

US EPA ARCHIVE DOCUMENT



VIA CERTIFIED MAIL/RETURN RECEIPT REQUESTED

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January 14, 2010

**RE: Plan for Addressing Recommendations in Site Assessment Report  
Louisville Gas and Electric Company  
Mill Creek Station Ash Pond**

Dear Mr. Hoffman:

This is a response on behalf of Louisville Gas and Electric Company (LG&E) to EPA's December 14, 2009 letter requesting LG&E to inform you of our plans to address the recommendations in EPA's site assessment report for the Mill Creek Station Ash Pond. Specifically, this response covers how LG&E intends to address the recommendations made by EPA and its engineering contractors, O'Brien & Gere, as a result of a site assessment conducted at the Mill Creek facility on September 14 and 15, 2009. LG&E has reviewed the recommendations and intends to address each of the recommendations to ensure the continued stability of the CCR impoundment at the Mill Creek facility. The attached (Table 1) identifies the specific plans and schedules for implementing each of the recommendations.

Please contact Mike Winkler at (502) 627-2338 or Michael.Winkler@eon-us.com if you have any questions regarding this response.

Sincerely,

**LOUISVILLE GAS and ELECTRIC COMPANY**  
**Plan For Addressing Recommendations in Site Assessment Report**  
**Louisville Gas and Electric Company - Mill Creek Station Ash Pond**

Table 1

Recommendations from EPA and O'Brien & Gere RE: Mill Creek Power Station Ash Pond Site Assessment, September 14 and 15, 2009 - maintenance items that do not require immediate attention			
	Recommendation	Implementation Plan	Implementation Schedule
1	Inboard slopes - repair eroded inboard slope of northern embankment prior to filling. Repairs should be completed in accordance with an engineered design. Inspect and maintain erosion that may develop on exposed portions of all inboard slopes on a regular basis.	LG&E plans to retain a professional geotechnical engineering firm to evaluate the stability of the inboard slopes and design necessary repairs. The inboard slopes are inspected periodically by plant staff responsible for the maintenance and operation of the impoundment.	Evaluation - Summer, 2010 Repairs - As necessary
2	Outboard slopes - Remove trees and mow vegetation at least twice annually.	LG&E retained a professional vegetation management company, Wright Tree Service to remove trees and other woody vegetation from the north and west outboard slopes.	Completed November, 2009
3	Outboard slopes - Perform follow-up inspection of north and west outboard slopes after vegetation is mowed to check for adverse conditions such as sloughs, erosion, and seepage.	LG&E retained a professional Geotechnical Engineering firm, ATC Associates (ATC), to conduct an assessment of the Ash Pond after vegetation was mowed. No significant issues were noted from the inspection.	Completed November, 2009
4	Outboard slopes - Trap burrowing rodents and fill animal burrows.	LG&E retained ATC to conduct an assessment of the Ash Pond. The scope of the inspection included a visual survey of the embankments for evidence of animal activity. ATC personal marked areas that had evidence of animal activity. The company contracted with the United States Department of Agriculture (USDA) to address the animal activity. USDA removed the animals and filled the burrows. Currently, the site is showing no further burrowing animal activity.	Completed November, 2009
5	Monitor the old slough on the south end of the west dike outboard slope.	The old slough on the south end of the west dike is monitored periodically by LG&E personnel who are responsible for the operation and maintenance of the impoundment.	Monitoring ongoing
6	Divider Dike - maintain outboard slope of divider dike by routinely repairing erosion rills. Monitor divider dike for seepage, which could lead to an uncontrolled breach.	LG&E plans to maintain the divider dike in conjunction with the refilling of the north cell of the Ash Pond. The inboard slopes are inspected periodically by plant staff responsible for the maintenance and operation of the impoundment.	Monitoring ongoing
7	Continue to participate in state biennial inspections.	LG&E will continue to participate in inspections from the State of Kentucky Department of Environmental Protection-Dam Safety and Floodplain Compliance Section.	Next state inspection expected in October 2010 and biennially thereafter
8	Consideration should be given to independent inspections, such as the one conducted by ATC Associates, Inc., by licensed dam safety engineers on at least a biennial basis	LG&E retained ATC to conduct an independent inspection in November of 2009. No significant issues were noted. LG&E is considering future periodic inspections of the facility by licensed professional engineers with expertise in dam safety.	Field work completed November 2009. Report expected in March 2010.
9	Consideration should be given to development of an O&M Plan that would establish a firm schedule for operations, maintenance, and inspection activities.	LG&E is currently developing Maintenance and Inspections Manuals for the Mill Creek Ash Pond.	Summer, 2010
10	Perform an updated slope stability analysis and seismic stability analysis on critical sections of the north and west dikes to confirm that these embankments continue to meet current stability criteria for earth dams.	LG&E has completed an initial phase of the slope stability analysis which included a geometric survey of critical sections of the Ash Pond. LG&E plans to retain a professional geotechnical engineering firm to perform an updated slope stability analysis and seismic stability analysis on critical sections of the north and west dikes to confirm that these embankments continue to meet current stability criteria for earth dams.	Summer, 2010
11	Install permanent observation wells or piezometers so that water levels in the embankments can be monitored during future inspections.	LG&E plans to install instrumentation (piezometers or observations wells) in conjunction with an updated slope stability analysis and seismic stability analysis on critical sections of the north and west dikes.	Summer, 2010
12	Forward results of embankment stability analysis to the Kentucky Department of Environmental Protection (KDEP) for review and formal filing.	LG&E plans to forward the results of the slope stability analysis to the KDEP.	Summer, 2010