

William H. Zimmer Power Station Retrofit Plan for Coal Pile Runoff Pond



Zimmer Power Company, LLC

Revision 0 May 14, 2021

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Prepared for

Zimmer Power Company, LLC

Clermont County, Ohio

Revision 0 May 14, 2021

Prepared by

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INDEX AND CERTIFICATION

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Report Index and Certification

<u>Chapter</u> <u>Number</u>	Chapter Title	Number of Pages
1.0	Introduction	2
2.0	Retrofit Construction Plan	2

Certification

I hereby certify, as a Professional Engineer in the State of Ohio, that the information in this document was assembled under my direct personal charge. This report is not intended or represented to be suitable for reuse by Dynegy Zimmer or others without specific verification or adaptation by the Engineer.

Matthew D. Bleything

Date: 5/14/21

Matthew D. Bleything License Number 82440

My license renewal date is December 31, 2021

Pages or sheets covered by this seal: As noted above.

TABLE OF CONTENTS

			<u>Page No.</u>
1.0	INTF	RODUCTION	1-1
	1.1	Site Information	
	1.2	Site Location	1-2
2.0	RET	ROFIT CONSTRUCTION PLAN	2-1
	2.1	Narrative of Measures Taken to Retrofit - § 257.102(k)(2)(i)(A)	2-1
	2.2	Removal Procedure for CCR and Contaminated Soil and Sediment - § 257.102(k)(2)(i)(B)	
	2.3	Estimated Quantities of CCR Materials Removed During Retrofit- § 257.102(k)(2)(i)(C)	
	2.4	Estimate of the Largest Area of the CCR Unit that Will be Affected by t Retrofit - § 257.102(k)(2)(i)(D)	the
	2.5	Schedule for Completing All Retrofit Activities - § 257.102(k)(2)(i)(E).	
	2.6	Notifications	

1.0 INTRODUCTION

Zimmer Power Company LLC (Zimmer) owns and operates the William H. Zimmer Power Station located near Moscow Ohio. The Zimmer Power Station produces coal combustion residuals (CCR) that must be managed by the requirements of 40 C.F.R. § Part 257, Subpart D, Standards for Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments, CCR Rule.

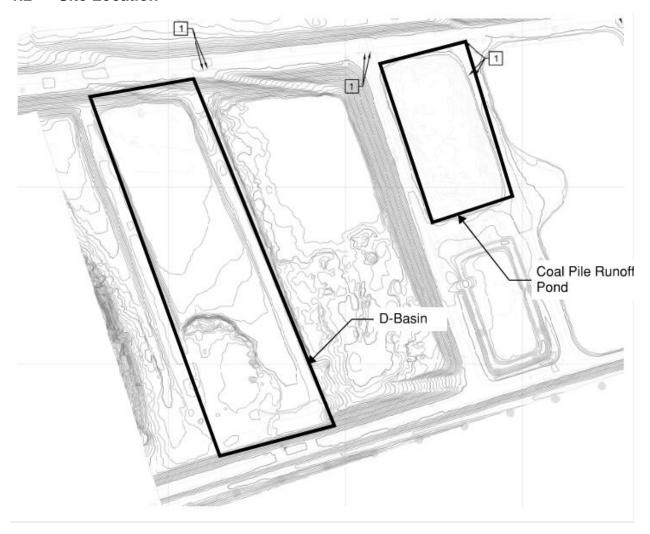
This Retrofit Plan outlines the construction activities to retrofit the existing CCR Surface Impoundment, Coal Pile Runoff Pond in the criteria outlined in 40 C.F.R § 257.102(k)(2) with a lining system that complies with 40 C.F.R. § 257.72 beginning the summer of 2021. The Coal Pile Runoff Pond is located north of the generating unit and is approximately 2.62 acres.

1.1 Site Information

Zimmer is located near Moscow Ohio in Clermont County, Ohio. Zimmer is a single coal fired unit that produces bottom ash, fly ash and flue gas desulfurization (FGD) solids. The Coal Pile Runoff Pond is intended to be retrofitted to a CCR compliant surface impoundment. The Coal Pile Runoff Pond is currently lined with three feet of compacted clay and has a perimeter gravel road around the impoundment to provide access. The impoundment receives flow from an onsite mercury treatment system which is forwarded through a series of two non-CCR impoundments prior to being discharged through NDPES Outfall 005 to the Ohio River.

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1.2 Site Location



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2.0 RETROFIT CONSTRUCTION PLAN

2.1 Narrative of Measures Taken to Retrofit - § 257.102(k)(2)(i)(A)

The Coal Pile Runoff Pond will be retrofitted in compliance with 40 C.F.R. § 257.102(k)(1). Wastestreams currently routed to the Coal Pile Runoff Pond will be temporarily diverted to an onsite CCR surface impoundment known as the D-Basin. Once wastestreams have been diverted, the Coal Pile Runoff Pond will be dewatered using pumps and piped to the D-Basin. Construction of the retrofit will begin by removing the CCR from the impoundment and hauling to D-basin prior to the closure of D-Basin. In addition to the CCR material, the existing clay liner will be removed as needed. The impoundment will then be lined with a composite liner system consisting of a geosynthetic clay liner (GCL) and a 60-mil HDPE geomembrane liner directly above the GCL.

2.2 Removal Procedure for CCR and Contaminated Soil and Sediment - § 257.102(k)(2)(i)(B)

Water from the Coal Pile Runoff Pond will be pumped to an existing on site CCR impoundment D-Basin. CCR material and the existing clay liner as needed will be removed and stored in the D-Basin. The impoundment has not exceeded groundwater protection standards; therefore, no additional soil removal is anticipated. Material will be excavated by mechanical earthwork equipment such as hydraulic excavators and loaded into dump trucks to be moved to the D-Basin. The pond will be visually inspected to verify all CCR material has been removed prior to the new liner installation. Once the retrofit of the Coal Pile Runoff Pond is completed, flows will be returned to the pond from D-Basin.

2.3 Estimated Quantities of CCR Materials Removed During Retrofit- § 257.102(k)(2)(i)(C)

Based on topographical and bathymetric surveys performed on the Coal Pile Runoff Pond, it is estimated that 32,000 Cubic Yards of CCR material and 4,600 Cubic Yards of underlying soil will be removed from the impoundment.

2.4 Estimate of the Largest Area of the CCR Unit that Will be Affected by the Retrofit - § 257.102(k)(2)(i)(D)

The estimated maximum disturbed area for the Coal Pile Runoff Pond is 3 acres.

2.5 Schedule for Completing All Retrofit Activities - § 257.102(k)(2)(i)(E)

Construction of the retrofit of the Coal Pile Runoff Pond is expected to begin in summer of 2021 and is expected to be completed in fall of 2021.

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2.6 Notifications

In accordance with 40 C.F.R. § 257.102(k)(2)(ii)(A), no later than 60 days prior to the date of initiating retrofit activities, Zimmer will complete and post the Retrofit Plan to the operating record. Zimmer will also post a Notification of Intent to Retrofit no later than the date the retrofit is initiated. See 40 C.F.R. § 257.102(k)(5). A Notification of Completion of Retrofit Activities will be signed and sealed by the engineer of record licensed in Ohio. This will be posted in the operating record within 30 days of completion of retrofit activities (40 C.F.R. § 257.102(k)(6)). The Retrofit Plan will also be posted to Zimmer's CCR web site. See 40 C.F.R. § 257.107(j)(1).

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