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October 12, 2016 File: let_010_175666013_certification Revision 0

Initial Hazard Potential Classification Assessment EPA Final CCR Rule D Basin Zimmer Power Station Clermont County, Ohio

1.0 PURPOSE

This report documents Stantec's certification of the initial hazard potential classification assessment for the Zimmer Power Station D Basin.

40 CFR 257.73(a)(2) requires the owner or operator of an existing CCR surface impoundment to conduct an initial hazard potential classification assessment and document the hazard potential classification, and the basis for the classification, of the CCR unit as either a high hazard potential CCR surface impoundment, a significant hazard potential CCR surface impoundment, or a low hazard potential CCR surface impoundment.

2.0 FINDINGS

A visual analysis was performed to evaluate potential hazards associated with a failure of the D Basin perimeter containment dike. Failure scenarios were considered along the perimeter dike and specifically at three locations. These three locations are located at the south, north and west embankments of the perimeter dike. The east side of the impoundment is bordered by higher ground, so it is unlikely that a breach would occur in this direction. A breach failure of the dike at the three locations was evaluated for potential downstream impacts to structures, infrastructure, frequently occupied facilities/areas, and waterways. Potential for impacts was evaluated by determining probable breach flow paths using available elevation data and imagery of the impoundment and nearby area.

The analysis suggests that none of the breach scenarios would impact structures. A breach to the south or north would likely be contained within the Coal Pile Runoff Pond and C Basin, as there is sufficient capacity within them to contain a breach from D Basin. A breach to the west would likely flow directly into the Ohio River. It was concluded that a breach failure of the D Basin containment dike would not likely result in probable loss of human life. However, it is anticipated that a breach failure of the containment dike could result in the release of the stored CCR materials into downstream areas and waterways which can cause environmental damage.

40 CFR 257.53 defines a "significant hazard potential CCR surface impoundment" as a diked surface impoundment where failure or mis-operation results in no probable loss of human life, but can cause economic loss, environmental damage, disruption of lifeline facilities, or impact other concerns.



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Based on the results of the analysis summarized above, D Basin was assigned a Significant hazard potential classification per 40 CFR 257.53.

3.0 QUALIFIED PROFESSIONAL ENGINEER CERTIFICATION

I, David Hayson, being a Professional Engineer in good standing in the State of Ohio, do hereby certify, to the best of my knowledge, information, and belief that;

- 1. the information contained in this report and the underlying data in the operating record was prepared in accordance with the accepted practice of engineering and is accurate as of the date of my signature below; and
- 2. the initial hazard potential classification assessment for the Zimmer Power Station D Basin was conducted in accordance with the requirements specified in 40 CFR 257.73.

SIGNATURE

DATE 10/12/16

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Design with community in mind