UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

July 28, 2011

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

VIA E-MAIL

Mr. Bradley Beecher
Vice President-Chief Operating Officer Electric
The Empire District Electric Company
602 Joplin Street
P.O. 127
Joplin, Missouri 64102

Dear Mr. Beecher,

On November 4, 2010 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a coal combustion residual (CCR) site assessment at the Asbury Power Station facility. The purpose of this visit was to assess the structural stability of the impoundments or other similar management units that contain “wet” handled CCRs. We thank you and your staff for your cooperation during the site visit. Subsequent to the site visit, EPA sent you a copy of the draft report evaluating the structural stability of the units at the Asbury Power Station facility and requested that you submit comments on the factual accuracy of the draft report to EPA. Your comments were considered in the preparation of the final report.

The final report for the Asbury Power Station facility is enclosed. This report includes a specific condition rating for each CCR management unit and recommendations and actions that our engineering contractors believe should be undertaken to ensure the stability of the CCR impoundment(s) located at the Asbury Power Station facility. These recommendations are listed in Enclosure 2.

Since these recommendations relate to actions which could affect the structural stability of the CCR management units and, therefore, protection of human health and the environment, EPA believes their implementation should receive the highest priority. Therefore, we request that you inform us on how you intend to address each of the recommendations found in the final report. Your response should include specific plans and schedules for implementing each of the recommendations. If you will not implement a recommendation, please provide a rationale. Please provide a response to this request by August 29, 2011. Please send your response to:

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

If you are using overnight of hand delivery mail, please use the following address:

Mr. Stephen Hoffman
U.S. Environmental Protection Agency
Two Potomac Yard
2733 S. Crystal Drive
5th Floor, N-5838
Arlington, VA 22202-2733

You may also provide a response by e-mail to hoffman.stephen@epa.gov

You may assert a business confidentiality claim covering all or part of the information requested, in the manner described by 40 C. F. R. Part 2, Subpart B. Information covered by such a claim will be disclosed by EPA only to the extent and only by means of the procedures set forth in 40 C.F.R. Part 2, Subpart B. If no such claim accompanies the information when EPA receives it, the information may be made available to the public by EPA without further notice to you. If you wish EPA to treat any of your response as "confidential" you must so advise EPA when you submit your response.

EPA will be closely monitoring your progress in implementing the recommendations from these reports and could decide to take additional action if the circumstances warrant.

You should be aware that EPA will be posting the report for this facility on the Agency website shortly.

Given that the site visit related solely to structural stability of the management units, this report and its conclusions in no way relate to compliance with RCRA, CWA, or any other environmental law and are not intended to convey any position related to statutory or regulatory compliance.

Please be advised that providing false, fictitious, or fraudulent statements of representation may subject you to criminal penalties under 18 U.S.C. § 1001.

If you have any questions concerning this matter, please contact Mr. Hoffman in the Office of Resource Conservation and Recovery at (703) 308-8413. Thank you for your continued efforts to ensure protection of human health and the environment.

Sincerely,
/Suzanne Rudzinski/, Director
Office of Resource Conservation and Recovery

Enclosures

Enclosure 2

Asbury Power Station Recommendations (from the final assessment report)

12.1 Corrective Measures and Analyses for the Structures

1. Continue and improve vegetation control efforts to maintain the downstream embankment slopes free of heavy vegetation and tree growth. Existing trees should be removed to prevent the root systems from creating seepage paths through the embankment slopes. A minimum of about 25 feet of clear space should be provided between the downstream toe and the tree line. Removal of root balls of large trees can cause additional damage to an embankment and removal is not recommended without appropriate engineering planning and consideration.

2. Conduct a geotechnical exploration program to assess the embankment and foundation soils materials types and properties. A geotechnical soils testing program should accompany the drilling program and should include index property tests along with strength tests. The program should be developed to provide the information needed to perform slope stability analyses on the perimeter embankments.

3. Perform slope stability analyses for the perimeter embankments of the CCW impoundments. Analyses should be made for the maximum section of each embankment with a phreatic surface representative of steady seepage under normal water surface conditions. Stability analyses should be performed for the full range of expected loading conditions, including appropriate application of equipment and surcharge loads related to the storage of CCW in the Lower Pond. The analyses should also evaluate stability of the existing ash stockpiles within the perimeter embankments.

4. Evaluate the liquefaction potential of CCW stored in the Lower Pond. Based on findings of the liquefaction evaluation, assess the potential impacts with respect to perimeter embankment stability.

5. Perform hydrologic and hydraulic analyses of the CCW impoundments. Assess the ability of the ash pond facilities to safely pass and/or store the recommended IDF. As part of the hydrologic analysis, develop accurate stage-storage curves for the impoundments and stage-discharge curves for spillway(s).

12.2 Corrective Measures Required for Instrumentation and Monitoring Procedures

Install piezometers at various locations on the perimeter embankments of the Lower Pond and South Pond to facilitate monitoring seepage through the embankments and foundations. Install survey monuments on the embankments to enable monitoring of potential embankment movements.

12.3 Corrective Measures Required for Maintenance and Surveillance Procedures

Conduct and document informal annual inspections of the CCW impoundments by APS personnel trained in dam safety evaluations. Have the CCW impoundment perimeter embankments inspected by a third-party professional engineer with experience in dam safety evaluations at a minimum of every 5 years. Consider developing and implementing a brief daily check inspection of the facilities to be conducted by APS personnel.

Implement early warning measures to more closely monitor water levels in the CCW impoundments and reduce the potential for overtopping failure of the embankments. Early warning measures could include enhanced visual surveillance and/or automated water level and alarm systems. Automated water level and alarm systems, if included in the early warning measures, should be installed at the Lower Pond Ponds and the South Pond.

12.4 Corrective Measures Required for the Methods of Operation of the Project Works
None.

12.5 Summary
The following factors were the main considerations in determining the final rating of the three CCW impoundments at Asbury Power Station.

- The Lower Pond perimeter embankment is a significant-hazard structure based on federal classification criteria.
- The Upper Pond perimeter embankment is a low-hazard structure based on federal classification criteria.
- The South Pond perimeter embankment is a low-hazard structure based on federal classification criteria.
- The three CCW impoundments were observed to be in generally good condition at the time of the field assessment.
- There are no hydrologic/hydraulic analyses on record indicating that the facilities can safely pass and/or store the recommended IDF. There are no stage-storage curves for the ponds, and there is no stage-discharge curve for the Lower Pond spillway.
- There are no stability analyses on record for the CCW impoundments.
- There are no means to accurately measure and record water levels and flow volumes.
- There are no means to monitor perimeter embankment performance (i.e. movement, settling, seepage, etc.).
- Maintenance, surveillance and operational procedures are considered fair.