GROUNDWATER MONITORING SYSTEM CERTIFICATION
40 Code of Federal Regulations Section 257.91(f)
PLANT SMITH ASH POND
FLORIDA POWER & LIGHT COMPANY

Arcadis U.S., Inc. ("Consultant") has been retained by Florida Power & Light Company ("FPL") to certify that the groundwater monitoring system for the coal combustion residuals ("CCR") unit identified as the Ash Pond at the Smith Electric Generating Plant ("Plant Smith" or "facility") meets that groundwater monitoring system design and construction requirements set out in 40 Code of Federal Regulations ("C.F.R.") § 257.91.

1.0 REGULATORY BACKGROUND

Pursuant to 40 C.F.R. § 257.90(a),(b), owners and operators of new and existing CCR landfills, and new and existing CCR surface impoundments, and all lateral expansions of a CCR unit must install a groundwater monitoring system. 40 C.F.R. § 257.91 requires owners and operators of a CCR unit to install a groundwater monitoring system that, relying on site-specific technical information, consists of a sufficient number of wells, installed at appropriate locations and depths, to yield groundwater samples from the uppermost aquifer that accurately represent the quality of background groundwater that has not been affected by leakage from the CCR unit and accurately represent the quality of groundwater passing the waste boundary of the CCR unit.

Pursuant to 40 C.F.R. § 257.91(f), the owner or operator must obtain a certification from a qualified professional engineer or geologist stating that the groundwater monitoring system has been designed and constructed to meet the requirements of 40 C.F.R. § 257.91, including the performance standards specified in 40 C.F.R. § 257.91(a), based on the site-specific information specified in 40 C.F.R. § 257.91(b).

2.0 SITE BACKGROUND

Plant Smith is owned by FPL, and is located at 4300 Highway 2300 in Southport, Bay County, Florida. This region has relatively flat terrain that gently slopes toward the Gulf of Mexico, with elevations typically less than 15 feet above mean sea level ("amsl"). Areas along the southern and western boundaries of the site and adjacent to North Bay and Alligator Bayou are at or near sea level. Otherwise, it is surrounded by undeveloped land on its north, east, and west, while North Bay lies to the south. Alligator Bayou extends into the western portion of the property from North Bay, which is connected to the Gulf of Mexico via St. Andrews Pass, approximately 9 miles south of the facility.

Plant Smith became operational in 1965. The Ash Pond was constructed at that time to manage coal ash generated by the facility's coal-fired power units. It was constructed east of Alligator Bayou as a surface impoundment that received coal ash produced during coal combustion. During its operation, CCR was periodically removed as it approached capacity, and transferred to the Ash Disposal Area (ADA) on its east side. The Ash Pond remained in operation until 2016, when coal-fired generation at the facility ceased. Since that time, no additional CCR has been deposited into the Ash Pond, and it has been designated as a CCR unit under 40 C.F.R. Part 257, Subpart D ("CCR Rule").

The surficial aquifer at Plant Smith is generally unconfined and composed of fine to coarse-grained sands, silty sands, and interbedded clay and silt layers. The base of the surficial aquifer dips to the south from approximately 20 feet below ground surface ("bgs") on the northern side of Plant Smith, to approximately 30 feet bgs near North Bay to the south, with the Jackson Bluff Formation underneath.

The groundwater flow direction in the Plant Smith area is generally west toward Alligator Bayou, south toward North Bay, and east toward the undeveloped area, with some localized mounding of groundwater around the ADA and extending into the Ash Pond. Groundwater monitoring at Plant Smith has identified statistically significant increases (SSIs) in Appendix III constituents and statistically significant levels (SSLs) of Appendix IV constituents including combined radium, arsenic, and lithium at concentrations exceeding groundwater protection standards (GWPS), which triggered initiation of a corrective action program. Closure activities have been completed, and corrective action continues for the Ash Pond, in accordance with the *Selection of Remedy Report,* (Geosyntec, 2022). Groundwater monitoring is ongoing in accordance with the *Corrective Action Groundwater Monitoring Plan,* ("CAMP") (Geosyntec, 2022).

3.0 GROUNDWATER MONITORING NETWORK

The groundwater monitoring system for the Ash Pond, an existing CCR unit at Plant Smith, was originally certified in October 2017. Since that time, based on continuing evaluation of hydrogeologic and chemical data, a revised groundwater monitoring system for the Ash Pond is outlined and recertified herein. The recertified groundwater monitoring system discussed below

meets the performance standards in 40 C.F.R. § 257.91(a) (outlined above in Section 1.0). This recertification supersedes the October 17, 2017, certification of the groundwater monitoring system for the Ash Pond.

The recertified groundwater monitoring system locations were chosen to monitor background and downgradient locations within the uppermost aquifer at the Ash Pond based on prevailing groundwater flow directions. A map depicting the recertified monitoring system is included in Figure 3-1. The recertified system includes the following wells:

- **Background wells:** MW-02 and MW-12
- **Downgradient wells:** MW-06R, MW-07R, MW-08R, MW-09R, MW-10R, MW-11R, MW-13R, MW-14R3, MW-15, MW-16, MW-17, and MW-18

Well construction details for the monitoring wells that are included in the groundwater monitoring system are provided in the attached Table 3-1. All the monitoring wells are constructed with 10-feet of 2-inch diameter Schedule 40 polyvinyl chloride (PVC) 0.010-inch slotted well screen and attached to an appropriate length of 2-inch diameter Schedule 40 PVC riser.

4.0 CERTIFICATION

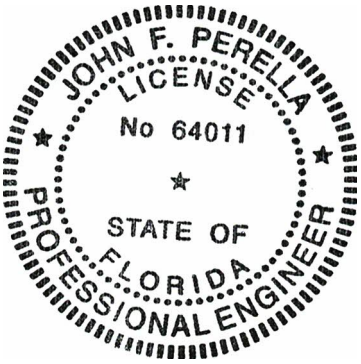
The above evaluation of the groundwater monitoring system for the Ash Pond confirms that there is sufficient information available to complete the certification required under 40 C.F.R. § 257.91(f). Signature of the Consultant's authorized representative on this document represents that to the best of the Consultant's knowledge, information, and belief in the exercise of their professional judgment, it is the Consultant's professional opinion that the aforementioned information is accurate as of the date of such signature. Any opinion or decisions by consultant are made on the basis of Consultant's experience, qualifications, and professional judgment and are not to be construed as warranties or guaranties. In addition, opinions relating to environmental, geological, and geotechnical conditions or other estimates are based on available data, and actual conditions may vary from those encountered at the times and locations where data are obtained, despite the use of due care.

I, John F. Perella, P.E., being a Licensed Professional Engineer, in accordance with the Florida Board of Professional Engineers, do hereby certify to the best of my knowledge, information, and belief, that the groundwater monitoring system for the CCR unit that is the subject of this certification dated March 26,2026 has been designed and constructed to meet the requirements of 40 C.F.R. § 257.91, and that this certification is true and correct and has been prepared in accordance with generally accepted good engineering practices.

John F Perella

Digitally signed by: John F Perella
DN: CN = John F Perella C = US
O = Florida
Date: 2026.03.26 13:27:42 -04'00'

SIGNATURE _____ DATE March 26, 2026



This document has been digitally signed and sealed by John F. Perella, P.E. on 3/26/2026.

Signature must be verified on any electronic copies.

Table

Table 3-1
Ash Pond CCR Well Construction Details
Florida Power & Light Company
Plant Lansing Smith
Southport, Florida

Monitoring Well ID	Installation Date	Northing [1]	Easting [1]	Ground Surface Elevation[2]	Top of Casing Elevation[2]	Total Well Depth (feet btoc)	Screen Elevation[2]		Designation
							Top	Bottom	
Ash Pond CCR Monitoring Network									
MW-02	11/10/2015	464419.66	1592286.78	10.26	13.29	26.00	-2.71	-12.71	Background
MW-12	11/11/2015	462362.00	1589322.96	8.21	11.14	31.70	-10.56	-20.56	Background
MW-06R[3]	3/6/2025	463932.78	1591438.23	11.76	15.17	27.70	-3.24	-13.24	Downgradient
MW-07R[3]	3/5/2025	463890.48	1592780.19	11.57	15.01	27.99	-3.43	-13.43	Downgradient
MW-08R[3]	3/7/2022	461469.18	1590480.47	9.58	12.55	31.00	-8.35	-18.35	Downgradient
MW-09R[3]	3/7/2022	460664.53	1590695.87	5.53	8.82	25.30	-6.48	-16.48	Downgradient
MW-10R[3]	3/8/2022	461237.65	1592097.00	4.68	7.83	26.80	-8.99	-18.99	Downgradient
MW-11R[3]	8/17/2022	462151.51	1593304.67	10.96	14.11	31.30	-7.04	-17.04	Downgradient
MW-13R[3]	11/2/2021	462672.78	1590519.02	20.19	23.25	40.50	-7.50	-17.50	Downgradient
MW-14R3 [4]	7/18/2024	460902.94	1590171.23	6.48	9.53	23.00	-6.52	-16.52	Downgradient
MW-15	8/6/2025	463317.19	1590535.08	12.58	15.92	34.12	-7.42	-17.42	Downgradient
MW-16	8/5/2025	462030.73	1590574.33	9.20	12.48	27.97	-5.80	-15.80	Downgradient
MW-17	8/5/2025	460964.58	1591415.27	5.36	9.03	28.38	-9.64	-19.64	Downgradient
MW-18	8/5/2025	461703.28	1592686.00	5.28	8.64	28.50	-9.72	-19.72	Downgradient

Notes:
1. Northing and easting are in feet relative to the State Plane Florida North Datum of 1983.
2. Elevations are in feet above mean sea level relative to the North American Vertical Datum of 1988.
3. Wells installed to replace previously abandoned wells are indicated with an "R" in the well ID.
4. Monitoring well MW-14R3 was installed in July 2024 to replace MW-14.

Acronyms and Abbreviations:
btoc = below top of casing
ID = identification

Figure

ROMAN RD.

MW-02

PERIMETER ROAD

CANAL

PERIMETER ROAD

OUTERMOTE DITCH

INTERMOTE DITCH

PERIMETER ROAD

INTERMOTE CANAL

CANAL

MW-06R

MW-07R

ACCESS ROAD

INTERMOTE CANAL

INTERMOTE DITCH

OUTERMOTE DITCH

MW-15

APPROXIMATE SLURRY WALL ALIGNMENT

MW-13R

ASH POND
(Currently Regulated CCR Unit)

MW-12

MW-11R

MW-16

MW-18

MW-08R

MW-10R

MW-14R3

MW-17

MW-09R

CANAL

PERIMETER ROAD

PERIMETER ROAD

N

0 500' 1,000'

GRAPHIC SCALE

BASE MAP SOURCE:
1. Aerial image from Google Earth Pro, 10/2025.
2. Parcel boundaries from Bay County Property Appraiser GIS database.

LEGEND

- PARCEL BOUNDARY
- FPL PARCEL BOUNDARY
- GENERATING FACILITY BOUNDARY
- ASH POND WASTE BOUNDARY
- ROAD/TRAIL
- BACKGROUND MONITOR WELL LOCATION
- DOWN GRADIENT MONITOR WELL LOCATION

FLORIDA POWER & LIGHT COMPANY
SMITH GENERATING PLANT
4300 C.R. 2300, SOUTHPORT, BAY COUNTY, FLORIDA

ASH POND CCR MONITORING NETWORK

ARCADIS

FIGURE
3-1