Westar Energy®

VIA E-Mail

August 26, 2011

Mr. Stephen Hoffman
U.S. Environmental Protection Agency (5304P)
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Re: Westar Energy, Tecumseh Energy Center
Reply to Final Report of Dam Safety Assessment
of Coal Combustion Surface Impoundments

Dear Mr. Hoffman,

On July 28, 2011, Westar Energy, Inc. (Westar) received from your office the Final Report of Dam Safety Assessment of Coal Combustion Surface Impoundments for our Tecumseh Energy Center. Per you request, Westar is providing this response to address the recommendations in the report. Westar agrees that the report recommendations are of the highest priority and in general will act to address each item as quickly and fully as possible. Specific comments and best estimate of schedule for each item follows.

4.2 Recommendations

4.2.1 Hydrologic and Hydraulic Recommendations
AMEC recommends that Westar Energy performs and documents a complete hydrologic and hydraulic study for both Ash Ponds, as described in the Draft Report, and that the study be used to properly and appropriately operate the ponds in anticipation of and response to future design storm events.

Response (4.2.1)
On March 31, 2011 Professional Engineering Consultants completed a hydrologic and hydraulic study for the Tecumseh Energy Center Area 1 and Area 2 ponds. The study indicated the Area 1 and Area 2 ponds could handle the design storm events but did not maintain the recommended 3' freeboard. Design work for modifications to the flow structures and/or berms to address the freeboard deficiency will be started in September 2011. Required modifications to the flow structures and/or berm to meet the 3' freeboard recommendation will be completed by December 31, 2012.

4.2.2 Geotechnical and Stability Recommendations
Based on the stability analyses provided to AMEC, the Area 1 and Area 2 ponds meet the minimum factors of safety.

Response (4.2.2)
Requirements met, no action items planned. Geotechnical engineer will provide design services on vegetation removal to ensure factors of safety are maintained at all times.

4.2.3 Monitoring and Instrumentation Recommendations
AMEC recommends that the installation and periodic monitoring of piezometers be considered by Westar Energy.

Response (4.2.3)
Westar Energy will consult with the geotechnical engineer that completed the stability analyses on the berms and who will be providing design services on the vegetation removal to provide piezometer recommendations by December 2011. If the Geotechnical Engineer recommends installation of piezometers, installation will be incorporated into the vegetation removal work. If recommended, installation of piezometers will be completed by December 31, 2012.

4.2.4 Inspection Recommendations
Annual visual inspections of each management unit should be performed by a Professional Engineer. These inspections should be documented reports and should be maintained by the facility.

Additionally, weekly visual inspections should be performed by facility O&M personnel and should be supported by an inspection checklist that would serve as documentation of these inspections.

AMEC recommends that vegetation on the impoundments be aggressively managed based on guidance in (a) Corps of Engineers EM 1110-2-301, *Guidelines for Landscape Planting and Vegetation management at Floodwalls, Levees, and Embankment Dams* and (b) FEMA 534, *Technical Manual for Dam Owners: Impacts of Plants on Earthen Dams*. Additionally, any animal impact should be mitigated based on guidance in FEMA 473, *Technical Manual for Dam Owners: Impacts of Animals on Earthen Dams*.

Response (4.2.4)
Westar will implement documented annual visual inspections of the berms by a PE. The annual visual inspections will be coordinated to also meet the Kansas Department of Agriculture, Division of Water Resources Requirements for a Significant Hazard Dam that specifies a documented PE inspection every 5 years. A PE inspection and report will be completed on the berms in 2012 following the completion of the vegetation removal and upgrades to address the freeboard deficiencies.

Weekly visual inspections and more detailed monthly O&M inspections of the berms will be completed by plant personnel. Inspections will be set-up and documented in the plant computerized work management system. Work orders will be created to address any noted deficiencies. Development of inspection documents, inspection training, and inspections will be implemented by December 31, 2011. Inspections will be modified as required to coordinate with vegetation removal and other improvements noted in this response.

An aggressive vegetation removal project and management program will be implemented based on the recommended documents. The geotechnical engineer who completed the berm stability analysis will be utilized to provide design services for vegetation removal. Design work for vegetation removal will be started in September 2011. Vegetation removal will be completed by December 31, 2012. Upon completion of the vegetation removal, continued maintenance of vegetation and animal impacts will be handled as part of the routine O&M inspections.

If there are any questions concerning this response information, please contact me at 785-575-8121.

Sincerely,

Craig Swartzendruber

Craig Swartzendruber
Manager Environmental Compliance Systems
Westar Energy