CCR 2024 Inspection Report AES Puerto Rico, LP

Introduction

Purpose Compliance with annual inspection requirements under the

Standards for the Disposal of Coal Combustion Residuals from

Electric Utilities Rule at 40 CFR 257.84 (b) (CCR Rule).

Scope Review of available information regarding the status and

condition of the AES CCR unit, including files in the operating record, and perform a direct visual inspection of the CCR unit to

identify signs of distress or malfunction.

Facility Location

General AES is in the south coast of the island of Puerto Rico, about 3.4

miles southwest of downtown Guayama.

Address AES Puerto Rico

Km 142.0 State Road PR-3 Guayama, Puerto Rico 00784

Facility Description

AES is a bituminous coal power plant that generates and sells electricity to LUMA Energy (the company responsible for power transmission and distribution in Puerto Rico) with a total power generation capacity of 520 Megawatts.

CCR Unit Description

Location The CCR Unit aka AgremaxTM Stockpile Area is located at the

southeast quadrant of the AES-PR facility, south of the power

plant and east of the limestone storage dome.

Process and Components

Fly ash and bottom ash are produced by the coal combustion process and stored in two elevated silos south of the facility's Power Block building. Using its own CCRs, AES-PR produces a manufactured

aggregate, known as AgremaxTM. Dry ashes are transported by an enclosed belt conveyor to be mixed in a pug mill that conditions this CCR to produce AgremaxTM with enough moisture to prevent their dispersion by wind, without producing free liquids, before feeding a conveyor belt used to transfer the mixture to the open Stockpile Area at the southeast side of the facility where it is also kept wet by the application of water sufficient to prevent dispersal by wind (without producing free liquids). A stockpile to store the inventory of AgremaxTM is formed by a bulldozer or by dump trucks that are loaded with AgremaxTM by an excavator or front-end loader; the trucks then place the AgremaxTM onto a stockpile.

For final off-site disposal, the AgremaxTM is fed by a bulldozer into a crusher located in the southwest side of the Stockpile Area. Subsequently, the crusher feeds an enclosed conveyor to transfer the AgremaxTM to marine vessels in the AES dock area (approximately 0.7 miles southwest of the Stockpile Area) for shipment overseas.

Equipment and facilities present and /or used within and around the Stockpile Area include a front-end loader, a bulldozer, a backhoe, a water truck with rear spray nozzles and front water cannon, mobile water sprinkler guns, large water hoses, fixed water spray nozzle systems, and a feeder / breaker mill. It also includes a physical containment system to prevent run-on or migration of sediments and runoff from the stockpile. The physical containment system is composed of: a leachate collection system, an earthen berm, reinforced concrete drainage channels, a concrete low wall along the facility's southern property boundary; and a no-discharge runoff pond that collects runoff from the AgremaxTM and coal storage piles.

Review of Available Information

The available inspection records did not identify significant issues during said inspections. Maintenance was ongoing and controls were operational.

Visual Inspection

Date Thursday December 12, 2024.

Time/Weather

Morning / calm wind and sunny weather conditions prevailed.

Methodology and Limiting Conditions

WRE confirmed the Stockpile Area boundaries and performed a reconnaissance around its accessible perimeter and terraces but did not look at areas where gaining access may have presented a health and/or safety hazard. The Stockpile Area was observed for visual evidence of signs of distress or malfunction.

Escort

Jose Manautou, AES CCP Coordinator and Felipe Bruneau, AES Senior Environmental Coordinator Lead provided escort during the visual inspection.

General Observations

The AgremaxTM Staging Area Liner Project has been completed. The Stockpile Area was operational at the time of the visual inspection with trucks moving up and down the access road. A main work terrace with berms on the edges was observed at the top.

Access Road

The Stockpile Area access road was observed to be well graded, with AgremaxTM berms on the edges and actively being wetted and with some rills created by over watering.

Stockpile Surface / Slopes

No animal burrows were observed. Slopes appeared stable and adequate.

Erosion

No significant erosion was observed on the slopes of the Stockpile Area.

Dust

Operational dust controls, including the water truck, and fixed water spray nozzles systems were observed. Stockpile surfaces appeared wet or crusted, therefore the water hoses and spray nozzles system were not operational at the time. No fugitive dust plumes were observed on the Stockpile Area at the time of inspection.

Sediment

No significant sediment accumulations were observed in the concrete channel that rings the Stockpile Area.

Drainage

The drainage channels surrounding the Stockpile Area were observed clean and unobstructed.

Containment Structures

The earthen berm ringing the Stockpile Area appeared to be structurally sound.

Conclusions

Changes in Geometry

With the AgremaxTM Staging Area Liner Project completed, the AgremaxTM inventory was distributed over the whole Stockpile Area. The height of the Stockpile was estimated at 60 feet above ground surface.

CCR Quantity

The amount of CCR stored at the time of the inspection was estimate at about 139,000 tons.

Potential Structural Weaknesses

Based on the visual inspection, no apparent or potential structural weaknesses of the stockpile and its ancillary structures were observed.

Certification

I hereby certify that I visually inspected and prepared this Report for the AgremaxTM Stockpile Area, owned and operated by AES-PR in accordance with the Coal Combustion Residuals Rule 40 CFR 257.84(b). I am a dully-licensed Professional Engineer under the laws of Puerto Rico.

12/23/24

Date

8827

License Number

8/31/23

License Renewal Date



Winston R. Esteves P.E.



P.E. Seal