



**REPORT**

**2022 Annual Inspection Report**  
*for CCR Surface Impoundment*

*Plant Smith Ash Pond*  
*Southport, Florida*

Submitted to:

**Florida Power & Light Company**

Submitted by:

**WSP Inc.**

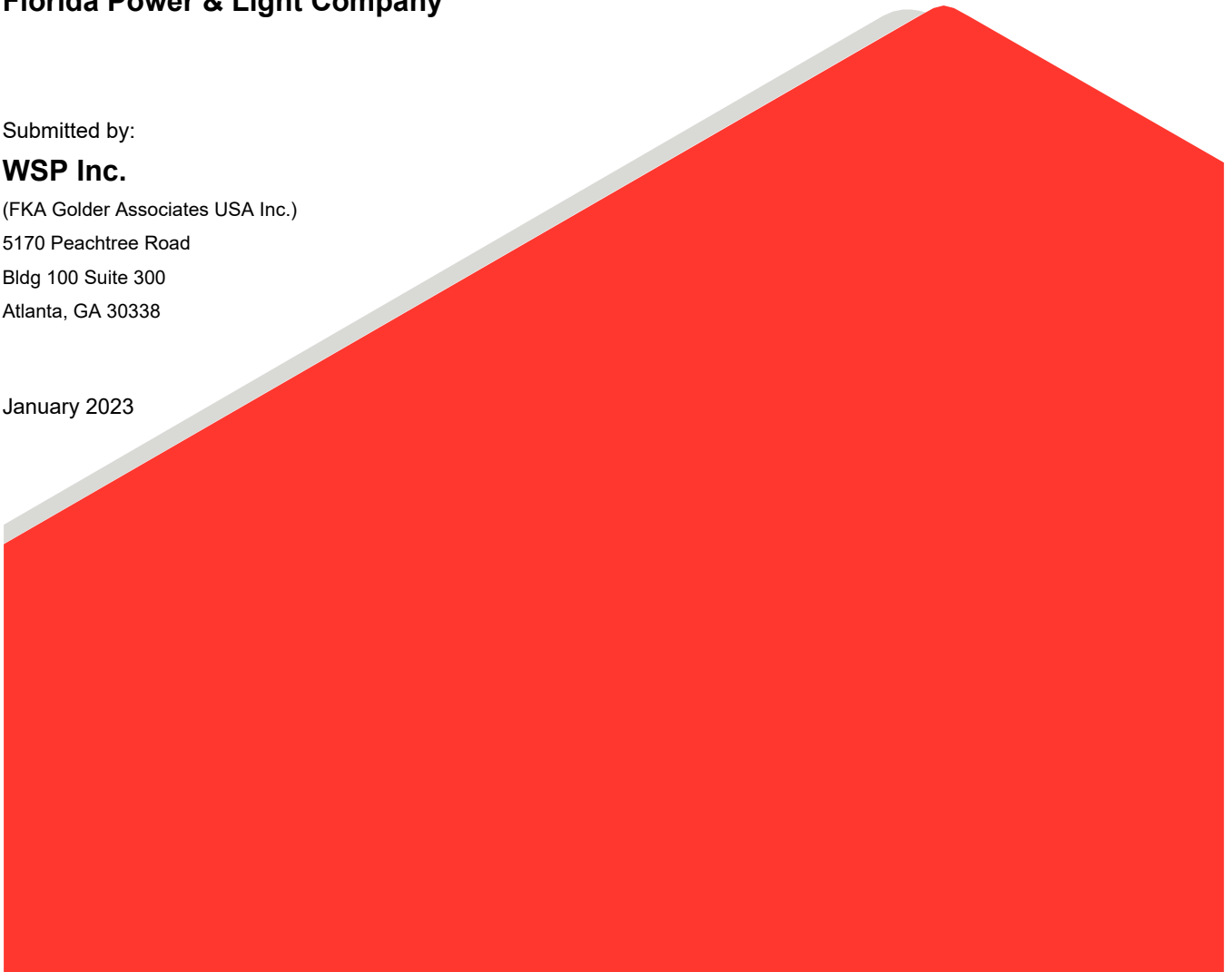
(FKA Golder Associates USA Inc.)

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January 2023



## Distribution List

Florida Power & Light Company

WSP USA Inc.

## INTRODUCTION

WSP USA Inc. (WSP; formerly known as Golder Associates USA Inc. – Member of WSP) performed the annual inspection for a coal combustion residuals (CCR) surface impoundment at the Plant Smith Ash Pond, located in Southport, Florida. This facility is owned and operated by Florida Power & Light Company (FPL). The inspection, conducted on November 17, 2022, and this report are intended to meet the requirements of 40 CFR §257.83(b). WSP's inspection was performed by Kevin S. Brown, PE.

The Plant Smith Ash Pond is currently being consolidated and closed in place in accordance with 40 CFR 257.102(d) and no longer receives CCR.

## REVIEW OF AVAILABLE INFORMATION – §257.83(b)1(i)

In accordance with §257.83(b)1(i), WSP reviewed available information regarding the status and conditions of the Plant Smith Ash Pond. The documents reviewed included:

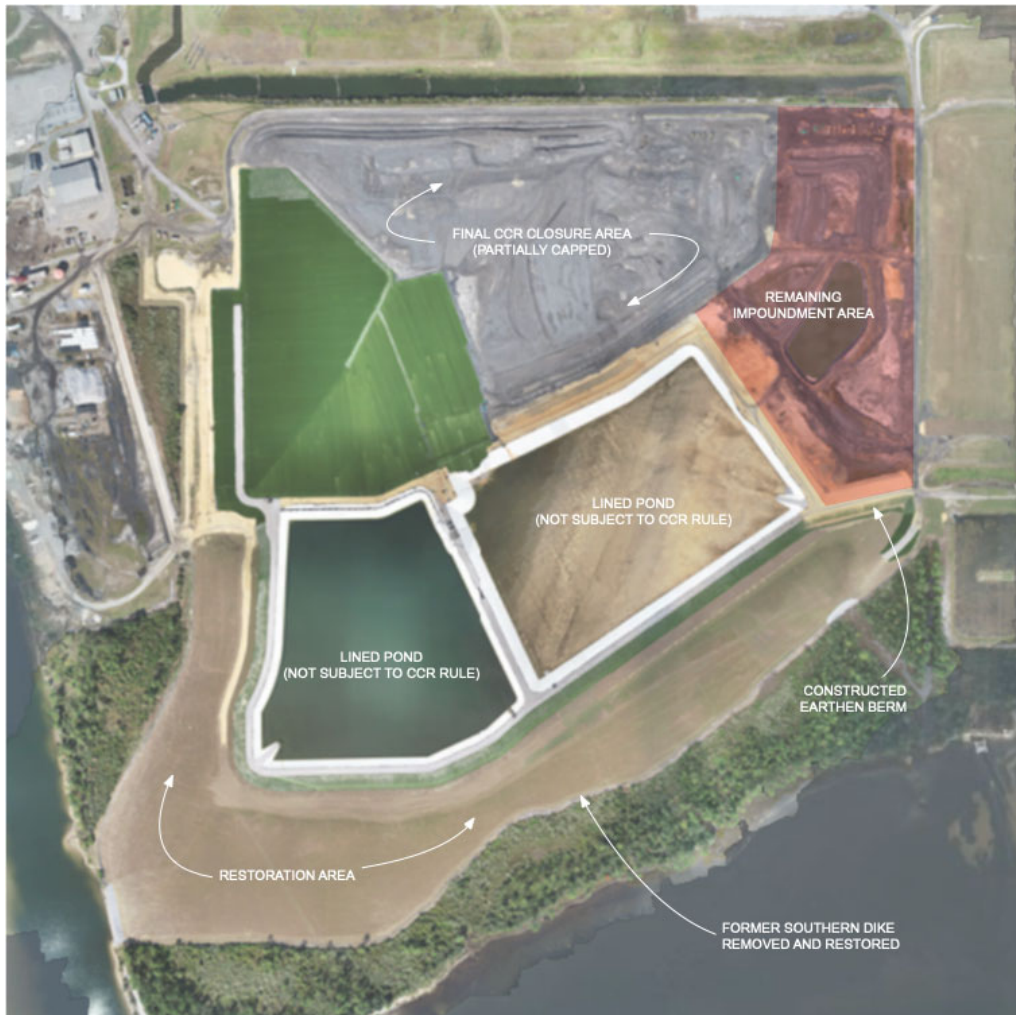
- Closure Plan (Rev. 01) – Plant Smith Ash Pond
- Structural Stability Assessment (Rev. 01) – Plant Smith Ash Pond
- Safety Factor Assessment (Rev. 01) – Plant Smith Ash Pond
- Hazard Potential Classification (Rev. 01) – Plant Smith Ash Pond
- Inflow Design Flood Control System Plan (2021) – Plant Smith Ash Pond
- History of Construction (2021) – Plant Smith Ash Pond
- Report of Annual Inspection 2021 – Plant Smith Ash Pond

## INSPECTION SUMMARY – §257.83(b)1(ii) AND §257.83(b)1(iii)

WSP conducted a visual inspection of the Plant Smith Ash Pond on November 17, 2022. The inspection evaluated the geometry and conditions of the impoundment, exterior slopes, erosion and vegetative conditions, stormwater management controls, placement of coal combustion residuals (CCR), slope stability, and any other signs of distress or malfunction.

## CHANGES IN GEOMETRY – §257.83(b)2(i)

The remaining portion of the south dike has been removed as part of closure activities (See Figure 1). Calculated storage capacity values incorporate this change in geometry. In addition, the final closure area elevation has increased to 73 ft. mean sea level (MSL) due to closure construction. This elevation is anticipated to be the maximum elevation of the placed and compacted CCR.



**Figure 1: Aerial Image of Plant Smith Impoundment dated October 28, 2022**

### **INSTRUMENTATION – §257.83(b)2(ii)**

There is currently no instrumentation equipment installed at Plant Smith impoundment. As such, there are no recorded readings of instruments since the previous annual inspection.

### **APPROXIMATE WATER AND CCR VOLUME– §257.83(b)2(iii)**

The approximate minimum and maximum depths of impounded water as of the previous annual inspection, as well as the present depth of impounded water as of November 17, 2022, are presented in Table 1 below. Water elevation estimated from aerial survey dated October 31, 2022 and / or confirmed per field observations in November 2022.

**Table 1: Impounded Water at Plant Smith Impoundment – 2022**

Minimum Depth:	< 2'
Minimum Elevation:	2.4'
Maximum Depth:	10'
Maximum Elevation:	15'
Present Depth:	< 2'
Present Elevation:	2.4'

The approximate minimum and maximum depths of CCR as of the previous annual inspection, as well as the present depth of impounded CCR as of November 17, 2022, are presented in Table 2 below. Elevation and depth of CCR includes the area where CCR is being actively placed and compacted per the approved closure plan.

**Table 2: Impounded CCR at Plant Smith Impoundment – 2022**

Minimum Depth:	0'
Minimum Elevation:	3.5'
Maximum Depth:	78' (placed and compacted CCR)
Maximum Elevation:	73' (top of placed and compacted CCR)
Present Depth:	78' (placed and compacted CCR)
Present Elevation:	73' (top of placed and compacted CCR)

## **STORAGE CAPACITY– §257.83(b)2(iv)**

The impoundment capacity of the Plant Smith impoundment at the time of the inspection is estimated to be approximately 180,000 cubic yards. Depths, elevations, and storage capacity are estimates derived by qualified personnel from available information and do not include the area above the original CCR elevation where CCR is being placed and compacted per the approved closure plan, e.g., the storage capacity does not include placed and compacted CCR. The volume is based on the area noted on Figure 1 as remaining impoundment area.

## **APPROXIMATE CCR AND WATER VOLUME – §257.83(b)2(v)**

The volume of materials in the Plant Smith impoundment at the time of the inspection is estimated to be approximately 61,000 cubic yards of impounded water and 486,000 cubic yards of impounded CCR, which remains to be relocated to the final closure area. The total volume CCR within the limits of the Plant Smith Ash Pond is 3.9 million cubic yards. This includes CCR that is being placed and compacted per the approved closure plan.

## **STRUCTURAL WEAKNESS AND DISRUPTING CONDITIONS – §257.83(b)2(vi)**

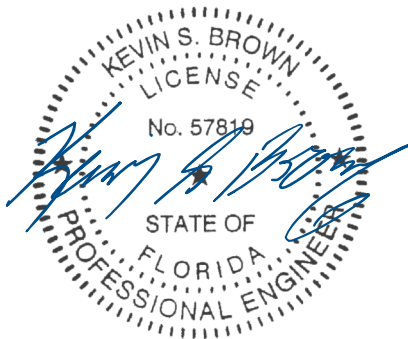
No indications of actual or potential structural weakness were noted during the November 16, 2022 inspection or during the review of available information.

## **CHANGES AFFECTING STABILITY OR OPERATIONS – §257.83(b)2(vii)**

The site is currently undergoing closure construction that involves consolidating the CCR footprint to a smaller area. Construction completed since the last inspection has included complete removal of the southeastern and southern containment dikes and restoration of those areas with placement of clean fill and vegetation. Process water from plant operations is currently stored within a lined pond in the southwest area of the site where CCR was previously removed. This storage area is not subjected to the CCR rule. A permanent earthen dike has been constructed on the eastern side of the site for future management of plant wastewater and stormwater. This dike currently serves as containment of contact water and CCR stockpiles during ongoing construction. These features are noted in the facility aerial photograph in Figure 1.

## **CERTIFICATION**

Based on the review of the available information noted above and of the observations and results of the annual inspection, it is my professional opinion that this report has been completed in accordance with 40 CFR 257.83(b).



1/19/2023

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Kevin S. Brown, PE  
Director, Civil Engineer  
Florida Professional Engineer No. 57819

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Date

KSB/WRP/lis

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