



Indianapolis Power & Light Company  
Harding Street Generating Station

Pond 1 Location Restriction Compliance:  
Seismic Impact Zones

Prepared by



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# 1 DEMONSTRATION

## **Federal CCR Rule References: 40 CFR 257.53 and 257.63(a)**

Indianapolis Power & Light Company (IPL) owns and operates the Harding Street Generating Station (HSS), which is now a natural gas-fueled power plant. Pond 1, an existing coal combustion residual (CCR) surface impoundment at the site, presently does not accept CCR and is planned to be closed in the future. This document addresses the demonstration required for the CCR unit to satisfy 40 CFR 257.63(a):

“New CCR landfills, existing and new CCR surface impoundments, and all lateral expansions of CCR must not be located in seismic impact zones unless the owner or operator demonstrates...that all structural components including liners, leachate collection and removal systems, and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site.”

Pursuant to 40 CFR 257.53:

“*Seismic impact zone* means an area having a 2% or greater probability that the maximum expected horizontal acceleration, expressed as a percentage of the earth’s gravitational pull (g), will exceed 0.10 g in 50 years.”

Per the United States Geological Survey’s (USGS) Earthquake Hazards Program, the preceding definition corresponds to an earthquake with a nominal return period of 2475 years. Based on a review of the USGS 2014 National Seismic Hazard Maps, Pond 1 is located in an area of the United States where the mapped maximum expected horizontal acceleration during the 2475-year earthquake is less than 0.10 g. Therefore, Pond 1 is not located in a seismic impact zone as defined by 40 CFR 257.53, and thus meets the performance standard promulgated by 40 CFR 257.63(a).

## 2 CERTIFICATION

### Federal CCR Rule Reference: 40 CFR 257.63(b)

The demonstration presented herein meets the requirements of 40 CFR 257.63(a).

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

Certified By: David E. Nielson

Date: October 17, 2018

Seal:

