Gainesville Regional Utilities
Deerhaven Generating Station

Coal Combustion Residual Units
Annual Inspection Report
(December 6, 2022 – December 5, 2023)

Prepared by:

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1 Introduction

The Deerhaven Generating Station (site) has two coal combustion residuals (CCR) units: a surface impoundment system and a landfill. The surface impoundment system (SIS) is comprised of two ash ponds (i.e., Ash Cell #1, and Ash Cell #2) located within the same slurry wall containment system. These cells received cooling tower blowdown and bottom ash (when generated) sluice water through a piping network that allows discharge to either cell from Unit #2, which is a natural gas and coal-fired combustion unit. Unit #2 was retrofitted in 2021 to primarily burn natural gas. It has ability to fire coal, as needed. From January through November 2023, coal constituted approximately 3.1% by heat input for Unit #2. Because of the recent design and operating modifications, the provisions of the CCR regulations are not applicable to the residuals generated from the facility.

Cooling tower blowdown represents the largest discharge stream routed to these cells, and sluiced ash constituted a relatively small portion of the discharges received by these cells. As the water moves through the ash cells, bottom ash settles, and the decant water gravity drains to adjacent pump back ponds (i.e., Pump Back Cell #1, Pump Back Cell #2) through subsurface culverts, which run beneath the embankment separating each ash cell from its adjacent pump back cell. The culvert inlets are enclosed within stoplog structures (located inside the ash cells near the embankment separating each ash cell from the adjacent pump back pond) to minimize ash entering the culverts. The adjacent pump back cells are used exclusively to store the decant water before treatment and reuse in plant operations. The slurry wall containment system is located beneath the peripheral embankment, encompassing the SIS, the pump back cells, and two front-end treatment (FET) lime sludge cells. The slurry wall is keyed into an existing, underlying clay layer. Figure 1 presents a layout view of the SIS and the two adjacent pump back cells at the site. The locations of several piezometers, which are used to qualitatively monitor for seepage through the exterior embankments, are also shown.

Figure 1. Layout of the CCR Surface Impoundment System, Adjacent Pump Back Cells, and Piezometers

GRU upgraded the Unit 2 boiler to primarily burn natural gas, and with the implementation of these upgrades, the provisions of the CCR rule do not apply to the process water streams generated at the facility. Therefore, GRU decided to close the ash cells by removing in-place CCRs and decontaminating these cells. GRU plans to repurpose the ash cells for managing the facility-generated process water streams, which are not subject to the CCR rule. GRU submitted a closure permit application to the Florida Department of Environmental Protection in August 2022 and was issued an approved closure permit for the SIS on April 7, 2023. Ash Cell #1 was closed by removing the deposited CCRs and decontaminating in 2023. After the closure, Ash Cell #1 has been used to manage the site's process water. GRU ceased CCR and non-CCR wastestreams placement in Ash Cell #2 on October 1, 2023. GRU is actively removing the CCRs from Ash Cell #2 for closure.

The CCR landfill primarily accepts flue gas desulfurization byproducts from the Unit #2 scrubbing process. The landfill also accepts the bottom ash periodically excavated from the SIS and lime sludge that is periodically removed from front-end treatment sludge ponds. Occasionally, fly ash is also deposited in the landfill when it is not hauled offsite for beneficial use. The landfill is comprised of four cells (i.e., Cells 1-4) sequentially arranged from west to east. The bottom of each landfill cell is graded to drain contact water (i.e., water that contacts CCR) intercepted by the cell bottom. In addition, perforated PVC pipes were installed at the base of the cells. Specifically, these pipes are located in the middle of each cell and between each cell to intercept and gravity-drain the contact water to a drainage ditch located along the northern toe of the landfill (i.e., the Northern Drainage Ditch).

Similar to the SIS, a slurry wall containment system, which is keyed into an existing underlying clay layer, encompasses the landfill and the Northern Drainage Ditch. A series of stormwater ditches outside the slurry wall route stormwater to either a wetland area located just west of the landfill or to a stormwater pond located southeast of the landfill. Currently, Cells 1, 2, and 3 of the CCR landfill are actively receiving CCR and other non-CCR materials. Figure 2 presents an aerial layout of the CCR landfill at the site, facing west.

Figure 2. Aerial Image of the CCR Landfill Facing West

GRU submitted an operations permit application for the CCR landfill to the Florida Department of Environmental Protection in September 2022 and was issued an approved operations permit on June 14, 2023 for the landfill.

Title 40 Code of Federal Regulations (CFR) 257.83(b) and 257.84(b) requires that CCR units be annually inspected by a qualified professional engineer to ensure that the design, construction, operation, and maintenance of each CCR unit are consistent with recognized and generally accepted good engineering standards. 40 CFR 257.53 defines a qualified professional engineer as "an individual who is licensed by a state as a Professional Engineer to practice one or more disciplines of engineering and who is qualified by education, technical knowledge, and experience to make the specific technical certifications required under this subpart. Professional engineers making these certifications must be currently licensed in the state where the CCR unit(s) is located". This report was prepared under the supervision of Pradeep Jain, who is a licensed professional engineer in the State of Florida (FL PE License No. 68657).

2 CCR Surface Impoundment System

2.1 Review of Relevant Information

2.1.1 Overview

The following documents have been reviewed by Innovative Waste Consulting Services LLC (IWCS), doing business as Innovative Technical Solutions (ITS), to understand the design and operation of the CCR SIS located at the site while preparing the previous annual inspection reports:

a) Construction drawings for the surface impoundment system certified as conforming to construction records (B&M 1981)

b) Bid documents for the site, including construction specifications for the surface impoundment system (B&M 1980)
c) A Site Certification Application for Unit 2 (RUB 1977)
d) A State of Florida Department of Environmental Regulation Electric Power Plant Site Certification Review FDER (1978)
e) Slope Stability and Liquefaction Potential Analysis, CCR Impoundment System, Deerhaven Generating Station (DGS) (UES 2015)
f) Slope Stability and Liquefaction Potential Analysis, CCR Impoundment System, Deerhaven Generating Station (DGS) (UES 2020a).
g) A topographic survey of the surface impoundment system (DSI 2015)
h) History of Construction – Coal Combustion Residual Surface Impoundment System. Prepared for Gainesville Regional Utilities, Deerhaven Generating Station IWCS (2016).
i) Coal Combustion Residuals (CCR) Surface Impoundment System Hazard Potential Classification (UES 2016a)
j) Coal Combustion Residuals (CCR) Abutment and Base Surface Impoundment System Evaluation (UES 2016b)
k) CCR Surface Impoundment System and Landfill Groundwater Monitoring Systems Design and Construction (UES 2017); UES completed the installation and development of the groundwater monitoring wells around each of the CCR units in March 2017.
l) Coal Combustion Residuals (CCR) Surface Impoundment System and Updated Landfill Groundwater Monitoring Systems Design and Construction UES (2020b)
m) Groundwater Sampling and Analysis Plan for the Coal Combustion Residuals Units (IWCS 2017); the plan provides details on the methodology to be used for sampling and analyzing groundwater data collected from the monitoring well networks of each CCR unit.
n) IWCS (2021). Coal Combustion Residuals Surface Impoundment System Inflow Design Flood Control System Plan, prepared by Innovative Waste Consulting Services LLC for Gainesville Regional Utilities, September 2021.
o) UES (2021a). Coal Combustion Residuals (CCR) Surface Impoundment System Periodic Hazard Potential Classification, prepared by Universal Engineering Services for Gainesville Regional Utilities, September 2021.
p) UES (2021b). Coal Combustion Residuals (CCR) Abutment and Base Surface Impoundment System Periodic Structural Stability Evaluation, prepared by Universal Engineering Services for Gainesville Regional Utilities, September 2021.

Since the last inspection, no modification has been made to the design and operational procedures of the SIS. GRU ceased accepting CCRs and non-CCRs in Ash Cell #1 in October 2021 and completed decontaminating the unit on May 4, 2023. GRU relocated bottom ash from Ash Cell #1 to the onsite CCR landfill and has repurposed the cell to manage process water waste streams; the provisions of CCR regulations do not apply to these water streams. GRU has resumed the SIS closure by decontaminating Ash Cell #2 and is planned to conclude efforts in 2024. The following additional documents developed since the previous annual inspection were reviewed for this report preparation:

a) Fifty-two (52) weekly (7-day) inspection worksheets

b) Twelve (12) monthly (30-day) inspection worksheets
c) ITS (2023). Coal Combustion Residuals Units, Ash Cell #1 Closure Certification Report, prepared by Innovative Technical Solutions, July 2023

2.1.2 Review of Weekly and Monthly Inspection Worksheets

Weekly and monthly inspection worksheets for the CCR SIS have been completed and placed in the operating record since October 19, 2015. ITS reviewed the worksheets for all the weekly and monthly inspections conducted since the previous annual inspection. Documentation reporting that the deficiencies identified during the previous annual inspection have been addressed is available on GRU's publicly accessible internet site.

40 CFR 257.83(a)(1)(i) and (iii) respectively establish maximum time intervals for weekly (i.e., seven days) and monthly (i.e., 30 days) inspections of the SIS. All the weekly inspections were performed within a seven-day time interval. There were five instances where this maximum time interval was exceeded for monthly inspections.

The following unusual conditions were reported in weekly and monthly inspection worksheets covering the current annual inspection period:

a) Elevated Ash Cell Water Levels – The top of the peripheral berm surrounding each of the ash cells is at an elevation of 195 feet, referenced to the National Geodetic Vertical Datum of 1929 (NGVD29). The ash cells are operated with a maximum operating level of 193 feet (NGVD29) to provide 2 feet of freeboard in case of heavy rain/storm events and other contingency events (e.g., during the brine concentrator outage). Water levels higher than 193 ft NGVD29 were observed for eight (8) weekly inspections for Ash Cell #2 during the time period covered by this report. During all weekly inspection events, the water level was reported to be lower than 193 ft NGVD29 for Ash Cell #1.

   For Ash Cell #2, the first incidence of elevated water levels was reported on 2/14/2023 due to unit outages. The water elevation in Ash Cell # 2 was reported to be intermittently above 193 feet (NGVD29) due to lack of storage capacity during cleaning of Ash Cell #1 (during March-May 2023) and outage of the brine concentrator unit (in May 2023). The operators closely monitored pond levels and adjusted pumping to the ponds to expeditiously reduce the ash pond levels during these events.

b) Low Ash Cell Water Levels. The water level in Ash Cell #1 was reported to be low from 4/4/2023 through 5/9/2023 due to the cell closure activities. The water level in Ash Cell #2 was reported to be low since 10/10/2023 due to the cell closure activities

c) Butterfly Valve Failure. The butterfly valve that is used to control the decant water flow from Ash Cell #2 to Pump Back Cell #2 has been reported to be inoperable since 5/5/2021. Repairs to the Ash Cell#2 butterfly valve were completed during 11/21/2023-11/28/2023 after Ash Cell #2 was dewatered for cleaning. The butterfly valve that is used to control the decant water flow from Ash Cell #1 to Pump Back Cell #1 was reported to be inoperable from 3/7/2023 through 5/2/2023. It was repaired during 5/2/2023-5/9/2023.

d) Shrubs or Trees on Armored Inner Slopes (5 instances) – Shrubs/Vegetation on the inner slopes of the Ash Cell #2 was observed to be taller than 2 feet on weekly inspections conducted from 8/22/23 through 9/19/23. Issues related to overgrown shrubs/vegetation were resolved by 9/26/23.

During each monthly inspection, depth-to-liquid readings in the piezometers located on the Ash Cell #1 and Ash Cell #2 embankments were measured. The water levels measured in these piezometers are used to qualitatively assess potential embankment seepage areas; Piezometers P-2, P-3, and P-4 are used to monitor exterior embankments for Ash Cell #1, and P-1 is used to monitor the exterior embankment of Ash Cell #2 (Figure 1). The liquid elevation in the piezometers was compared to the liquid elevation in each adjacent ash pond. Figures 3 and 4 present a comparison of the measured liquid levels for Ash Cell #1 and corresponding piezometers and Ash Cell #2 and corresponding piezometer(s), respectively. The measurements taken by ITS engineers on the day of the annual inspection were within the range of the measurements recorded by GRU during the reporting period.

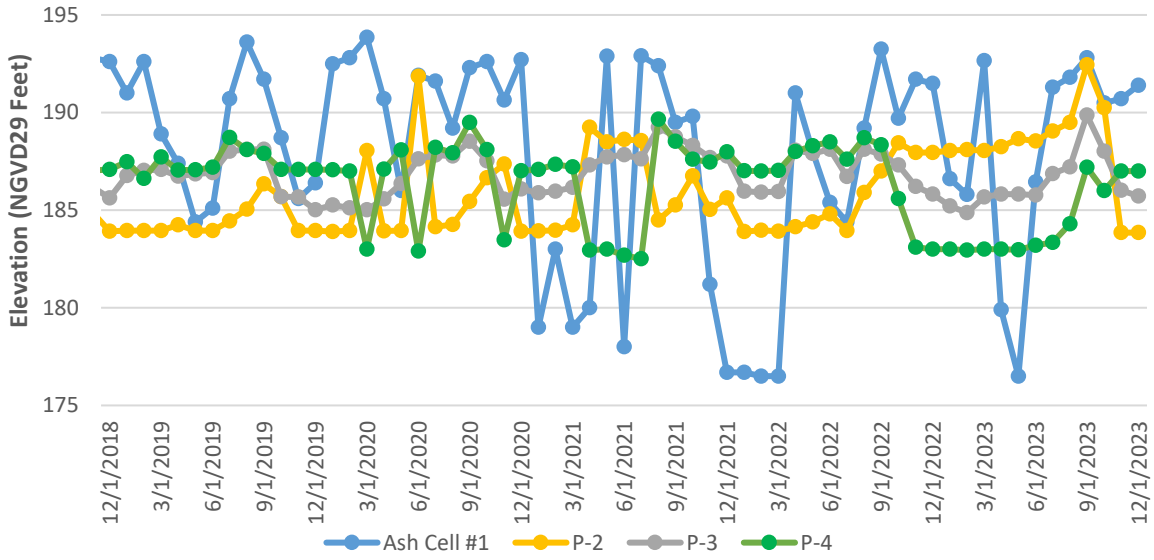

Figure 3. Liquid Elevations for Ash Cell #1 and Piezometers

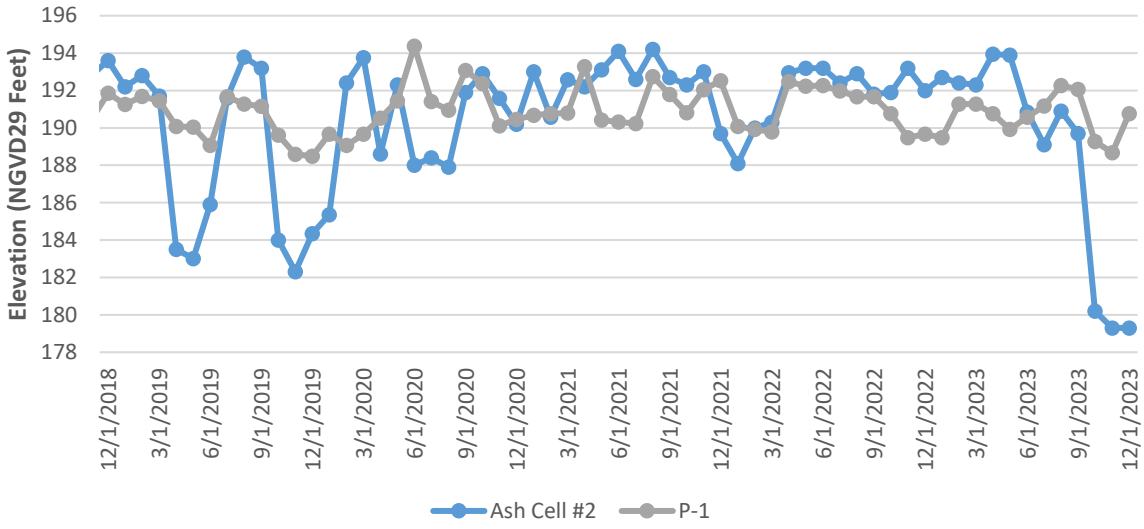

Figure 4. Liquid Elevations for Ash Cell #2 and Piezometer

2.2 Field Inspection

ITS inspected the CCR SIS on December 4, 2023. The following section describes the observations made during the inspection.

2.2.1 Signs of Distress or Malfunction of CCR Unit or Appurtenant Structures

No sign of distress or malfunction was observed for the visible sections of the ash ponds or the stoplog structures. GRU reported that the butterfly valve in Ash Cell #2 had been repaired at the time of the inspection.

2.2.2 Hydraulic Structures

ITS could not inspect the subsurface culverts connecting each ash cell to its adjacent pump back pond as the Ash Cell#1 culverts were submerged below the water levels in the ash pond and pump back pond. Although the water level in Ash Cell #2 was low, the cell bottom was too soft and muddy to walk. Therefore, ITS recommends that GRU conduct a dry/semi-dry inspection of the culverts to assess their structural integrity.

2.2.3 Geometrical Changes of CCR Unit

ITS conducted a topographic survey of select features of the SIS on November 13, 2022. A comparison of the topographic conditions collected during this survey to those observed in the survey conducted by DSI (2015) does not suggest any significant deviations in geometry from those observed during the previous annual inspection. Appendix A includes a comparison between the elevations of the features during this inspection to those presented by DSI (2015). Please note that the surveyed elevations should be considered rough approximations as the survey was not performed by a licensed surveyor.

2.2.4 Instrumentation Locations and Maximum Readings

Apart from a groundwater monitoring system (separately discussed in detail in annual groundwater monitoring and corrective action reports), the piezometers adjacent to each of the two ash ponds are the only instruments used to monitor the SIS. Table 1 presents the location of the piezometers, along with their maximum recorded readings over the last annual inspection period. Please note that the easting and northing coordinates are referenced to US State Plane 1983 Florida North 0903. The maximum reading liquid elevations are referenced to NGVD29. As a point of comparison, the top of the peripheral berm surrounding each of the ash cells is at an elevation of 195 feet NGVD29. The maximum elevations observed during the reporting period for piezometers P-1 and P-4 were within the range of the historical measurements. The maximum elevations observed at P-2 and P-3 were slightly greater than the historical maximum elevation.

Table 1. Location, Type, and Maximum Recorded Readings of Existing Instrumentation

Piezometer	Easting	Northing	Max Elevation (NGVD29)
P-1	2636972.5	284823.8	192.3
P-2	2636725.5	284571.1	192.5
P-3	2636691.7	284443.8	189.9
P-4	2636873.5	284259.3	187.2

2.2.5 Elevation of CCR and Impounded Water

Table 2 presents a comparison of the water levels observed on the day of inspection with the maximum and minimum levels recorded by GRU staff during weekly and monthly inspections; the water levels in the ponds are tracked with a staff gauge painted on one of the concrete walls of the stoplog structure in each ash pond. It should be noted that all liquid depths in each pond were calculated assuming the bottom of the ash ponds is located at 179 feet NGVD29, as indicated in the B&M (1981) drawing set. The surface of the settled bottom ash is not evenly distributed – the elevations presented in Table 2 correspond to the water elevation of the ponds.

Table 2. Maximum, Minimum, and Present Depth and Elevation of CCR and Water

Location	Media	Parameter	Unit	11/13/23	Minimum of the Weekly and Monthly Measurements	Maximum of the Weekly and Monthly Measurements
Ash Cell #1	Water	Elevation	feet (NGVD29)	192.3	176.5	192.8
		Depth	feet	13.3	0	13.8
Ash Cell #2	Water	Elevation	feet (NGVD29)	Cell dewatered	179.3	193.95
		Depth	feet	0	0.3	14.95

2.2.6 Storage Capacity and Volume of CCR and Impounded Water

Based on construction records, it is estimated that the CCR SIS has a total volumetric capacity of 17.3 million gallons (or approximately 85,400 cubic yards), not including the capacity associated with the 2 feet

of freeboard. The provisions of CCR regulations are not applicable to the wastestreams contained in Cell #1.

Although Ash Cell #2 was dewatered at the time of inspection, a topographic survey of the current CCR surface could not be performed to assess its elevation and in-place volume due to soft and muddy conditions. The visual inspection suggests that CCRs occupy ¼ to 1/3 of the pond capacity, equivalent to in-place CCR volume in Ash Cell #2 ranging from 21,400 to 28,500 cubic yards.

2.2.7 Structural Weaknesses and Adverse Conditions

ITS visually inspected the external side slopes of the SIS to identify any potential indicators of structural weakness or any other adverse condition, including signs of erosion, bulging, depressions, cracks, animal forage holes, boils, or excessive, turbid, or sediment-laden seepage. No signs of structural weakness or adverse conditions were observed during the annual inspection of the SIS.

2.2.8 Other Changes Affecting Stability or Operation

The height of grass on the southern and western slopes of the SIS on December 4, 2023 was less than the maximum 6-inch requirement (§257.74(d)(iv)). No other changes or circumstances that may impact the stability or operation of the SIS were noted during the inspection.

3 CCR Landfill

3.1 Review of Relevant Information

The following additional documents (i.e., beyond those reviewed for previous annual inspections) were reviewed by ITS to understand the design and operation of the CCR landfill located at the site while preparing this annual inspection report:

a. A total 52 weekly CCR landfill inspection worksheets were reviewed; these worksheets covered the period from December 12, 2022 through December 4, 2023. 40 CFR 257.84(a)(1)(i) establishes a maximum time interval of 7 days for weekly inspections of the CCR landfill. All 52 weekly CCR landfill inspections were performed without exceeding the maximum time interval.

The worksheets allow the inspector to categorize observations as *Acceptable*, *Area of Concern*, or *Needs Attention*. The *Area of Concern* is defined in the worksheet as "may develop into a *Needs Attention* area if not addressed. Monitor the situation and reevaluate during the next inspection. Address as necessary." It should be noted that an *Area of Concern* is not indicative of a problem but is used to proactively identify and monitor circumstances that have an elevated chance of developing into a problem. *Needs Attention* is defined in the worksheet as "currently or imminently presents a human-health, operation or environmental hazard/problem. Address as soon as possible."

Thirty-two (32) *Needs Attention* observations were reported in the weekly inspection worksheets reviewed for this report. The majority of these observations (20 instances) were because of the high water level in the Northern Drainage Ditch, which was above the underdrains when the water level was high in the Northern Drainage Ditch and the underdrains were underwater and the presence of loose ash piles that were not spread and compacted (8 occasions). Based on supervisor notes included in the inspection

worksheets, it appears that these issues were addressed expeditiously and were resolved as soon as feasible.

The *Needs Attention* observations corresponded to the following four categories:

1) **Water Level Above Underdrain Outlets (20 instances)** – Four underdrain pipes collect and transport CCR contact water to the Northern Drainage Ditch. Multiple events under this category are primarily related to the lack of SIS storage capacity to due the Ash Cells #1 and 2 closure activities. Ash Cell #1 was unavailable to manage the process water until May 2023. The placement of CCR and non-CCR wastestreams in Ash Cell # 2 was ceased by October 1, 2023 for initiating its closure. The high water level in the northern drainage ditch was a frequently occurring issue during the reporting period. On all occasions, the Northern Drainage Ditch was pumped down as soon as feasible following these observations.
2) **Loose Piles of CCR (8 instances)** – Loose piles of CCR accumulated on the landfill surface were observed – these piles have the potential to contribute to dust emissions. The piles were spread and compacted within a week of the observation based on the supervisor's note on the weekly inspections reports.
3) **Overgrown Vegetation (2 instances)** – Vegetation on the side slopes of the CCR landfill was observed to be taller than 6 inches. Issues related to overgrown vegetation were resolved within a week.
4) **Dust Emissions (2 instances)** – Water was sprayed on the access ramps and active area. This issue was resolved the same day.

Twenty-seven (27) "Areas of Concern" were noted. These are listed as follows:

1. **Grass and other vegetation height on external slopes (13 instances).** The vegetation on external side slopes was reported as an area of concern in 13 instances. One of the instances was reported to be due to equipment maintenance.
2. **Bare Spots in Stormwater Drainage Channel (6 instances)** – Bare spot was reported in the southern ditch near LF-3. The issue was resolved by sodding after a seeding attempt failed.
3. **Hay bales condition (6 instances)**. The hay bales were found to be deteriorating and were replaced to address the issue. The hay bales are installed around the downcomer inlets to minimize migration of the CCRs into the Northern Drainage Ditch.
4. **Ponding (1 instance)**. Ponding of water was observed in Cell 4. The explanation was that Cell 4 was being utilized for water storage due to the lack of storage capacity during the Ash Cell #1 closeout.
5. **Downcomer Submerged (1 instance)** – The outlets of the downcomers that drain into the northern drainage ditch were reported to be slightly submerged with water. The drainage ditch was pumped down to address this issue.

Based on supervisor notes included in the inspection worksheets, it appears that these issues were addressed expeditiously and were generally resolved as soon as practically feasible.

3.2 Field Inspection

ITS inspected the CCR landfill on December 4, 2023. The following section describes observations made during the inspection event.

3.2.1 Signs of Distress or Malfunction

Cells 1-4 underdrains appear to be performing as designed, and no submergence was observed (Figure 5).

(a)

(b)

(c) (d)

Figure 5. Condition of Underdrain Outlets of (a) Cell 1, (b) Cell 2, (c) Cell 3, and (d) Cell 4 on December 4, 2023.

3.2.2 Geometrical Changes of CCR Landfill

In accordance with the landfill filling plan, the interior of Cell 1 and Cell 2 and the peripheral berm on the external side slopes of Cell 1 and Cell 2 is progressively raised by approximately 4 feet for each lift of deposited CCR. No changes in the geometry of the landfill indicative of structural instability or weakness were noted. Since the last inspection, no modification has been made to the design and operational procedures of the landfill.

3.2.3 Volume of CCR

ITS conducted a topographic survey of the landfill on November 6, 2023 and used AutoCAD Civil 3D 2013 cut-and-fill procedures to estimate the in-place CCR volume; the landfill bottom elevation was assumed to be 184 feet NGVD29 (as approximately shown in B&M 1981). Approximately 542,300 cubic yards of CCR and other materials (i.e., cover soil, FET lime sludge) have been deposited in the landfill to date. The topographic survey and the estimated in-place volume should be considered as a rough approximation as the survey was not performed by a licensed surveyor.

3.2.4 Structural Weaknesses and Adverse Conditions

ITS performed a visual inspection of all exterior slopes of the CCR landfill for any appearance of actual or potential structural weakness, including signs of erosion, bulging, depressions, cracks, animal forage holes, boils, or excessive, turbid, or sediment-laden seepage. No signs of structural weakness or adverse conditions were observed.

3.2.5 Other Changes Affecting Stability or Operation

Apart from those discussed above, no other changes or circumstances that may impact the stability or operation of the landfill were noted during the inspection.

3.2.6 Miscellaneous

Ponding was observed in Cell 4. GRU indicated that Cell 4 is used for storing process water due to a lack of storage capacity because of the Ash Cell #2 clean-up and brine concentrator outage.

4 Summary of Deficient Conditions and Recommendations

No deficient conditions were observed during the annual inspection that require GRU's attention.40 CFR 257.83(a)(1)(i) and (iii) respectively establish maximum time intervals for weekly (i.e., seven days) and monthly (i.e., 30 days) inspections of the SIS. There were five instances where this maximum time interval was exceeded for monthly inspections. Similarly, 40 CFR 257.84(a)(1)(i) establishes a maximum time interval of 7 days for weekly inspections of the CCR landfill. All the weekly inspections were performed within this maximum time interval of 7 days. GRU is recommended to perform the weekly and monthly inspections within these maximum intervals.

5 References

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UES (2020a). Slope Stability and Liquefaction Potential Analysis CCR Impoundment System, Deerhaven Generating Station (DGS), prepared by Universal Engineering Services for Gainesville Regional Utilities and Innovative Waste Consulting Services, LLC, November 2020.

UES (2020b). Geotechnical Consulting Services – Coal Combustion Residuals (CCR) Surface Impoundment System and Updated Landfill Groundwater Monitoring Systems Design and Construction, Deerhaven Generating Station (DGS), 10001 NW 13th Street, Gainesville, Alachua County, Florida. Prepared for Innovative Waste Consulting Services, LLC by Universal Engineering Sciences, November 2020.

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UES (2021b). Coal Combustion Residuals (CCR) Abutment and Base Surface Impoundment System Periodic Structural Stability Evaluation, prepared by Universal Engineering Services for Gainesville Regional Utilities, September 2021.

6 Professional Engineer Certification

This plan was prepared under the supervision, direction, and control of the undersigned registered professional engineer (PE). The undersigned PE is familiar with the requirements of 40 CFR 257.83(b) and 84(b). The undersigned PE certifies that this CCR unit annual inspection report meets the requirements of 40 CFR 257.83(b) and 84(b).

Name of Professional Engineer: Pradeep Jain

Company: Innovative Waste Consulting Services, LLC

PE Registration State: Florida

Florida PE License No.: 68657

Pradeep Jain

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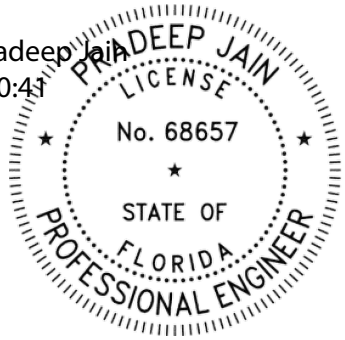

This item has been digitally signed and sealed by Pradeep Jain, PE, on the date adjacent to the seal.
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Appendix A

Comparison Table of Surface Impoundment System Elevations from DSI (2015) and Elevations Observed by ITS on November 13, 2023

Surface Impoundment System Feature	November 13, 2023 Elevation (feet NGVD29)	DSI (2015) Survey Elevation (feet NGVD29)
Top of Embankment - Ash Cell #1	194.7 - 195.8	194.9 - 195.9
Top of Embankment - Ash Cell #2	195.0 – 196.1	194.7 - 195.6
Top of Embankment - Pump Back Cell 1	188.0 - 188.7	187.6 - 188.7
Top of Embankment - Pump Back Cell 2	188.6 - 188.8	188.1 - 188.8
Stoplog Structure - Ash Cell #1	195.4	195.3
Stoplog Structure - Ash Cell #2	195.2	195.2
Stoplog Bridge Abutment - Ash Cell #1	194.9 – 195.0	194.8 - 194.9
Stoplog Bridge Abutment - Ash Cell #2	194.9	194.8 - 194.9
Top of North Splash Block Ash Cell #1	194.6	194.7
Top of South Splash Block Ash Cell #1	194.6	194.7
Top of North Splash Block Ash Cell #2	194.6	194.7
Top of South Splash Block Ash Cell #2	194.6	194.6 - 194.7
Electrical Equipment Building Retaining Walls	188.4	188.1 - 188.4
Ash Pipe Drain Pit	179.7 – 180.3	179.6 - 180.3
Ash Cell 1 Outer Embankment Toe	182.7 – 182.9	182.6 - 182.7
Ash Cell #2 Outer Embankment Toe	182.6- 183.0	182.1 - 182.7