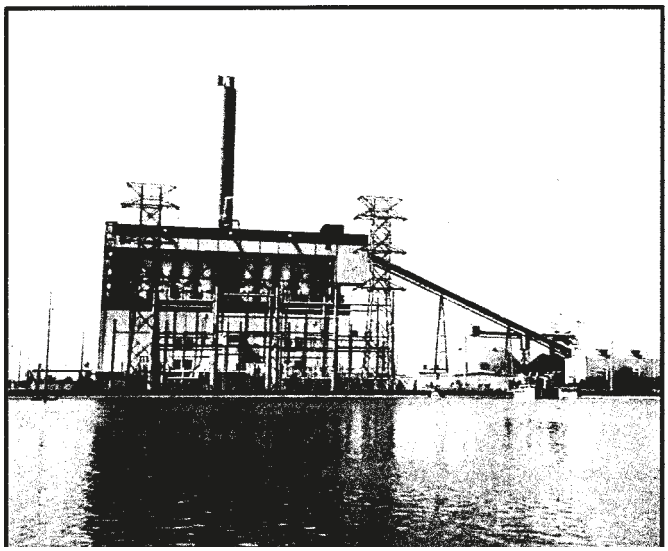
AES
Puerto Rico

# Run-on and Run-off Control System Plan Five-Year Update



Coal Combustion Residuals Temporary Stockpile Area

AES Puerto Rico, L.P.

January 2026

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# 1.0 Introduction

## Facility Information

AES Puerto Rico (AES-PR} is a bituminous coal-fueled power plant that generates and sells electricity to LUMA with a total power generation capacity of 454 Megawatts (MW). AES-PR also produces a manufactured aggregate known as Agremax™.

AES-PR is located on an 85-acre tract of land owned by AES Puerto Rico, LP. It is bordered to the north by a former pharmaceutical facility (TAPI Puerto Rico, lnc.-TAPI) and vacant land owned by the Puerto Rico Land Administration (PRLA); to the south by wetlands and Bahia Las Mareas; to the east by the former Chevron Phillips Chemical Puerto Rico Core, LLC (CPC) facilities; and to the west by AES llumina and PRLA vacant lands. The facility, owned and operated by AES-PR is composed of a coal-fired power plant and an ancillary marine dock that is not contiguous to the main power plant. It also occupies associated rights-of- way for elevated conveyors, transmission lines, make-up water supply lines, process steam piping and service/access roads.

The AES-PR facilities are completely fenced and gated and include a power plant building, office/ storage and maintenance buildings, open paved parking areas, cooling tower, open coal and manufactured aggregate stockpile areas, limestone storage dome, manufactured aggregate / coal pile stockpiles runoff pond, a storm water runoff pond, a make-up water pond, a cooling tower water pond, water treatment facilities, material and equipment storage areas and storm water collection and conveyance systems. The coal pile runoff pond collects non-industrial storm water runoff from the coal stockpile, the limestone storage dome area, the manufactured aggregate (Agremax™) stockpile and certain areas adjacent to these locations. The storm water runoff pond collects non-industrial storm water runoff.

## Federal Regulations

Title 40 Section 257.81(a)(1) and (2) of the Code of Federal Regulations (CFR) stipulates that, in accordance with the requirements under the Clean Water Act (CWA), the owner or operator of a Coal Combustion Residuals (CCR) unit must design, construct, operate, and maintain the following control systems:

- A run-on control system to prevent flow onto the active portion of the CCR unit during the peak discharge from a 24-hour, 25-year storm; and
- A run-off control system from the active portion of the CCR unit to collect and control at least the water volume resulting from a 24-hour, 25-year storm

In addition, 40 CFR 257.81(b) requires that run-off from the active portion of the CCR unit must be handled in accordance with the surface water requirements under 40 CFR 257.3-3 i.e., point sources that discharge into waters of the United States must do so through a National Pollutant Discharge Elimination System (NPDES) permitted outfall.

The owner or operator of the CCR unit must prepare periodic run-on and run-off control system plans required by 40 CFR 257.81(c) every five years. These plans must document how the run-on and run-off control systems have been designed and constructed to meet the applicable requirements. Each plan must be supported by appropriate engineering calculations. The owner or operator has completed a periodic run-on and run-off control system plan when the plan has been placed in the facility's operating record as required by 40 CFR 257.105(g) (3).

The owner or operator may amend the written run-on and run-off control system plan at any time provided the revised plan is placed in the facility's operating record as required by 40 CFR 257.105(g)(3). The owner or operator must amend the written run-on and run-off control system plan whenever there is a change in conditions that would substantially affect the written plan in effect.

## 2.0 Purpose / Methodology

This report was prepared by Winston R. Esteves P.E. (WRE) to fulfill the requirements of 40 CFR 257.81(c) (4) to prepare periodic run-on and run-off control system plan every five years.

To develop this periodic run-on and run-off control system plan, WRE performed the following tasks:

- Reviewed the two previous run-on and run-off control system plans of 2016 and 2021.
- Reviewed the available CCR Annual Inspection Reports.
- Reviewed the current Storm Water Pollution Prevention Plan.
- Reviewed the available topographic surveys of the Agremax™ temporary stockpile area.
- Reviewed the December 2025 Hydrologic / Hydraulic Study Report for the AES-PR facility.
- Conducted a visual reconnaissance of the manufactured aggregate stockpile and adjacent areas.
- Interviewed site management and operations personnel.
- Prepared this revised run-on and run-off control system plan.

## 3.0 Hydrologic / Hydraulic Criteria

To verify the potential effects of current site conditions since the initial; hydrologic / hydraulic (H/H) analysis performed in 2012, a new H/H study was performed taking into consideration the existing topography, watersheds and controls at AES-PR. The results of the H/H study are included in a report by Caribe Environmental Services (CES) dated December 2025. The CES report concludes that the run-on and run-off control systems implemented by AES-PR at the coal pile runoff pond watershed are effective to meet the requirements of 40 CFR 257.81(a)(1) and (2).

## 4.0 Run-on and Run-off Control Systems

- Run-on Controls: the AES CCR temporary stockpile is encircled by berms and conveyance channels designed and constructed to handle peak flows from the 100-year, 24-hour rainfall which are significantly larger than that from the 25-year, 24-hour rainfall. Based on the information obtained and evaluated during this update, the current run-on controls are effective to prevent flow onto the active portion of this CCR unit during the peak discharge from a 24-hour, 25-year storm.

- Run-off Controls: the AES CCR temporary stockpile is encircled by concrete ditches and culverts that discharge into the coal pile runoff pond, all designed and constructed to handle peak flows from the 100-year, 24-hour rainfall which are significantly larger than that from the 25-year, 24-hour rainfall. Based on the information obtained and evaluated during this update, the current run-off controls of the active part of this CCR unit are effective to collect and control at least the water volume resulting from a 25-year, 24-hour storm.

- Run-off Discharge: run-off from the active portion of the AES CCR temporary stockpile is collected in the coal pile runoff pond that was designed, constructed and operated a zero-discharge unit. Therefore, the run-off from the active portion of this CCR unit is handled in accordance with the surface water requirements of 40 CFR 257.3-3.

## 5.0 Proposed Conditions

Presently, no foreseeable additional significant operational modifications or expansions of the Agremax™ Staging Area footprint are anticipated.

## 6.0 Conclusions and Recommendations

Based on the review of the information obtained from performing the tasks described in Section 2 of this Report and the current site conditions, the AES CCR (Agremax™) temporary stockpile area meets the requirements of 40 CFR 257.81 (a) and (b) of the EPA CCR Rule.

WRE recommends that, as the sedimentation levels in the coal runoff pond increase, the frequency of the bathymetric surveys be reassessed to better anticipate when the critical sediment level will occur and plan for its removal. The potential impact that future construction projects may have on the site's hydrologic and hydraulic conditions used to develop this Plan should be evaluated to determine if this Plan must be amended as per 40 CFR 257.81 (c) (2) before the next 5-year revision period in 2031.

## 7.0 Limitations

The statements, conclusions, recommendations and opinions included in this Report are based upon, and limited by the agreed scope of work, information disclosed by AES-PR and reasonably ascertainable information obtained from ground-level and aerial visual observations, review of CCR Annual Inspection Reports, interviews with AES personnel, and our understanding of applicable environmental regulations and are only intended to give approximations of the hydraulic- hydrologic conditions found at the time, limited to the particular issues actually targeted by WRE in the agreed-upon scope of work. No representations or warranties are made concerning the site conditions after the date of the last information used in the preparation of this Report. If additional information that might impact our conclusions becomes available, WRE reserves the right to review the information, reassess the potential concerns, and modify opinions, if warranted.

## 8.0 Certification

Pursuant to 40 CFR 257.81 (c) (5) by this certification, I attest that:

(i) I am a Professional Engineer currently licensed in the Commonwealth of Puerto Rico;

(ii) I am familiar with the provisions of 40 CFR Part 257 Subpart D;

(iii) I have visited and examined the AES Puerto Rico CCR Temporary Stockpile Area;

(iv) It is my professional opinion that, to the best of my knowledge, information, and belief, this Run-On and Run-Off Control System Plan has been prepared in accordance with current good and accepted engineering practice(s) and standard(s) , including consideration of applicable industry standards and the requirements of the CCR Rule;

(v) This Run-On and Run-Off Control System Plan meets the requirements of 40 CFR 257.819(c);and

(vi) This Plan is adequate for the AES- PR CCR Temporary Stockpile Area.

"Certification "in this document is exclusively a statement of professional opinion not to be interpreted or construed as a guarantee, warranty or legal opinion.

**Name:** Winston R. Esteves **Signature:**

**Title:** Environmental Consultant Lic.#:8827

**Date:** January 26, 2026 **PE Stamp:**

## 9.0 References


AES Puerto Rico. Run-on and Run-off Control System Plan. Coal Combustion Residue Temporary Stockpile Area. December 2021.

AES Puerto Rico. 2018-2024 CCR Annual Inspection Reports.

AES Puerto Rico. Storm Water Pollution Prevention Plan for Industrial Activities. 2024.

AES Puerto Rico. SOP-WT-18. Water Retention Ponds Management Procedure. Revision 2. December 23, 2021.

Caribe Environmental Services. Hydrologic / Hydraulic Study Report. AES Facility, Guayama, Puerto Rico. December 2025.

U.S. Department of Commerce, National Oceanographic and Atmospheric Administration (NOAA). Point Precipitation Frequency Estimates. AES Guayama, Puerto Rico. NOAA Atlas 14, Volume 3, Version 4.

U.S. Environmental Protection Agency. 40 CFR Part 257.81 Run-on and run-off controls for CCR landfills.

U.S. Geological Survey, Topographic Map of the Central Aguirre 1970, photo revised 1982.