

2018 ANNUAL CCR INSPECTION

Facility Name: Jeffrey Energy Center (JEC)
 Owner/Operator Name: Westar Energy
 CCR Unit: Inactive Bottom Ash Pond
 Inspection Date: May 16, 2018

| USEPA CCR Rule Criteria 40 CFR §257.83 | Inactive Bottom Ash Pond Annual Inspection Results |
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| <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 Inactive Bottom Ash Pond (Pond) and associated hydraulic structures was completed on May 16, 2018 by Mr. Richard Southorn, a qualified professional engineer (QPE). The Pond is currently undergoing closure and is being infilled with non-CCR material per closure design specifications. It is estimated that between 0 and 10 feet of non-CCR fill have been added to the Pond near the Pond Dam since the prior 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>The standpipe piezometer (WR-3) located on the eastern edge of the berm is used to monitor the water level within the Pond Dam and is measured no less than every 30 days per the CCR Rule. A review was conducted of the inspection reports completed since the prior inspection. The measurements indicate a decrease in potentiometric water level associated with the Pond dewatering activities as part of closure. The highest recorded reading since the previous annual inspection was 9.67 feet. Prior to the dewatering of the Pond, the potentiometric elevations within this piezometer generally showed the upper water surface to be located near the historical water elevation of the Pond.</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 Pond is currently being dewatered due to closure and has no standing water present. The typical impounded water elevation in the Pond prior to dewatering ranged from approximately 1,163 to 1,165 ft MSL (depth 0 to 5 ft). The minimum and maximum estimated depth of CCR in the Pond ranges from approximately 1 to 41 feet (elevation 1,123 to 1,164 ft MSL) 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 Pond was estimated to be approximately 550 acre-ft based on a 2007 survey.</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, the Pond was being dewatered as part of construction for closure. There was no visible ponded water in the Pond. It is estimated that there is approximately 400 acre-ft of stored CCR material in the Pond, based on a 2007 survey. The Pond is currently undergoing closure and will be capped-in-place.</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 this inspection, there were no signs or distress of malfunction that would indicate actual or potential structural weakness at the Pond or Pond Dam. There was no indication that existing conditions at the Pond Dam have disrupted or have the potential to disrupt safety or operations. |
| §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> | There have been no changes to the Pond that pose a threat or concern to the stability of the Pond, Pond Dam, or operations at JEC. The Pond has remained stable during all construction activities. |

PROFESSIONAL ENGINEER CERTIFICATION

The undersigned registered professional engineer is familiar with the requirements of the CCR Rule and has visited and examined JEC or has supervised examination of JEC 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 Pond does not exhibit any appearances of actual/potential structural weakness that would be disruptive to the normal operations of the CCR Unit. The unit 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:

