments of the Closed Ash Pond are formed by an engineered perimeter containment berm surrounding the unit, consisting of locally borrowed, clean compacted soils of the Gulf Coastal Plain Geologic Province (namely dense clean sands (USCS SP, SP-SM) and stiff silty sands (SM)), and compacted mixtures of bottom ash, fly ash, and the aforementioned soils with trace gravel sized bottom ash and pyrite. The subsurface near the perimeter berms of the Closed Ash Pond consists of the following major layers:

- Sandy fill soils and ash-soil mixtures
- Organic Soils
- Interlayered clean sands with clayey and silty sands
- Clayey Soils (in select areas)
- Silty Sands
- Limestone

The engineered perimeter containment berm surrounding the unit was constructed using mechanical stabilization during operation. These embankments are founded on stable foundation soils, that do not meet the definition of Unstable Areas (40 C.F.R. §257.53 and 257.64). Slopes and other cover components effectively meet the requirements of 40 C.F.R. §257.73(d). Downstream embankment slopes are covered with the ClosureTurf™

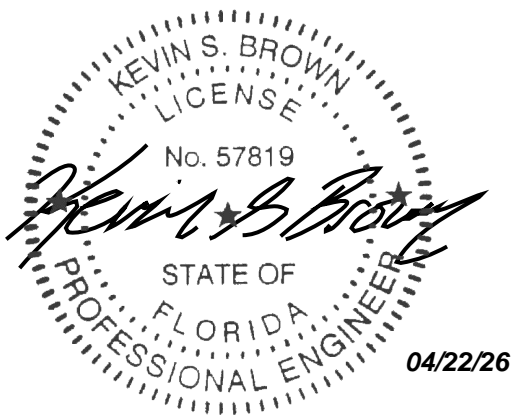
system and well maintained. The Closed Ash Pond has been converted during closure from an impoundment by dewatering, consolidating and compacting CCR over which final cover has been placed. Therefore, there are no concerns with wave action or rapid drawdown.

Because the CCR has been dewatered, consolidated, and capped with a stormwater detention pond located between the CCR embankment and the river, there is a very low probability of inundation of the downstream slopes of the embankment due to surge from tropical storms. Currently, the embankment is protected from erosion in the event of inundation by the ClosureTurf™ system and rip rap cover at the downstream toe of the embankment.

Engineering analyses for the Closed Ash Pond were evaluated for the required loading conditions using its final conditions reflective of the post closure configuration of the site.

### CERTIFICATION

I certify that this Structural Stability Assessment for the Plant Scholz Closed Ash Pond was conducted in accordance with 40 C.F.R. § 257.73(d).



*This item has been digitally signed and sealed by Kevin Brown on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies*

Kevin S. Brown, P.E.  
Florida Licensed Professional Engineer No. 57819  
WSP USA, Inc.