

2018 ANNUAL CCR INSPECTION

Facility Name: Jeffrey Energy Center (JEC)
 Owner/Operator Name: Westar Energy
 CCR Unit: Bottom Ash Settling Area
 Inspection Date: November 28, 2018

USEPA CCR Rule Criteria 40 CFR §257.83	Bottom Ash Settling Area Annual Inspection Results
<p>§257.83(b)(2)(i) stipulates: <i>“(2) Inspection report. The qualified professional engineer must prepare a report following each inspection that addresses the following: (i) Any changes in geometry of the impounding structure since the previous annual inspection;”</i></p>	<p>A visual inspection of the JEC Bottom Ash Settling Area (Impoundment) and associated hydraulic structures was completed on November 28, 2018 by Mr. Richard Southorn, a qualified professional engineer (QPE). No changes in geometry of the impounding structure were noted since the 2017 annual inspection.</p>
<p>§257.83(b)(2)(ii) stipulates: <i>“(ii) The location and type of existing instrumentation and the maximum recorded readings of each instrument since the previous annual inspection;”</i></p>	<p>No instrumentation is associated with the Impoundment.</p>
<p>§257.83(b)(2)(iii) stipulates: <i>“(iii) The approximate minimum, maximum, and present depth and elevation of the impounded water and CCR since the previous annual inspection;”</i></p>	<p>The maximum and minimum depths of impounded water vary depending on plant needs or rainfall events, and is estimated at 0 to 5 feet (1,238 ft to 1,243 ft mean sea level (ft MSL), respectively). The approximate present water elevation was visually estimated to be at 1239.5 ft MSL (maximum depth of 1.5 ft). The estimate of the approximate minimum, maximum and present depth of CCR in the Impoundment ranges from approximately 17 to 30 feet (1,238 ft MSL to 1,243 ft MSL), based on the estimated base of the Impoundment and a 2018 survey, and has not deviated greatly in recent years.</p>
<p>§257.83(b)(2)(iv) stipulates: <i>“(iv) The storage capacity of the impounding structure at the time of the inspection;”</i></p>	<p>The total storage capacity of the Impoundment was estimated to be approximately 651,000 cubic yards (cy), based on a 2018 survey by Professional Engineering Consultants.</p>
<p>§257.83(b)(2)(v) stipulates: <i>“(v) The approximate volume of the impounded water and CCR at the time of the inspection;”</i></p>	<p>At the time of inspection, it was estimated that there is approximately 618,000 cy of water and CCR present, based on a 2018 survey by Professional Engineering Consultants.</p>

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§257.83(b)(2)(vi) stipulates: <i>“(vi) Any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit and appurtenant structures;”</i>	At the time of inspection, slope appearance, stability, and overall impoundment conditions were assessed. No actual or potential structural weaknesses that are or could have the potential to disrupt the operation or safety of the Impoundment were noted. No signs of distress or malfunction that may contribute to instability of the Impoundment were observed.
§257.83(b)(2)(vii) stipulates: <i>“(vii) Any other change(s) which may have affected the stability or operation of the impounding structure since the previous annual inspection.”</i>	A road was constructed to the center of the Impoundment to support equipment that was used to obtain borings to confirm base elevations of the Impoundment. The road does not affect the stability of the Impoundment. The Impoundment is in good operating condition and functioning as intended. There were no other changes to the Impoundment that may have affected the stability or operations of the Impoundment since the previous annual inspection.

PROFESSIONAL ENGINEER CERTIFICATION

The undersigned registered professional engineer is familiar with the requirements of the CCR Rule and has visited and examined the Impoundment or has supervised examination of the Impoundment by appropriately qualified personnel. I hereby certify based on a review of available information within JEC’s operating records and observations from my personal on-site inspection, that the Impoundment does not exhibit any appearances of actual/potential structural weakness that would be disruptive to the normal operations and safety of the Impoundment. The Impoundment is being operated and maintained consistent with recognized and generally accepted good engineering standards and practices. This certification was prepared as required by 40 CFR Part §257.83.

Name of Professional Engineer: Richard Southorn

Company: APTIM

Professional Engineer Seal:

