US ERA ARCHIVE DOCUMENT

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February 7, 2011

#### CERTIFIED MAIL AND ELECTRONIC MAIL

Mr. Stephen Hoffman Office of Resource Conservation and Recovery U. S. Environmental Protection Agency (5304P) 1200 Pennsylvania Avenue, NW Washington, DC 20460

hoffman.stephen@epa.gov

Re: "Report of Safety Assessment Coal Combustion Surface Impoundments, Georgia Power, Plant Scherer, Juliette, Georgia", December 2010

Dear Mr. Hoffman:

On January 7, 2011, the U. S. Environmental Protection Agency ("EPA") provided Georgia Power with a final report regarding certain facilities for the management of coal combustion byproducts at Georgia Power's Plant Scherer ("Final Report"). The Final Report was prepared by AMEC Earth & Environmental, Inc. ("AMEC") and dated December 2010. EPA stated that Georgia Power's comments were considered in preparation of the Final Report. Georgia Power appreciated the opportunity to provide comments. EPA also requested Georgia Power's response to the Final Report's recommendations, including specific plans and schedules for implementing the recommendations. This letter provides Georgia Power's response to the recommendations in the Final Report and additional comments on the Final Report. With this submittal, Georgia Power has addressed all recommendations identified in the Final Report and EPA's transmittal letter dated January 7, 2011. EPA's recommendations are shown in italics below, and Georgia Power's responses follow each recommendation. The Georgia Power comments on the Final Report are shown at the end of the letter.

# Acknowledgement of Management Unit Condition and Potential Hazard Rating

Georgia Power is committed to the management of coal combustion byproducts in a safe manner that is protective of human health and the environment. Georgia Power has had a robust ash pond dike inspection and maintenance program in place for many years. We are pleased that EPA's on-site inspection and document review have confirmed that Georgia Power's facilities are well constructed and managed effectively.

### 4.2 Hydrologic and Hydraulic Recommendations

June 2010 Draft Report. AMEC recommended that Georgia Power determine what rainfall event the Ash and Settling Ponds are capable of safely containing or passing. A more complete evaluation would determine the effect of the PMP rainfall event on the Ash Pond and the Plant Scherer site. The analyses should include evaluation of Lake Juliette's ability to safely contain or pass the design storm event.

During the site visit, the hazard potential was evaluated to be "significant hazard" because failure of the dam could result in damage to public roads and environmental damage, but would be unlikely to cause loss of human life. There are residences nearby, to the north of the dam, along Luther Smith Road; the nearest residence is about 800 feet from the dam. Due to the thickness of the wooded terrain and the presence of a deep defile between the dam and the homes, the potential for loss of human life was assessed as being unlikely. In AMEC's opinion, it would be prudent to perform a dam breech analyses to evaluate the potential for a dam failure to inundate these homes.

Final Report. Based upon additional information provided by Georgia Power on September 21, 2010 (SCH-API 043), in AMEC's opinion, the analyses that were provided address the ability of the both impoundments to safely control or pass appropriate storm events.

No further recommendation was provided so no response is necessary.

# 4.3 Geotechnical and Stability Recommendations

June 2010 Draft Report. SCH-API 025 discusses soil strength parameters of foundation soil only. Embankment soil strength parameters are shown in SCH-API 026 and 027, but their genesis is not provided. AMEC recommends that clarification of how the engineering soil strength parameters for the embankment soil were determined be provided. AMEC recommends that the stability analyses include design storm peak/surcharge stage water levels that reflect appropriate phreatic surfaces due to pre-saturation by appropriate antecedent precipitation and the limited outflow capacity of the pond. Likewise, the stability analyses should consider all critical stages during the life of the facility, such as maximum pool area and any potential surchages, as well as likely loading combinations. Furthermore, the previous analyses limit the failure surfaces to circular surfaces; AMEC recommends that the slope stability analyses include slip surface optimization to allow for noncircular failure surfaces.

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Final Report. Based upon additional information provided by Georgia Power on September 21, 2010 (SCH-API 040), in AMEC's opinion, the information provided adequately documents the soil strength parameters and the analyses address the stability of both impoundments under the noted load cases.

No further recommendation was provided so no response is necessary.

### 4.4 Monitoring Instrumentation

AMEC has reviewed provided information and records and determined that Georgia Power has adequate instrument monitoring and review practices. We recommend that Plant Scherer continue the current instrument monitoring and review practices.

Georgia Power will continue its instrument monitoring and review practices.

#### 4.5 Inspection Recommendations

AMEC has reviewed provided information and inspection records and determined that Georgia Power has adequate inspection practices. We recommend that Plant Scherer continue the current inspection program and practices.

Georgia Power will continue its inspection program and practices.

# Additional Georgia Power comments on the Final Report

Page 8: The slough repair on the south dike was carried out between June 22, 2010 and July 8, 2010. Photos were provided with comments to Draft Report.

Page 16: Section 3.5, Plant personnel inspect the ponds and embankments weekly. They are normally documented and provided to SCG Hydro Services.

Appendix A – Checklist – Georgia Power again note that there has never been a failure at this site.

Appendix C -The piezometer plots do not have the attribution statement that is provided elsewhere.

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With this response, Georgia Power has addressed all recommendations in the Final Report and EPA's letter dated January 7, 2011. Please direct any future correspondence to my attention.

Sincerely,

Kon Shy mar Ron Shipman