Ronald Shipman
Vice President
Environmental Affairs

241 Ralph McGill Boulevard NE
Atlanta, Georgia 30308-3374

Tel 404.506.7777
Fax 404.506.7066
rshipman@southernco.com

GEORGIA POWER
A SOUTHERN COMPANY

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 Yates, Newnan, Georgia", December2010

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 Yates ("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 Ash Pond 1

4.2.1 Hydrologic and Hydraulic Recommendations

Ash Pond 1 is currently using a sediment control for the coal stockpile. Some of the embankment's downstream face has been backfilled due to construction of cooling towers. However, the dam is a maximum of 15 feet high and the surface of the ash is sufficiently low to allow accumulation of water. Based upon additional information provided by Georgia Power on 21 September 2010 (YAT-API 083), in AMEC's opinion, the analyses that were provided address the ability of the impoundment to safely control or pass appropriate storm events.

No further recommendation was provided so no response is necessary.

4.2.2 Geotechnical and Stability Recommendations

In the draft report, AMEC commented that the stability analyses were performed for the existing loading condition plus a seismic acceleration. It was unclear if the steady state condition includes the peak pool due the design and storm event. The analyses presented depicted a grid and radius type search; however, the grid appears to be small and seems to limit the radii of the potential failure circles. The analyses should include an entry and exit type of search that would allow long radius failure surfaces. Furthermore, the failure surfaces appear to be limited to circular surface; the failure surfaces should be optimized. Subsequently, SCECS provided updated stability analyses in the information submitted on September 21, 2010 which satisfactorily addresses the comments AMEC provided in the draft report.

No further recommendation was provided so no response is necessary.

4.2.3 Monitoring and Instrumentation Recommendations

This ash pond is not actively receiving CCWS, but is used for storm water control. At the time of the draft report there was no instrumentation for this structure. Subsequently, a piezometer was installed and is being monitored.

No further recommendation was provided so no response is necessary.

4.2.4 Inspection Recommendations

This pond has, prior 2007, not had routinely documented inspections. Routine documented formal inspections are now performed on a regular basis.

No further recommendation was provided so no response is necessary.

4.3 Ash Pond 2

4.3.1 Hydrologic and Hydraulic Recommendations

Ash pond 2 is currently used for disposal and processing of CCW. This pond also receives almost all the drainage from six of the other ponds at the site prior to recycling the water. Based upon additional information provided by Georgia Power on 21 September 2010 (YAT-API 084), in AMEC's opinion. The analyses that were provided address the ability of the impoundment to safely control or pass appropriate storm events.

No further recommendation was provided so no response is necessary.

4.3.2 Geotechnical and Stability Recommendations

In the draft report, AMEC commented that the stability analyses were performed for the existing loading condition plus a seismic acceleration. It was unclear if the steady state condition included the peak pool due that would result from the design storm event. The analyses presented depict several methods of search; however, the extent of the searches appears to be limited and seems to prevent several modes of failure. The failure surfaces should also be optimized to allow for non-circular or non-planer failures. Subsequently, SCECS provided updated stability analyses in the information submitted on September 21, 2010 which satisfactory address the comments AMEC provided in the draft report.

In the draft report, AMEC commented that the analyses discuss the loss of the riverbank, which supports the toe of the dam, and indicates that "...we feel that even if the toe of the dam were undermined, the overall stability of the dam is high enough that corrective measures could be taken before Ash Pond 2 dike would be affected. "After consideration and review of flood events over the recent past, a prudent engineer could perceive that erosion of the toe of the dam and the riverbank during a flood event may be sufficient to cause total failure of the dam, without allowing protection or repairs to the dam during the event. FEMA"s 1% recurrence flood is a flood that has a 1% chance of occurring in any one year; for a dam with a 50 or 100 year design life, the probability of the dam experiencing such a flood is high. It would be prudent to provide scour and erosion protection of the riverbank and toe of the dam to a level sufficient to protect them from a flood event well in excess of the minimum criteria. Such a flood event might include the flood of record or the 0.2% recurrence event for that portion of the Chattahoochee River. Upon review of the updated information and analyses submitted on September 21, 2010 by SCECS, AMEC generally agrees that inspection and maintenance of the riverbank is a critical aspect to assure stability and safety of ASH Pond 2. As stated in their report, Georgia Power and Plant Yates personnel are keenly aware of the need to monitor the riverbank and the riverbank is included in their weekly inspection. The riverbank is also included in the routine inspections by the Dam Safety Engineer. Any change in condition of the riverbank would be immediately noted and corrective action taken before the stability of Ash Pond

2 dike would be compromised. This attention to the riverbank satisfactorily addresses the comments AMEC provided in the draft report.

No further recommendation was provided so no response is necessary.

4.3.3 Monitoring and Instrumentation Recommendations

AMEC has reviewed provided information and instrumentation records for Ash Pond 2 and determined that Georgia Power has adequate inspection practices. These instruments were installed only in that last few months, so it would be prudent for Plant Yates to document monitoring more frequently than normal until base line phreatic readings are apparent. AMEC recommends that the current inspection program and practices be continued for this ash pond.

These piezometers were installed and have been a part of Georgia Power's monitoring program since March of 2010. Georgia Power will continue its monitoring and inspection program and practices.

4.3.4 Inspection Recommendations

AMEC has reviewed provided information and inspection records for Ash Pond 2 and determined that Georgia Power has adequate inspection practices. AMEC recommends that the current inspection program and practices be continued for this ash pond.

Georgia Power will continue its inspection program and practices.

4.4 Ash Pond 3

4.4.1 Hydrologic and Hydraulic Recommendations

Ash Pond 3 is not currently used for processing of CCW. This pond receives almost all the drainage from Ash Pond B' before discharging into Ash Pond 2. YAT-AP1 057, from 2001, provided information regarding analyses of design storm events for AP 3. That document appeared to indicate that the dike overtopped during the 2% (50-year) storm event. Since the service life of this facility is generally 50 to 100 years (it is now 33 years old), there is a high probability that the dam will experience a storm event in excess of the "design" storm. Based upon additional information provided by Georgia Power on September 21, 2010 (YAT-API 084), in AMEC's opinion, the analyses that were provided address the ability of the impoundment to safely control or pass appropriate storm events.

No further recommendation was provided so no response is necessary.

4.4.2 Geotechnical and Stability Recommendations

In the draft report, AMEC commented that the stability analyses were performed for the existing condition plus a seismic acceleration. It was unclear if the steady state condition included the peak pool due to the design storm event. The analyses presented depict only the sliding block methods of search; however, the extent of the searches appears to be limited. AMEC recommended that the slope stability analyses be performed so they include design storm peak/surcharge stage water levels that reflect appropriate phreatic surfaces due to presaturation 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 surcharges, as well as likely loading combinations. Furthermore, the previous analyses limited the failure surfaces to linear surfaces; AMEC recommended that the slope stability analyses include entry and exit type searches that would allow long radii failure circles as well as slip surface optimization to allow for non-linear and non-circular failure surfaces. Subsequently, SCECS provided updated stability analyses in the information submitted on September 21, 2010 which satisfactorily address the comments AMEC provided in the draft report.

No further recommendation was provided so no response is necessary.

4.4.3 Monitoring and Instrumentation Recommendations

AMEC has reviewed provided information and instrumentation records for Ash Pond 3. The piezometers installed in 1997 appear to have been temporary and don't appear to have been monitored since 1999. AMEC understands that six piezometers were recently installed.

No further recommendation was provided so no response is necessary.

4.4.4 Inspection Recommendations

AMEC has reviewed provided information and inspection records for Ash Pond 3 and determined that Georgia Power has adequate inspection practices. AMEC recommend that the current inspection program and practices be continued for this ash pond.

Georgia Power will continue its inspection program and practices.

4.5 Ash Pond B

4.5.1 Hydrologic and Hydraulic Recommendations

Ash Pond B' is currently used for processing of CCW and discharges into Ash Pond 3. Based upon YAT API-050, it appears that Ash Pond B' was designed to safety store or pass the 1% recurrence (100-year) storm, however, the document did not indicate the storm duration. Since the service life of this facility is generally 50 to 100 years (it is now about 33 years old), there is a high probability that the dam will experience a storm event equal to or greater than the "design" storm. Based upon additional information provided by Georgia Power on September 21, 2010 (YAT-API 083), in AMEC's opinion, the analyses that were provided address the ability of the impoundment to safely control or pass appropriate storm events.

No further recommendation was provided so no response is necessary.

4.5.2 Geotechnical and Stability Recommendations

In the draft report, AMEC commented that the stability analyses were performed for the existing loading condition plus a seismic acceleration. It was unclear if the steady state condition included the peak pool due to the design storm event. The analyses presented depicted only the grid & radius methods of search; however, the extents of the searches appeared to be extended. AMEC recommended that the slope stability analyses be performed so they 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 surcharges, as well as likely loading combinations. Furthermore, the previous analyses limited the failure surfaces to circular surfaces; AMEC recommended that the slope stability analyses include entry and exit type searches that would allow long radii failure circles as well as slip surface optimization to allow for non-linear and non-circular failure surfaces. Subsequently, SCECS provided updated stability analyses in the information submitted on September 21, 2010 which satisfactorily address the comments AMEC provided in the draft report.

No further recommendation was provided so no response is necessary.

4.5.3 Monitoring and Instrumentation Recommendations

AMEC has reviewed provided information and instrumentation records for Ash Pond B'. These instruments were installed only in that last few months, so it would be prudent for Plant Yates to document monitoring more frequently than normal until base line phreatic readings are apparent. AMEC recommend that the current inspection program and practices be continued for this ash pond.

These piezometers were installed and have been a part of Georgia Power's monitoring program since March of 2010. Georgia Power will continue its inspection program and practices.

4.5.4 Inspection Recommendations

This pond has, historically, not had routinely documented inspections. Because this pond is used to receive CCW and is capable of impounding water, AMEC recommends that this pond have documented formal inspections on a regular basis.

Georgia Power will continue formal inspections on a regular basis which includes this ash pond.

4.6 Ash Pond A

4.6.1 Hydrologic and Hydraulic Recommendations

Ash Pond A is currently inactive, covered, and no longer receives liquid borne waste. Drainage from this unit appears to flow overland or in ditches to Ash Pond 2. Erosion and vegetation, for the most part, appear to be under control. AMEC recommends that Georgia Power continue to periodically maintain this unit to provide erosion and vegetation control.

Georgia Power will continue to maintain this ash pond to provide erosion and vegetation control.

4.6.2 Geotechnical and Stability Recommendations

In the draft report, AMEC commented that the stability analyses were performed for the existing loading condition plus a seismic acceleration. The analyses presented depict only the sliding block methods of search. AMEC recommended that the slope stability analyses be performed so they reflect appropriate phreatic surfaces due to pre-saturation by appropriate antecedent precipitation. Furthermore, the previous analyses limit the failure surfaces to linear surfaces; AMEC recommends that the slope stability analyses include entry and exit type searches that would allow long radii failure circles as well as slip surface optimization to allow for non-linear and non-circular failure surfaces. Subsequently, SCECS provided updated stability analyses in the information submitted on September 21, 2010 which satisfactorily address the comments AMEC provided in the draft report.

No further recommendation was provided so no response is necessary.

4.6.3 Monitoring and Instrumentation Recommendations

AMEC has reviewed provided information and instrumentation records for Ash Pond A. These instruments were installed only in that last few months, so it would be prudent for

Plant Yates to document monitoring more frequently than normal until base line phreatic readings are apparent. AMEC recommend that the current inspection program and practices be continued for this ash pond.

These piezometers were installed and have been a part of Georgia Power's monitoring program since March of 2010. Georgia Power will continue its inspection program and practices.

4.6.4 Inspection Recommendations

This pond has, historically, not had routinely documented inspections. Because this dam exists and is subject to failure or degradation due to erosion, AMEC recommends that this pond have documented formal inspection on a regular basis.

Georgia Power will continue formal inspections on a regular basis which includes this ash pond.

4.7 Ash Pond B

4.7.1 Hydrologic and Hydraulic Recommendations

Ash Pond B is currently inactive and the dam appears to be breached and buried. Drainage from this unit appears to flow overland or in ditches to Ash Pond 2. Erosion and vegetation, for the most part, appear to be under control. AMEC recommends that Georgia Power continue to periodically maintain this unit to provide erosion and vegetation control.

Georgia Power will continue to maintain this ash pond to provide erosion and vegetation control.

4.7.2 Geotechnical and Stability Recommendations

No stability analyses are available for Ash Pond B. Likewise, it appears that the dam for Ash Pond B has been partially to mostly buried; AMEC rated this unit as less than low hazard. AMEC recommends that only routine maintenance of vegetation and prevention of erosion is necessary for this unit.

Georgia Power will continue to maintain this ash pond to provide erosion and vegetation control.

4.7.3 Monitoring and Instrumentation Recommendations

No instrumentation was available for review for this unit. It appears that the dam for Ash Pond B has been partially to mostly buried; AMEC rated this unit as less than low hazard. AMEC recommends that only routine maintenance of vegetation and prevention of erosion is necessary for this unit.

Georgia Power will continue to maintain this ash pond to provide erosion and vegetation control.

4.7.4 Inspection Recommendations

No instrumentation was available for review for this unit. It appears that the dam for Ash Pond B has been partially to mostly buried; AMEC rated this unit as less than low hazard. AMEC recommends that only routine maintenance of vegetation and prevention of erosion is necessary for this unit.

Georgia Power will continue to maintain this ash pond to provide erosion and vegetation control.

4.8 Ash Pond C

4.8.1 Hydrologic and Hydraulic Recommendations

Ash Pond C has been incorporated into solid waste landfill R6. AMEC recommends that Georgia Power continue to periodically maintain this unit to provide erosion and vegetation.

Georgia Power will continue to maintain this ash pond to provide erosion and vegetation control.

4.8.2 Geotechnical and Stability Recommendations

Ash Pond C has been incorporated into solid waste landfill R6. AMEC recommends that only routine maintenance of vegetation and prevention of erosion is necessary for this unit.

Georgia Power will continue to maintain this ash pond to provide erosion and vegetation control.

4.8.3 Monitoring and Instrumentation Recommendations

Ash Pond C has been incorporated into solid waste landfill R6. AMEC rated this unit as less than low hazard. AMEC recommends that only routine maintenance of vegetation and prevention of erosion is necessary for this unit.

Georgia Power will continue to maintain this ash pond to provide erosion and vegetation control.

4.8.4 Inspection Recommendations

Ash Pond C has been incorporated into solid waste landfill R6. This pond has, historically, not had routinely documented inspections. AMEC recommends that only routine maintenance of vegetation and prevention of erosion is necessary for this unit.

Georgia Power will continue to maintain this ash pond to provide erosion and vegetation control.

Additional Georgia Power comments on the Final Report

Page 17: Section 3.2.1, last paragraph: should note that since the dry ash stacking operation has not been undertaken, the proposed modifications had not been implemented.

Page 21: Table 4, Note 3: Triaxial testing was attempted. No triaxial test results were considered viable.

Page 21: Table 4, Note 4 & 5: A piezometer was installed in Ash Pond 1 after the initial report.

Page 21: Table 4, Note 6: No UD samples were recoverable. SPT samples were recovered.

Page 27: Section 3.4: Information related to the foundation conditions for all ash ponds was provided in the revised 2010 Stability Analysis and accompanying figures.

Page 29: Section 3.5.1, next to last paragraph: An updated reference to piezometer locations and nomenclature at AP 3 was provided in our September 21 comments.

FIGURES 1-9 are of Plant McDonough and should be replaced.

Photo 2-9 – Wet Area at Toe Near Left Abutment of Downstream Slope
Photo A-3 – Severe Erosion at Drain Outlet at Left Abutment

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,

Ron Shipman