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Revision 0

**Initial Hazard Potential Classification Assessment**  
**EPA Final CCR Rule**  
**Primary Ash Pond**  
**Newton Power Station**  
**Jasper County, Illinois**

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**1.0 PURPOSE**

This report documents Stantec's certification of the initial hazard potential classification assessment for the Newton Power Station Primary Ash Pond.

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 Primary Ash Pond perimeter containment dike. Breach failure scenarios were analyzed at the west, north, northeast, southeast and southwest faces of the embankment. Breach locations were selected based on locations of nearby downstream structures and locations that could be potentially occupied by people. Potential for impacts were evaluated by determining probable breach flow paths using available elevation data and imagery of the impoundment along with the surrounding area.

Analyses indicate that a breach of the west and north embankments have potential to impact Landfill 1 and 2 with discharge eventually reaching the Landfill Stormwater Runoff Pond No. 1 and the western branch of Newton Lake. A breach of the northeast embankment will impact the construction pond, railroad running parallel with the embankment, temporary facilities associated with the power station and the eastern branch of Newton Lake. A breach of the southeast embankment would likely result in CCR and water being discharged into the eastern branch of Newton Lake. A breach of the southwest embankment would result in a discharge of CCR and water into the Secondary Pond and the east and west branches of Newton Lake. Based on the visual analysis of the breach scenarios, it does not appear likely that such an event would result in probable loss of human life. However, it is anticipated that a breach failure at critical locations of the containment dike would result in the release of the stored CCR materials into downstream areas and waterways which could 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.

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

### 3.0 QUALIFIED PROFESSIONAL ENGINEER CERTIFICATION

I, Matthew Hoy, being a Professional Engineer in good standing in the State of Illinois, 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 Newton Power Station Primary Ash Pond was conducted in accordance with the requirements specified in 40 CFR 257.73.

SIGNATURE 

DATE 10/12/2016

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Design with community in mind