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Initial Hazard Potential Classification Assessment
EPA Final CCR Rule
Primary East Ash Pond
Wood River Power Station
Madison County, Illinois

1.0 PURPOSE

This report documents Stantec’s certification of the initial hazard potential classification assessment for the Wood River Power Station Primary East 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

An existing breach analysis was reviewed to evaluate potential hazards associated with a failure of the Primary East Ash Pond perimeter containment dike and to see if it was suitable for the purpose of hazard potential classification. The existing breach analysis performed by the URS Corporation in May 2013 utilized a volume transfer method to approximate inundation limits and depths. The existing analysis involved transferring stored volumes within the ponds at various selected breach locations and pond level elevations to evaluate potential impacts to downstream areas.

Based on its review, Stantec concluded that the existing breach analysis is suitable for the purpose of hazard potential classification and that there have not been any material changes to the Primary East Ash Pond or downstream areas that would significantly impact the previous analysis results. Resultant inundation maps provided by the existing analysis indicate that the breach volumes will be contained in nearby downstream areas that are located on the Wood River Power Station property. Power station structures, access roads, and railroad are located within the downstream inundation area and have the potential to be impacted. The potentially impacted structures and access roads are typically intermittently used by Wood River Power Station personnel and the at-risk populations are considered transient. In accordance with Federal guidelines, loss of life is not considered probable for scenarios where persons are only temporarily in the potential inundation area. Per review of the existing breach analysis and corresponding inundation maps, it was concluded that a failure of the Primary East Ash Pond perimeter dike will not cause probable loss of human life. However, a breach of the impoundment perimeter dike has potential to release stored CCR material and cause environmental damage.

Design with community in mind
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 East 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 Wood River Power Station Primary East Ash Pond was conducted in accordance with the requirements specified in 40 CFR 257.73.

SIGNATURE

DATE 10/12/2016

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