# **CLOSURE PLAN**

CFR 257.102(b)

Primary Bottom Ash Pond

Flint Creek Plant Gentry, Arkansas

September 2016 Revised October 2023

Prepared for: Southwestern Electric Power Company

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CFR 257.102(b)
FLINT CREEK PLANT
PRIMARY BOTTOM ASH POND

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I certify to the best of my knowledge, information, and belief that the information contained in this closure plan meets the requirements of 40 CFR § 257.102(b)

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#### 1.0 OBJECTIVE

This report was prepared by AEP- Geotechnical Engineering Services (GES) section to fulfill requirements of CFR 257.102(b) for Closure Plans of Existing CCR Surface Impoundments.

#### 2.0 DESCRIPTION OF THE CCR UNIT

The Flint Creek Power Plant is located near the City of Gentry, Benton County, Arkansas. Southwestern Electric Power Company (SWEPCO) is a co-owner of the plant and operated by SWEPCO. The facility operates a surface impoundment for the settling and temporary disposal of CCR materials, called the Primary Bottom Ash Pond.

The dam is a cross valley dam on a tributary to the Little Flint Creek. The dam is 45 feet high and has side slopes of 3H:1V. The downstream slope is partially submerged by the Little Flint Creek Reservoir.

#### 3.0 DESCRIPTION OF CLOSURE PLAN 257.102(b)(1)(i)

[A narrative description of how the CCR unit will be closed in accordance with this section]

Closure of the Primary Bottom Ash Pond will be by removal of the CCR material and 12-inches of bottom soils.

#### 4.0 CLOSURE BY REMOVAL 257.102 (b)(1)(ii)

[If closure of the CCR unit will be accomplished through removal of CCR from the CCR unit, a description of the procedures to remove the CCR and decontaminate the CCR unit in accordance with paragraph (c) of this section.]

Closure of the Primary Bottom Ash Pond will be by removing all of the CCR material and 12-inches of the natural soils along the bottom of the pond.

The removal of the material will be accomplished using a combination of mechanical and hydraulic dredging equipment, as decided by the construction contractor and approved by the engineer and AEP. All of the material will either be placed in the on-site CCR landfill or beneficially reused.

A visual evaluation of the pond bottom by a third party consultant will be the basis for declaring the CCR material has been removed. After all CCR material has been removed, an additional 12 inches of soil from the pond bottom will be removed as part of the closure procedure.

## 4.1 CLOSURE PERFORMANCE STANDARDS 257.102 (c)

[An owner or operator may elect to close a CCR unit by removing and decontaminating all areas affected by releases from the CCR unit. CCR removal and decontamination of the CCR unit are complete when constituent concentrations throughout the CCR unit and any areas affected by releases from the CCR unit have been removed and groundwater monitoring concentrations do not exceed the groundwater protection standard established pursuant to §257.95(h) for constituents listed in appendix IV to this part.]

Closure of the CCR unit will be completed when all CCR in the unit and the 12-inches of soil has been removed and groundwater monitoring demonstrates that all concentrations of the assessment monitoring constituents listed in appendix IV to part 257 do not exceed either statistically equivalent background levels or MCLs for two consecutive sampling events using the statistical procedures in § 257.93(g).

#### 5.0 ESTIMATE OF MAXIMUM CCR VOLUME 257.102 (b)(1)(iv)

[An estimate of the maximum inventory of CCR ever on-site over the active life of the CCR unit.]

The maximum CCR volume expected for this Primary Bottom Ash pond is 550,000 cubic yards.

#### 6.0 ESTIMATE OF LARGEST AREA OF CCR REQUIRING COVER 257.102 (b)(1)(v)

[An estimate of the largest area of CCR unit ever requiring a final cover

Not applicable since the CCR unit will be closed by removal.

### 7.0 CLOSURE SCHEDULE 257.102(b)(1)(vi)

[A schedule for completing all activities necessary to satisfy the closure criteria in the section, including an estimate of the year in which all closure activities for the CCR unit will be completed. The schedule should provide sufficient information to describe the sequential steps that will be taken to close the CCR unit, including identification of major milestones such as coordinating with and obtaining necessary approvals and permits from other agencies, the dewatering and stabilization phases of the CCR surface impoundment closure, or installation of the final cover system, and the estimated timeframes to complete each step or phase of the CCR unit closure.

Closure of the PBAP will be a phased approach as generally outlined below allowing a portion of the pond to continue to receive CCR material until the dry bottom ash handling system is operational while removal of CCR begins in the other portion. Final removal of CCR material will occur after sluicing of CCR materials is ceased. The non-CCR wastewaters will continuously discharge into the PBAP. The table is a summary of major activities and milestone dates to complete the closure project.

Engineering and design of pond closure	Q3 2020 – Q2 2021
Submit and acquire approved permits	Q4 2020 – Q3 2022
Bid and award construction contract	Q2 2021 – Q4 2021
Site preparation and flow reroutes	Q4 2021 – Q1 2022
Dredging/excavation operations	Q4 2021 – Q4 2022
Final removal activities after last receipt of CCR	Q4 2022 – Q3 2023
Ground Water Sampling	Q3 2023 – Q3 2024