



Indianapolis Power & Light Company
Eagle Valley Generating Station

Hazard Potential Classification Assessment of
CCR Surface Impoundments

Prepared by



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1 PURPOSE

This document provides the initial hazard potential classification assessment for the existing coal combustion residual (CCR) surface impoundments at Indianapolis Power & Light Company's (IPL) Eagle Valley Generating Station for compliance with 40 CFR 257.73(a)(2). Based on its applicability criteria, 40 CFR 257.73(a)(2) applies to Ponds A, B, and C at the Eagle Valley Generating Station.

2 BASIS FOR HAZARD POTENTIAL CLASSIFICATION

This assessment considered hypothetical dike breaches at any of the existing CCR surface impoundments' dikes regardless of potential causes and/or apparent dike stability. Each surface impoundment was considered independently from the other surface impoundments and, at the time of the hypothetical failure, was considered to be filled with liquid.

2.1 POTENTIAL FOR LOSS OF HUMAN LIFE

The following items were considered when evaluating the potential for a general loss of human life should a hypothetical failure or a mis-operation occur at any of the existing CCR surface impoundments:

- Absence of nearby residences, businesses, and public buildings,
- Absence of nearby campgrounds and public spaces,
- Absence of nearby public roads and highways, and
- Proximity to rail lines.

Pond A's eastern dike is approximately 100 feet west of a rail line operated by the Indiana Southern Railroad (ISRR). Based on a review of the type and frequency of this rail line's service, the rail line predominately transports agricultural commodities and coal. The rail line does not provide transportation services for the general public. Therefore, a loss of human life along the ISRR rail line is not probable should a hypothetical failure or mis-operation occur at Pond A.

Based on the preceding observations, a loss of human life in areas accessible to the general public is not probable should a hypothetical failure or mis-operation occur at Ponds A, B, or C.

The following items were considered when evaluating the potential for loss of Station personnel lives should a hypothetical failure or a mis-operation occur at any of the existing CCR surface impoundments:

- Proximity to the Station's power block and balance-of-plant structures,
- Frequency of Station personnel activity near the surface impoundments, and
- Topography of the ground surface between the CCR surface impoundments and the Station's facilities.

The existing CCR surface impoundments are not located near any significant Station facilities or other areas regularly occupied by Station personnel. Therefore, a loss of Station personnel lives is not probable should a hypothetical failure or mis-operation occur at Ponds A, B, or C.

Per the preceding observations, a loss of human life is not probable should a hypothetical failure or mis-operation occur at Ponds A, B, or C.

2.2 POTENTIAL FOR ECONOMIC & ENVIRONMENTAL LOSSES

The following items were considered when evaluating the risks of economic loss and environmental damage should a hypothetical failure or a mis-operation occur at any of the existing CCR surface impoundments:

- Proximity to the Discharge Canal and the White River,
- Potential disruption of lifeline facilities, such as the nearby electrical transmission towers,
- Potential disruption of or damage to the ISRR rail lines,
- Potential disruption of construction activity for the new combined-cycle power plant, and
- Topography of the ground surface between the CCR surface impoundments and the aforementioned features.

Ponds A and C are approximately 60 feet south of the Discharge Canal. Because the topography adjacent to these ponds' northern dikes slopes down to the Discharge Canal, CCR could be deposited into the canal and eventually spread into the White River and the immediate downstream area, should a hypothetical failure or mis-operation occur at these ponds. Similarly, given Pond B's proximity to the White River and the descending topography toward the river, CCR could also be deposited into the White River should a hypothetical failure or mis-operation occur at that pond. Therefore, hypothetical failures or mis-operations at Ponds A, B, and C could cause environmental damage beyond IPL's property.

The environmental damage to the White River and other areas immediately downstream that could result from a hypothetical failure or mis-operation at Ponds A, B, or C is enough alone to justify classifying each surface impoundment as a significant hazard potential, even without accounting for the aforementioned potential economic losses.

2.3 SUMMARY OF HAZARD POTENTIAL CLASSIFICATION ASSESSMENTS

Hypothetical failures or mis-operations at Ponds A, B, and C result in no probable loss of human life. However, hypothetical failures or mis-operations at these existing CCR surface impoundments could result in environmental damage to the White River and other areas immediately downstream that are beyond IPL's property.

3 CONCLUSION

The following initial hazard potential classifications have been assigned to the existing CCR surface impoundments at the Eagle Valley Generating Station in accordance with 40 CFR 257.73(a)(2):

- Pond A: significant hazard potential,
- Pond B: significant hazard potential, and
- Pond C: significant hazard potential.

4 CERTIFICATION

This initial hazard potential classification assessment meets the requirements of 40 CFR 257.73(a)(2).

I certify that this document was prepared by me or under my direct supervision and that I am a registered professional engineer under the laws of the State of Indiana.

Certified By: _____

Date: _____

10-14-16

Seal:

