Indianapolis Power & Light Company
Eagle Valley Generating Station

Structural Stability Assessment of CCR Surface Impoundments

Prepared by

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1 PURPOSE

This document provides the initial structural stability assessment for the coal combustion residual (CCR) surface impoundments at Indianapolis Power & Light Company's (IPL) Eagle Valley Generating Station for compliance with 40 CFR 257.73(d). Based on the applicability criteria presented in 40 CFR 257.73(b), the following existing CCR surface impoundments are addressed herein:

- Pond A,
- Pond B, and
- Pond C.

2 STRUCTURAL STABILITY ASSESSMENT RESULTS

To develop the assessment presented herein, a review of the available construction documents, soil borings through the dikes, the annual inspection by a third party professional engineer, and IPL's observations of the dikes has been completed. Pursuant to 40 CFR 257.73(d)(1), the standard for this evaluation is consistent with recognized and generally accepted good engineering practices.

2.1 STABLE FOUNDATIONS & ABUTMENTS

Federal CCR Rule Reference: 40 CFR 257.73(d)(1)(i)

The soils supporting the exterior dikes of CCR surface impoundments A, B, and C are considered stable for the maximum CCR storage capacity.

2.2 ADEQUATE SLOPE PROTECTION

Federal CCR Rule Reference: 40 CFR 257.73(d)(1)(ii)

The slopes are adequately protected against surface erosion, wave action, and adverse effects of sudden drawdown.

2.3 COMPACTED DIKES

Federal CCR Rule Reference: 40 CFR 257.73(d)(1)(iii)

As documented by the Station's Safety Factor Assessment [per 40 CFR 257.73(e)], the dikes are adequately compacted to provide the required engineering properties to achieve the stability safety factors for the required loading conditions.

2.4 VEGETATED SLOPES

Federal CCR Rule Reference: 40 CFR 257.73(d)(1)(iv)

The existing vegetation is considered to be appropriate slope protection against erosion.

2.5 SPILLWAY

Federal CCR Rule Reference: 40 CFR 257.73(d)(1)(v)

The dikes, which are perched, do not incorporate spillways. The Station's Inflow Design Flood Control System Plan [40 CFR 257.82(c)] indicates that spillways are not required for these CCR surface impoundments.

2.6 HYDRAULIC STRUCTURES

Federal CCR Rule Reference: 40 CFR 257.73(d)(1)(vi)

Based on the annual inspection by a third party professional engineer, the hydraulic structures that pass through and beneath the dikes are in sound condition to the extent they are accessible.

2.7 ADJACENT WATER BODIES

Federal CCR Rule Reference: 40 CFR 257.73(d)(1)(vii)

The downstream slopes of the exterior dikes are appropriate for the flooding risks of the adjacent White River and Discharge Canal.

3 CORRECTIVE MEASURES

Federal CCR Rule Reference: 40 CFR 257.73(d)(2)

No corrective measures are recommended.

4 CONCLUSION

This structural stability assessment confirms that the three existing CCR surface impoundments at the Eagle Valley Generating Station – Pond A, Pond B, and Pond C – have been designed, constructed, operated, and maintained to provide structural stability consistent with recognized and generally accepted good engineering practices.

5 CERTIFICATION

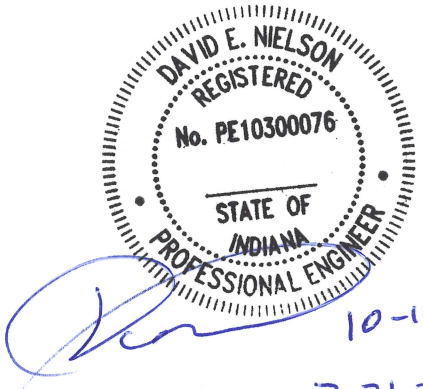
Federal CCR Rule Reference: 40 CFR 257.73(d)(3)

This initial structural stability assessment was conducted in accordance with the requirements of 40 CFR 257.73(d).

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: 10-14-2016

Seal:



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