

CCR Construction Certification

Basin Electric Power Cooperative
Laramie River Station

Bottom Ash Pond 3

AECOM Project No.: 60664804
January 6, 2023

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Laramie River Station Bottom Ash Surface Impoundment CCR Retrofit Completion Revision History

Revision No.	Revision Date	Section Revised	Summary of Revision(s)
0	1/6/2023		Original Document

1. Background

The purpose of this CCR Construction Certification (Certification) is to document the Bottom Ash Pond 3 (BAP 3) retrofit construction was completed in accordance with the Retrofit Plan dated December 9, 2021 and that the work was performed in accordance with the Coal Combustion Residuals Rule (CCR Rule). The following sections provide background information on the facility and related regulatory requirements.

1.1 Facility Information

Name of Facility	Laramie River Station (LRS)
Name of CCR Units	Bottom Ash Pond 3 (BAP 3)
Name of Operator	Basin Electric Power Cooperative
Facility Mailing Address	347 Grayrocks Road, Wheatland, WY 82201
Location	Approximately five (5) miles northeast of Wheatland, WY
Facility Description	Laramie River Station (LRS) is owned by Missouri Basin Power Project (MBPP) and operated by Basin Electric Power Cooperative (Basin Electric). LRS consists of three (3) 570 megawatt (MW) units. Unit 1 went online in 1980, Unit 2 went online in 1981 and Unit 3 went online in 1982.

1.2 Regulatory Requirements

This certification has been developed for LRS BAP 3 in accordance with 40 CFR 257.102 (k). The CCR Rule requires preparation of a certification upon completion of the construction verifying that the retrofit activities have been completed in accordance with the retrofit plan specified in 40 CFR 257.102(k)(2).

2. Retrofit Description

The retrofit of BAP 3 was performed in accordance with the CCR Rule and recognized and generally accepted good engineering practices. Plan items required under the CCR Rule described in this section constitute the narrative description of the specific measures that were taken to retrofit the CCR Unit, description of CCR removal procedures, estimated volume of CCR removed, and estimated surface area of the Units that affected by the retrofit.

2.1 Retrofit Description

CCR and CCR impacted materials were removed from the eastern portion of the footprint of BAP 3. A new central berm was constructed in BAP 3 with liner installed on both sides of the new berm. CCR and CCR impacted materials were consolidated from the eastern portion of BAP 3 into the western portion of BAP 3 with excess material hauled to and disposed of in the onsite landfill. Final cover was installed on the West Hill. Materials removed included bottom ash and other CCR materials, the existing rip rap and cover material, the existing membrane liner system in the eastern portion and below the central berm. Upon removal of these layers, the exposed subgrade was visually inspected for the presence of any CCR materials or any other materials which needed to be removed to prepare the subgrade. Once subgrade had been prepared, the central berm was constructed from onsite soils and a liner system consisting of a geocomposite clay liner (GCL) and a synthetic membrane liner were installed to create a composite liner system in accordance with section 257.71 of the CCR Rule. The West Hill was capped with a cover system consisting of a synthetic membrane, a minimum of 18 inches of soil infiltration layer and a minimum of 6 inches of topsoil.

2.2 CCR Removal

CCR and CCR contaminated soils and sediments were removed by mechanical excavation. All free water and entrained water which were encountered were removed by pumping and discharged into Bottom Ash Pond 2 (BAP 2).

2.3 CCR Volumes

A total of 1,223,667 CY of material were excavated from the eastern portion of BAP 3. Approximately 246,824 CY were placed into the on-site Landfill with the remaining 976,843 CY being consolidated into the West Hill.

2.4 CCR Unit Area

The final area of retrofit for BAP 3 based on as-built construction records was 35.4 acres.

3. Engineering Certification

Certification Statement 40 CFR § 257.102(k)(4) – Completion of Retrofit Activities for an Existing CCR Surface Impoundment

CCR Unit: Basin Electric Power Cooperative; Laramie River Station; Bottom Ash Pond 2.

I, Jeremy Thomas, being a Registered Professional Engineer in good standing in the State of Wyoming, do hereby certify, to the best of my knowledge, information, and belief, that the information contained in this certification has been prepared in accordance with the accepted practice of engineering. I certify, for the above-referenced CCR Unit, that the completion of retrofit activities is in accordance with the retrofit plan dated December 9, 2021 prepared pursuant to 40 CFR § 257.102(k)(2) and the requirements of 40 CFR § 257.102.

Jeremy Thomas

Printed Name

January 6, 2023

Date

