



LEROY, ALABAMA

2023 Annual Inspection Report

Table of Contents

Engineer's Certification

| Overview | .1 |
|---|----|
| Table 1 – Summary for Unit 1 Bottom Ash Pond Inspection | |
| Table 2 – Summary for Unit 2/3 Bottom Ash Pond Inspection | |
| Table 3 – Summary for FGD Waste Pond Inspection | |



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Engineer's Certification

I hereby certify that it is my professional understanding that the inspections conducted and resulting CCR Annual Inspection Report presented herein meet the requirements of Section 257.83 (b) of Title 40 of the Code of Federal Regulations and ADEM Admin. Code r. 335-13-15-.05 (5) as amended upon the date of this certification.

Carmen D. Chosie, P.E. CDG, Inc. 1962 West Main Street Dothan, AL 36301 (334) 677-9431 Alabama Registration Number 36280





The Charles R. Lowman Power Plant campus in Leroy, AL includes three impoundments for the storage of coal combustion residual (CCR) material. These are noted as shown in Figure 1.



Figure 1
Identification of Ponds

The field inspections outlined herein were completed on September 14, 2023. The inspection staff consisted of staff from CDG, Inc. (CDG) and PowerSouth Energy Cooperative (PowerSouth) as indicated below.

| Company | Name / Title |
|------------|--|
| CDG | Scott W. Trott, P.E. / Project Manager |
| CDG | Carmen Chosie, P.E. / Project Engineer |
| PowerSouth | Justin McDaniel |
| PowerSouth | John Goldman |

Inspection procedures were completed in accordance with §257.83(b)(1)(i)-(iii) and 335-13-15-.05(5((b)(1)(i)-(ii)). Documentation including pertinent previous report documents and documents within the facility's operating record have been reviewed as part of the inspection efforts. The visual inspections examined the overall condition of each structure to identify any potential signs of distress or malfunction. Piping and related, active hydraulic structures associated with each impoundment were also visually inspected to address the condition and ability of each to meet intended design purposes.



Findings have been generated by CDG's inspection and are found in Tables 1-3 contained herein.

Table 1Summary for Unit 1 Bottom Ash Pond Inspection

| | Unit 1 Bottom Ash Pond | | | | |
|-----------------|---|---|--|--|--|
| Item | Reference | Comment | | | |
| Changes in | § 257.83(b)(2): (i) | No changes to impoundment footprint | | | |
| Geometry | | | | | |
| , | 335-13-1505(4)(b)(2): (i) § 257.83(b)(2): (ii) | To a constant the least of the | | | |
| Existing | § 257.65(D)(Z). (II) | Two pumps with hour meters removed | | | |
| Instrumentation | 335-13-1505(4)(b)(2): (ii) | | | | |
| Minimum | § 257.83(b)(2): (iii) | • 0'-0" | | | |
| Water Depth | 335-13-1505(4)(b)(2): (iii) | • 10.00' MSL | | | |
| and Elevation | | | | | |
| Maximum | § 257.83(b)(2): (iii) | • 18'-0" | | | |
| Water Depth | 335-13-1505(4)(b)(2): (iii) | • 28.00' MSL | | | |
| and Elevation | | | | | |
| Present | § 257.83(b)(2): (iii) | Varying depth, not continuous surface | | | |
| Water Depth | 335-13-1505(4)(b)(2): (iii) | Average water depth estimated at 1.0' | | | |
| and Elevation | | • 11.00' MSL | | | |
| Minimum CCR | § 257.83(b)(2): (iii) | Minimum CCR depth possible 0'-0" | | | |
| Depth and | 335-13-1505(4)(b)(2): (iii) | Minimum CCR elevation 10'-0" MSL | | | |
| Elevation | | | | | |
| Maximum CCR | § 257.83(b)(2): (iii) | Maximum CCR depth possible estimated at 18'-0" | | | |
| Depth and | 335-13-1505(4)(b)(2): (iii) | Maximum CCR elevation is 28'-0" | | | |
| Elevation | | | | | |
| Present | § 257.83(b)(2): (iii) | CCR not present | | | |
| CCR Depth | 335-13-1505(4)(b)(2): (iii) | | | | |
| and Elevation | | | | | |
| Storage | § 257.83(b)(2): (iv) | • 408,000 yd ³ | | | |
| Capacity | 335-13-1505(4)(b)(2): (iv) | | | | |
| Volume of | § 257.83(b)(2): (v) | Impounded water volume estimated at 30,653 yd ³ | | | |
| Impounded | | | | | |
| Water | 335-13-1505(4)(b)(2):(v) | | | | |
| Volume of | § 257.83(b)(2): (v) | Impounded CCR estimated at 0 yd ³ | | | |
| Impounded | 005 10 15 05(4)(1)(0) (1) | | | | |
| CCR | 335-13-1505(4)(b)(2):(v) | | | | |
| Observed | § 257.83(b)(2): (vi) | None observed | | | |
| Actual or | 225 12 15 05/4//5/20/- /- 2 | | | | |
| Potential | 335-13-1505(4)(b)(2): (vi) | | | | |
| Structural | | | | | |
| Weakness | | | | | |
| Observations | § 257.83(b)(2): (vii) | None observed | | | |
| of Changes | 225 12 15 05/4/b)/0\· (\) | | | | |
| Impacting | 335-13-1505(4)(b)(2): (vii) | | | | |
| Stability or | | | | | |
| Operation | | | | | |

Table 2Summary for Unit 2/3 Bottom Ash Pond Inspection

| | Unit 2/3 Bottom Ash Pond | | |
|-----------------|---|---|--|
| Item | Reference | Comment | |
| Changes in | § 257.83(b)(2): (i) | None observed | |
| Geometry | | | |
| | 335-13-1505(4)(b)(2): (i) § 257.83(b)(2): (ii) | | |
| Existing | § 257.83(D)(2): (II) | • Skid-mounted duplex suction pumps with suction lines | |
| Instrumentation | 335-13-1505(4)(b)(2): (ii) | in pond installed for dewatering treatment system | |
| Minimum | § 257.83(b)(2): (iii) | • 1'-0" per visual level indicator | |
| Water Depth | 225 12 15 05(4)(b)(2): (iii) | • 40.00'MSL | |
| and Elevation | 335-13-1505(4)(b)(2): (iii) | | |
| Maximum | § 257.83(b)(2): (iii) | 6'-0" per visual level indicator | |
| Water Depth | 335-13-1505(4)(b)(2): (iii) | • 45.00' MSL | |
| and Elevation | | | |
| Present | § 257.83(b)(2): (iii) | Average water depth estimated at 1.0' | |
| Water Depth | 335-13-1505(4)(b)(2): (iii) | • 41.00' MSL | |
| and Elevation | | | |
| Minimum CCR | § 257.83(b)(2): (iii) | Minimum CCR depth estimated at 2'-0" | |
| Depth and | 335-13-1505(4)(b)(2): (iii) | Minimum CCR elevation 26.00' MSL | |
| Elevation | | | |
| Maximum CCR | § 257.83(b)(2): (iii) | Maximum CCR depth estimated at 19'-0" | |
| Depth and | 335-13-1505(4)(b)(2): (iii) | Maximum CCR elevation is 43.00' MSL | |
| Elevation | | | |
| Present | § 257.83(b)(2): (iii) | CCR depth not uniform across impoundment | |
| CCR Depth | 335-13-1505(4)(b)(2): (iii) | Average CCR depth estimated at 16'-0" | |
| and Elevation | | Average CCR elevation estimated at 40.00' MSL | |
| Storage | § 257.83(b)(2): (iv) | • 1,206,760 yd ³ | |
| Capacity | 335-13-1505(4)(b)(2): (iv) | | |
| Volume of | § 257.83(b)(2): (v) | Impounded water volume estimated at 16,714 yd ³ | |
| Impounded | 005 10 15 05(4)(1)(0) (1) | | |
| Water | 335-13-1505(4)(b)(2): (v) | | |
| Volume of | § 257.83(b)(2): (v) | • Impounded CCR volume estimated at 1,206,760 yd ³ | |
| Impounded | 225 12 15 05/41/61/21/61 | | |
| CCR | 335-13-1505(4)(b)(2): (v) | | |
| Observed | § 257.83(b)(2): (vi) | None observed | |
| Actual or | 335 13 15 05/4//b//20-/- | | |
| Potential | 335-13-1505(4)(b)(2): (vi) | | |
| Structural | | | |
| Weakness | | | |
| Observations | § 257.83(b)(2): (vii) | None observed | |
| of Changes | 335-13-1505(4)(b)(2): (vii) | | |
| Impacting | 000 10 10 .00(4)(0)(2). (411) | | |
| Stability or | | | |
| Operation | | | |

Table 3Summary for FGD Waste Pond Inspection

| | | FGD Waste Pond |
|--|-----------------------------|--|
| Item | Reference | Comment |
| Changes in | § 257.83(b)(2): (i) | None observed |
| Geometry | 335-13-1505(4)(b)(2): (i) | |
| Existing | § 257.83(b)(2): (ii) | Two pumps with hour meters removed |
| Instrumentation | 335-13-1505(4)(b)(2): (ii) | Visual water level indicator at southwest corner |
| | 000 10 10 100(1)(2)(2). (1) | Trailer-mounted pump with suction line in pond discharging into Unit 2/3 Ash Bond |
| Minimum | § 257.83(b)(2): (iii) | discharging into Unit 2/3 Ash Pond • 2'-6" per visual level indicator |
| Water Depth and Elevation | 335-13-1505(4)(b)(2): (iii) | • 40.50' MSL |
| Maximum | § 257.83(b)(2): (iii) | 5'-6" per visual level indicator |
| Water Depth and Elevation | 335-13-1505(4)(b)(2): (iii) | • 43.50' MSL |
| Present | § 257.83(b)(2): (iii) | Limited water present in low spot from recent rainfall |
| Water Depth and Elevation | 335-13-1505(4)(b)(2): (iii) | |
| Minimum CCR | § 257.83(b)(2): (iii) | Minimum CCR depth estimated at 1'-0" |
| Depth and Elevation | 335-13-1505(4)(b)(2): (iii) | Minimum CCR elevation 26.00' MSL |
| Maximum CCR | § 257.83(b)(2): (iii) | Maximum CCR depth estimated at 18'-0" |
| Depth and Elevation | 335-13-1505(4)(b)(2): (iii) | Maximum CCR elevation is 43.00' MSL |
| Present | § 257.83(b)(2): (iii) | CCR depth not uniform across impoundment |
| CCR Depth and Elevation | 335-13-1505(4)(b)(2): (iii) | Average CCR depth estimated at 18'-0" Average CCR elevation estimated at 43.00' MSL |
| Storage | § 257.83(b)(2): (iv) | • 1,298,047 yd ³ |
| Capacity | 335-13-1505(4)(b)(2): (iv) | |
| Volume of | § 257.83(b)(2): (v) | • Impounded water volume estimated at 0 yd ³ |
| Impounded Free Water | 335-13-1505(4)(b)(2): (v) | |
| Volume of | § 257.83(b)(2): (v) | • Impounded CCR volume estimated at 1,298,047 yd ³ |
| Impounded CCR | 335-13-1505(4)(b)(2):(v) | |
| Observed | § 257.83(b)(2): (vi) | None observed |
| Actual or | 335-13-1505(4)(b)(2): (vi) | |
| Potential Structural | | |
| Weakness | | |
| Observations | § 257.83(b)(2): (vii) | None observed |
| of Changes Impacting Stability or Operation | 335-13-1505(4)(b)(2): (vii) | |