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COMMENTS

Comments received for CHA Draft Report *(December 23, 2009,* CHA Project No. 20085.2060.1510*)* for the Assessment of Dam Safety of Coal Combustion Surface Impoundments Georgia Power Company – Plant Branch, Milledgeville, GA. Comments include;

- EPA comments - None;
- GA DNR comments received on January 19, 2010; and
- Georgia Power Company comments received on January 27, 2010.

FW One more...Comments on Draft Report Georgia Power's Plant Branch
From: Harris IV, Warren
Sent: Wednesday, February 03, 2010 2:43 PM
To: Adnams, Katy; Everleth, Jennifer
Subject: FW: One more...Comments on Draft Report: Georgia Power's Plant Branch

Attachments: Comments on Georgia Power Plant Harlee.doc; Georgia Power Response to Branch Draft Report EPA 012710.doc.pdf

-----Original Message-----
From: Kohler.James@epamail.epa.gov [mailto:Kohler.James@epamail.epa.gov]
Sent: Wednesday, February 03, 2010 2:30 PM
To: Hargraves, Malcolm; Harris IV, Warren; dennis.a.miller@lmco.com
Cc: Hoffman.Stephen@epamail.epa.gov
Subject: One more...Comments on Draft Report: Georgia Power's Plant Branch

Dennis/CHA:

I lied, one more....

EPA/state/company comments are attached, please address as appropriate.
As before: we will be including these comments as a separate document and posting to the web along with the draft and final reports.

Please note: changes do not need to be made to your recommendations or any other parts of the report based on these comments unless you feel the additional information provided in the comments warrants a change.

If there is any question about how to address a comment, please inform Steve and myself and we can discuss.

Thank you!

Jim

(See attached file: Comments on Georgia Power Plant Harlee.doc)(See attached file: Georgia Power Response to Branch Draft Report EPA 012710.doc.pdf)

****
Jim Kohler, P.E.
Environmental Engineer
LT, U.S. Public Health Service
U.S. Environmental Protection Agency
Office of Resource Conservation and Recovery
Phone: 703-347-8953
Fax: 703-308-0514
****

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Final Report
Assessment of Dam Safety of Coal Combustion Surface Impoundments
Georgia Power Company – Plant Branch
Milledgeville, GA

Comments Received from the EPA
In Response to CHA Draft Report dated December 23, 2009
None Received

CHA Project No. 20085.2060.1510

CHA

Comments

EPA HQ - Page ii: Check assessment dates.

EPA Region – None.

State –

From: "Carey Anderson" <Carey.Anderson@dnr.state.ga.us>
To: James Kohler/DC/USEPA/US@EPA
Cc: "Charles Grizzard" <Charles.Grizzard@dnr.state.ga.us>, "Ed Fiegle" <Ed.Fiegle@dnr.state.ga.us>, "Tom Woosley" <Tom.Woosley@dnr.state.ga.us>
Date: 01/19/2010 10:10 AM
Subject: Re: Comment Request on EPA's Draft Coal Ash Impoundment Assessment Reports

Jim,

I have a few comments on the sections that mention the GA Safe Dams Program...

1. On page 2, first paragraph, if you need them the State ID's for Ash Ponds B and D are (C doesn't have an ID yet):
B - 117-023-04387
D - 117-021-02354

2. On page 2, last paragraph, I would delete the words "much of the" in the sentence that starts "Category II facilities are exempt from much of the...". Category II dams are not regulated at all by the State.

3. On page 2, last paragraph, last sentence, I would change the word "facility" to "dam" (may want to change it in the previous sentence also) just so there is no confusion. The dams for Ash Ponds B and D are not held to any design standards, but the discharge from the ponds may be regulated as explained in the next section of the report.

4. On page 90, Table 2, for small dam the size definition should be "Storage capacity not exceeding 500 ac-ft and height not exceeding 25 ft", for medium dam the size definition should be "Storage capacity exceeding 500 ac-ft but not exceeding 1000 ac-ft or height exceeding 25 feet but not exceeding 35 feet", for large dam the size definition should be "Storage capacity exceeding 1000 ac-ft but not exceeding 50,000 ac-ft or height exceeding 35 ft but not exceeding 100 ft"

5. On page 100, first paragraph in Section 3.5.1, Ash Pond C should be deleted in the second sentence (C has not been classified yet and currently is not a Category II dam).

Hope this helps. Let me know if you have any questions,

Carey

Carey Anderson, E.I.T.
Environmental Engineer III
GA DNR/EPD
Safe Dams Program
4244 International Pkwy, Suite 110
Atlanta, GA 30354
404/362-2678

Company – See attached letter dated January 27, 2010.

US EPA ARCHIVE DOCUMENT

Final Report
Assessment of Dam Safety of Coal Combustion Surface Impoundments
Georgia Power Company – Plant Branch
Milledgeville, GA

Comments Received from GA DNR
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Email dated January 19, 2010 and

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Assessment of Dam Safety of Coal Combustion Surface Impoundments
Georgia Power Company – Plant Branch
Milledgeville, GA

Comments Received from Georgia Power Company
In Response to CHA Draft Report dated December 23, 2009
Comments Received January 27, 2010

CHA Project No. 20085.2060.1510

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Comments

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404/362-2678

Company – See attached letter dated January 27, 2010.

US EPA ARCHIVE DOCUMENT

Charles H. (Chuck) Huling, P.E.
Vice President
Environmental Affairs

241 Ralph McGill Boulevard NE
Atlanta, Georgia 30308-3374
Tel 404.506.7716
Fax 404.506.7066
chhuling@southernco.com

GEORGIA POWER
A SOUTHERN COMPANY

Overnight and Electronic Mail

January 27, 2010

Mr. Stephen Hoffman
U.S. Environmental Protection Agency
Two Potomac Yard
2733 South Crystal Drive
5th Floor, N-5237
Arlington, VA 22202-2733

Re: Comments on "Assessment of Dam Safety Coal Combustion Surface Impoundments (Task 3) Draft Report" for Georgia Power Company Plant Branch, Milledgeville, Georgia

Dear Mr. Hoffman:

On December 28, 2009, the U. S. Environmental Protection Agency ("EPA") provided to Georgia Power a draft report regarding certain facilities for the management of coal combustion byproducts at Georgia Power Plant Branch ("Draft Report"). The Draft Report was prepared by CHA under contract to Lockheed Martin and was dated December 23, 2009. Georgia Power appreciates the opportunity to provide comments on the Draft Report before it is finalized. This letter provides Georgia Power's comments on that Draft Report.

Acknowledgement of Management Unit Condition

We are pleased that the report concludes that the dikes for coal combustion byproduct (CCB) management units C, D and E at Plant Branch are in "Satisfactory" condition, which is the most favorable category. The currently active portion of Ash Pond B at Plant Branch is an incised pond. The inactive portion of Ash Pond B is not a liquid-borne CCB containing structure. Therefore, the Ash Pond B dike should be removed from the scope of this inspection and this Draft Report.

Comments on the Report

Georgia Power has provided significant technical information to the inspection team to assist them in performing the inspection and in providing factual information as a basis for their report. We appreciate the amount of time involved in reviewing and evaluating such information. We have reviewed the Draft Report in detail and offer our comments

to assist in providing clear and factual information. These comments are included as Attachment I.

Report Conclusions/Recommendations

It is anticipated that significant revisions will be made to Section 4.0 of the Draft Report based upon CHA's review of the supplemental information that Georgia Power provided subsequent to the Plant Branch inspection that took place on November 23 – 24, 2009. Georgia Power respectively requests an opportunity to review and comment on the revised report prior to it being finalized.

Ash Pond B

Georgia Power has provided CHA BRA-API 0070 dated 12/15/09 and CHA BRA-API 0074 dated 1/10/10.

Findings

As shown on Sections A-A and B-B of the above report (dated 12/15/09), the water level in the inactive ash pond area drops toward the lower portion of the upstream slope of the dike. These sections also indicate that the water level in the downstream portion of the dike is below the toe of the slope and coincides with the elevation of Lake Sinclair. The soil cover shown by the borings and photo included in the report (dated 12/15/09) varies from about 0.6 feet to 3.0 feet in thickness.

Based upon the findings and conclusions presented in the above report dated 12/15/09:

- Ash Pond B dike is not a water-impounding structure,
- sufficient soil cover is provided on the inactive portion of Ash Pond B, and
- there is adequate surface drainage such that ponding is avoided on the inactive portion of Ash Pond B (see drawing H-134 included in the report).

Conclusion

The Ash Pond B dike should be removed from the scope of this inspection and this Draft Report.

Ash Pond C

Georgia Power has completed or agrees to initiate the recommendations for Ash Pond C, as described in Section 4.2.2. of the CHA Draft Report.

Georgia Power has completed the erosion protection of the upstream side of the South side of Ash Pond C dike.

Southern Company Generation Hydro Services has conducted an investigation of the wet areas observed along the downstream toe of the south dike. A report (BRA API 0069 dated 12/1/09) presenting the findings and conclusions of this investigation, has been provided to CHA. These are described below.

Findings

It was determined that finger drains shown on the drawings are at elevations below the bottom of the berm. Therefore, the observed wet areas are not associated with "buried/covered" foundation drains, as originally assumed. An existing slope filter/drain was encountered at two locations near the crest of the berm which were found to be source of the observed flows noted during the Plant Branch inspection on 11/23/09. This drain was not encountered at two other wet areas at the berm. New four inch perforated socked pipe drains were installed at each location on the berm.

Conclusions

The originally installed foundation finger drains are not the source of the wet areas on the downstream slope of the berm. New slope drains have been installed and have been shown to be effective in draining the existing wet areas.

Ash Pond D

There is no dike on the southeast edge of the ash pond, and therefore requires no observation or monitoring.

Ash Pond E

Georgia Power is continuing to meet the two recommendations identified in the CHA Draft Report for Ash Pond E. Georgia Power will continue to monitor the three soft areas downstream of the lower concrete lined drainage channel. Georgia Power will also continue to incorporate maintenance measures to address the potential for erosion in dike areas.

Animal Control

Animal burrows that were identified during the inspection have been filled. This took place during the inspection.

Site Plan and Instrumentation

Southern Company Generation Hydro Services and Georgia Power's Plant Branch will continue to gather information on the CCB management units into an accessible format. Information on these units was provided during the inspection in several documents and is currently available.

As noted in the attached comments, piezometers are read monthly by plant personnel and the data is reviewed monthly by Southern Company personnel. Also, deformation monuments have been read biennially since the early 1990s. The deformation survey was provided to CHA (BRA-API-0080). These settlement and deformation surveys will continue biennially.

Hydrologic and Hydraulic Recommendations

Southern Company Generation Hydro Services will evaluate susceptibility to overtopping during a reasonable design storm for Ash Ponds C and D.

The hydrologic and hydraulic analysis for Ash Pond E was provided to CHA in the following documents: BRA-API-0075, BRA-API-0077, BRA-API-0078 and BRA-API-0079.

Stability Recommendations

Georgia Power agrees that as-constructed geotechnical information is not available for Ash Pond dikes C, D, and E. However, based on performance history and the monitoring and inspection programs, performance of these dikes has been shown to be satisfactory. Georgia Power agrees to obtain necessary geotechnical information for future as –built analyses in conjunction with future project requirements.

Southern Company Generation Hydro Services has conducted stability analyses using current modeling and analysis techniques (for Ash Pond dikes C, D, and E). A report containing the results of these analyses, using the phreatic surface assumed in the original design was provided to CHA during the inspection (BRA-API-0034). A revised report, incorporating original design parameters, current dike sections and measured phreatic surfaces, will be submitted to CHA by January 29, 2010.

As discussed above, Ash Pond B dike is not a water-impounding structure, and should be removed from the scope of this inspection and this Draft Report.

Inspection Recommendations

Georgia Power and Southern Company will continue the piezometer monitoring and inspection program for the Plant Branch Ash Pond dikes.

Thank you again for this opportunity to comment. Please direct any future correspondence on this to me. As discussed above, Georgia Power respectively requests an opportunity to review and comment on the revised report prior to it being finalized.

Sincerely,

Charles H. Huling

Enclosure(s)

Appendix I Comments on Assessment of Dam Safety Coal Combustion Surface Impoundments (Task 3) Plant Branch Draft Report

Page	Section	Statement Currently reads:	Recommended Change	Additional notes for EPA
ii	NA	Have been assessed on May 23, 2009 and May 24, 2009	Have been assessed on November 23, 2009 and November 24, 2009	
ii	NA	Adnams	Cody Johnson should possibly replace Admans	Cody Johnson was inspector with Mr. Hargraves
iii and iv	Table of Contents	3.3.1's	Please check numbering of Section 3.0	
2	Third paragraph, First sentence	...result in probably loss of human life, as per.	Delete "as per"	
2	Third paragraph, Second sentence	Category II facilities are exempt from much of the Georgia...	Delete ".. much of.."	Category II facilities are exempt from Georgia dam safety regulations in its entirety
3	Section 1.3, Last sentence	Branch is misspelled	Branch	
3	Ash Pond E note	Capacity expanded in 2004 by means of raising the dike elevation	Please remove this statement, as it is not accurate	Dike was not raised, only wave wall installed for additional freeboard
4	Section 1.3.1, first sentence	Construction drawings were not provided for Ash Pond B		Construction drawings were not provided for Ash Pond B, however, a design drawing C-4 (CHA Fig. 4-A) and an as-built sketch (CHA Fig. 5-1) were provided.
4	Second paragraph	The first phase entailed dumping large rock and soil...to create a rock base approximately 10 to 15 feet above rock level.	The first phase entailed dumping large rock and soil...to create a rock base above the bottom of the cove.	The rock level is not known.

4	Third paragraph	Ash pond B is used for the storage of bottom ash recovered from the coal power production process. Previously bottom ash was placed in this pond until sold. However, as explained....and only impounded.	Currently, a small portion of Ash Pond B is used for the dewatering of bottom ash recovered from the coal power production process. The dewatered ash is removed for storage or marketing.	
5	Section 1.3.2, second sentence	Information on the material used in construction of the dikes was not provided	Information on materials used in construction of the dikes was submitted.	**This information was submitted subsequent to issue of Draft Report. (2nd package)**
5	Section 1.3.2, last sentence	The fly ash is dredged from the pond as it settles out.	Delete last sentence: The fly ash is dredged from the pond as it settles out.	Ash pond C is not dredged.
5	Section 1.3.3, first sentence	Construction Ash Pond D began...	Construction of Ash Pond D began...	Word "of" was omitted
6	Section 1.3.4 First paragraph, last sentence	...information on nature of the material and method of placement and compaction was not provided.	...information on the nature of materials was provided; information on the method of placement and compaction was not available.	**This information was submitted subsequent to issue of Draft Report. (2nd package)**
6	Section 1.3.4. Second paragraph, first sentence	Subsequently...the dike height for Ash Pond E was raised...The new dike height...for storage.	Please delete this entire paragraph.	The dike was not raised. Wave wall was added.
6	Section 1.3.4. Third paragraph, first sentence	production process is "sluiced" and pumped	production process is pumped	Sluicing is not an accurate terminology for E pond ash movement
6	Section 1.3.5, last sentence	It is understood that this pond was filled to capacity and was closed per regulations at the time of site closure in June 1966.	It is understood that this pond was filled to capacity and covered with the placement of a soil cover in June 1966.	

7	Section 1.4, third sentence	In January 1969 grouting procedures were implement in effort...	...implemented in an effort...	Word "an" was omitted
7	Section 1.4, third sentence	...and in December 2000, a mechanical failure...	Please delete reference to this mechanical failure.	This was not a dam safety issue and should not be included in this report. A copy of the submission notes has been provided to CHA
7	Section 1.4 - first sentence	There have been two previously identified dams safety issues...	There has been one previously identified dam safety issue...Delete the second sentence	Upon the removal of the mechanical failure wording, only the one Ash Pond B issue remains
7	Section 1.4 - second sentence	one of the two...in the last ten years	Delete the second sentence	No longer applicable once the mechanical failure wording is removed
7	Section 1.4 - last sentence	These incidents are discussed in more detail...	remove reference to 1.4.2 - per info provided above.	
8	Section 1.4.2 (entire paragraph)		Please delete this paragraph.	The mechanical failure was not a dam safety issue and should not be included in this report. A copy of the submission notes has been provided to CHA
8	Section 1.5, first sentence	Plant Branch...lie in the Blue Ridge...	Delete ... Blue Ridge...	Plant Branch is located in the Piedmont physiographic province.
9	Section 1.6, Bibliography			This is not a comprehensive list of all of the documents provided to CHA
9	Section 1.6, Bibliography	Plant Bowen Ash Pond Dike...	Plant Branch Ash Pond Dike...	
15	Figure 2E	Stacked Ash label	Need to change "Stacked Ash" label to "Ash Delta"	

23	Section 2.1, second paragraph, second sentence	The weather was partly cloudy and temperatures...	The weather was cloudy and temperatures	The weather was very overcast until Tuesday afternoon.
24	Section 2.2.1, First paragraph, Second sentence	Slightly over...filled with bottom ash, covered with top soil, and vegetative cover...	Slightly over...filled with ash, covered with soil and vegetative cover...	Please remove words "bottom" and "top"
24	Section 2.2.1, second paragraph, third sentence	Representatives of Georgia Power stated...southern portion of the pond being filled with bottom ash and capped	Representatives of Georgia Power stated...southern portion of the pond being filled with ash and capped	Please remove word "bottom"
25	Section 2.2.1., first paragraph, last sentence	The remaining portion of Ash Pond B that is filled...bottom ash is covered with...	The remaining portion of Ash Pond B that is filled...ash is covered with...	Please remove the word "bottom"
25	Section 2.2.1, last paragraph		Based on Ash Pond B report and data submitted as BRA-API 0070 and BRA - API 0074, Ash Pond B is no longer a liquid waste impounding structure.	**Please revise this paragraph after reviewing the information provided to CHA**
26	Section 2.2.2.1, first paragraph, fourth sentence	This was done around the same time the primary siphon system...	This was done around the time the siphon system...	Please delete the word "primary" because there is only one siphon system
26	Section 2.2.2.1, first paragraph, third sentence	It was later replaced with a siphon at this location...	It was later replaced with two emergency overflow pipes at this location...	
26	Section 2.2.2.1, first paragraph, fourth sentence	...conveying water to Pond B was installed.	...conveying water to the plant was installed.	
26	Section 2.2.2.1, second paragraph	No information was provided from Georgia Power personnel...	Areas were not noted as potential seepage areas in previous weekly inspections by Plant Branch or quarterly inspections by SCG Hydro Services.	

26	Section 2.2.2.2, first paragraph	...was implanted in an effort to alleviate...	...was implemented in an effort to alleviate...	Change implanted to implemented.
26	Sec 2.2.2.2	...process over the last few years...	...on-going process over at last the past ten years	
27	Section 2.2.2.2, last paragraph		The Report, Plant Branch C Dike Drain Exploration and Installation (BRA - API 0069) concluded that the originally installed foundation finger drains were not the source of the wet areas on the downstream slope of the berm but rather filter/drains that had been installed in the berm to control surface runoff. New drains have been installed.	**Please revise this paragraph after reviewing the exploration report that was provided to CHA**
27	Section 2.2.2.3, last sentence	The deformation appeared to be created from mowing...	The ruts appeared to be created from mowing...	"Deformations" generally refers to more significant embankment irregularities.
28	Section 2.2.2.3, first paragraph		Add "Rodent holes were filled during inspection on 11/23/09."	
28	Section 2.2.2.3, last paragraph - last sentence	...appeared to be the intial formation of erosion rills beneath the ....on the slope	appeared to be the remnants of erosion rills....on the slope	
28	Section 2.2.3, second paragraph		Add "Rodent holes were filled during inspection on 11/23/09."	
28	Section 2.2.3, last paragraph	...member of Georgia Power personnel...	...Georgia Power personnel...	
29	Section 2.2.3, second paragraph, second sentence	...was installed in effort...	... was installed in an effort ..	insert the word "an".
29	Section 2.2.3, second paragraph, last sentence	...indicated by member of Georgia Power...	... indicated by Georgia Power personnel ...	

30	Section 2.2.4, third paragraph	A small area of sloughing was noted along the south central portion of the dike...	A small area of sloughing was noted on the downstream slope of the access road as shown in Photo 8.	This area is on the slope between the channel and the access road along the toe.
30	Section 2.2.4, second paragraph, second sentence	...due to the fabriform being slightly out of line.	due to the upstream fabriform being slightly out of line.	Add "upstream".
31	Section 2.3.1, Bullet 4	Water is siphoned from Ash Pond C to ash Pond B	Water is siphoned from Ash Pond C to the plant.	
31	Section 2.3.1, Bullet 6	Water from Ash Pond B...	Water from Ash Pond C...	
31	Section 2.3.1, Bullet 1	Fly ash is sluiced to Ash Pond E	Fly ash is pumped to Ash Pond E	
32	Section 2.3.2, first paragraph, third sentence	The spillway drains directly...	The channel drains directly...	
32	Section 2.4		Based on Ash Pond B report and data submitted as (BRA-API 0070) and (BRA - API 0074), Ash Pond B is no longer a liquid waste impounding structure.	**This section should be revised upon review of the exploration report and water levels for B dike.**
32	Section 2.4.2, last paragraph, third sentence	Information for Piezometer S2 is provided in the plots, however the location of this instrument is not shown on the location plan provided.	Delete sentence.	S2 is shown as SW2 on the location plan.
32	Section 2.4.2-first paragraph - second and third sentences	...(H1 through L1,and S1) are located.....	..five piezometers (H1 through L1) are located.... (add sentence) S1 & SW2 piezometers are located halfway up the downstream slope.	S1 & SW2 piezometers are located halfway up the downstream slope, not on the crest

33	Section 2.4.3, second paragraph, last sentence	Data has not been provided for these monuments	Delete sentence.	**These monuments are present and were read in 2009. Please see Bates number BRA-API-0080 provided by subsequent submittal to the Draft Report.**
33	Section 2.4.3,last sentence	Flow rate...relive wells...	Flow rate...relief wells...	Spelling of "relief".
34	Figure 4A		Need to use drawing C-37 for accurate photo locations	**This drawing is being supplied to CHA**
35	Figure 4B		Photo location #63 should be just north of location #62 at the toe of the dike	
47	Picture #20	Interior edge of the dike (pond side) shown with possible ash build up	Interior edge of the dike (pond side).	The ash is within the ash pond.
48	Picture #22	Crest widening due to bulid up of ash per Georgia Power personnel.	Please delete this sentence.	The ash is within the ash pond.
48	Picture #22 (Label)		Please remove the label	
50	Photo #26, second sentence	"Georgia Power personnel....remediation."	"Georgia Power personnel....remediation." should be deleted and moved under Photo #25.	This caption applies to Photo 25, not Photo 26.
54	Photo 34	One of two "soft spot" s indicated by arrow.	One of two "soft spots" indicated by arrow.	
57	Photo 39	...heavy vegetative cover present.	...heavy vegetative cover present past toe of dike.	
61	Photo #48	"...Ash Pond B."	At the end of the caption, delete "...Ash Pond B." and replace with "...the Plant."	
62	Photo #49 At the end of the 2nd sentence	...and tall vegetative growth...	...and tall vegetative growth in the ash.	
64	Photo 53		Change label "deformation" to "ruts due to mowing"	

65	Photo 56	"Saturated areas possibly due to buried drains."	Delete last sentence "Saturated areas possibly due to buried drains."	Not foundation drains. See Report, Plant Branch C Dike Drain Exploration and Installation (BRA - API 0069) dated 12/22/09.
66	Photo 57		Change "pooled water" to water shown due to rainfall	
66	Photo 58		Change "pooled water" to water shown due to rainfall	
89	Section 3.1, first paragraph, third sentence			**This historical information was provided subsequent to the inspection. Please refer to BRA-API-0079**
89	Section 3.2, first sentence	Georgia DNR...shall be capable of safely passing the design storm based upon...	Georgia DNR...shall be capable of safely passing a design storm based upon a fraction of	
89	Section 3.2, first sentence	Table 3	Table 3 should read Table 2	
90	Under table	...considered by and engineer...	... considered by an engineer..	Change "and" to "an".
90	Section 3.2, last paragraph, first sentence	As a Class I "very large" Dam...	As a Class I "large" dam...	Ash pond Dike E is a Large Dam based on being less than 100 ft. tall and holding less than 50,000 ac.-ft. Hydrologic analysis was therefore based on 50% of PMP showing a minimum of 3 ft. of freeboard.
90	Section 3.2, last paragraph, last sentence	CHA was not provided with a hydraulic analysis...	CHA was provided w ith a hyrauilic analysis	The hydraulic analysis (BRA-API-0079) was provided.
90	Second 3.2, last paragraph, second sentence	CHA was not provided with a hydraulic analysis...	CHA was provided with a hydraulic analysis in a subsequent submittal	**Please see BRA-AOI-0075, 77, and 79**

90	Section 3.3			**The discussion in this Section on stability analyses appears to only address the original data submitted on the drawings and does not reference the most recent Stability Report noted in the data submitted. The most recent report uses the cross-sections and parameters used in the originals. Comparisons were provided to the current minimal standards and to the original results. A revised report that incorporates the current phreatic surface data from the instrumentation under the current accepted methods of analysis will be provided to CHA by January 29, 2010.**
91	Section 3.3.1			**This paragraph should be revised after CHA's review of the supplemental data (report) that indicates Ash Pond B dike is not a liquid waste impounding structure..**
91	Sec 3.3.1	Ash pond was constructed of dumped rocks	Ash pond was constructed of rocks	
92	Section 3.3.1 ?	Section 3.3.1.	This Section should be 3.3.2	
92	First paragraph	Southern Power Company Drawing H-93 is assumed to present...	Southern Company Services drawing H-93 presents slope stability information...	H-93 is Ash Pond C

92	Second paragraph	Information regarding the selection...was not provided	Information regarding the selection...was provided	**Supplemental information regarding soil data has been submitted subsequent to the issue of the Draft report.**
92	Table 4		2nd line, 4th column – 420 should read 460	
92	Table 4		3rd line, 3rd column – "unclear" should read 15.5	
92	Table 4		4th line, 4th column – "unclear" should read 0 (zero)	
92	Section 3.3.1	"two of the soil strength values were unclear..."	Remove this sentence.	The numbers have been provided.
93	Section 3.3.2 ?	Section 3.3.2	This Section should be 3.3.3	
93	First sentence	A copy of a design drawing...	A copy of a design drawing...was reviewed.	Please add "was reviewed" at the end of the first sentence.
93	Third sentence	Information regarding the selection...was not provided	Delete this sentence.	**Supplemental information regarding soil data has been submitted subsequent to the issue of the Draft report.**
93	Fifth sentence	However, information on nature....has not been provided	Information on the nature of the embankment materials was provided. However, the method of placement and compaction, as well as construction documentation, was not available.	**Supplemental information regarding soil data has been submitted subsequent to the issue of the Draft report.**

93	Last sentence	The soil strata in the slope stability analysis does not differentiate between different embankment materials.	Please delete this statement.	The different soil strata, in terms of parameters, are indicated in the Soil Tables by numbers. These numbers are then shown in the applicable zones in the stability sections.
95	Section 3.3.3	Section 3.3.3	Section should be 3.3.4	
95	Last sentence	Information on the magnitude of the earthquake force is not provided.	Please delete this sentence.	The information on the magnitude of the earthquake force was provided in the November 2009 stability analysis. This was provided during the Inpsection.
98	Section 3.3.4.	Section 3.3.4.	This Section should read 3.3.5.	
98	Section 3.3.4 - first sentence	..piezometers have been in installed across the.....	..piezometers have been installed across the.....	remove the word "in"
98	Section 3.3.4 2nd paragraph			Georgia Power thought that it had sent the cross section showing the phreatic surface for Ash Ponds dikes C, D, and E previously. These cross sections are being provided to EPA.
99	2nd paragragh	A subsurface profile or boring logs were not provided.	Please delete this sentence.	**Supplemental information regarding soil data, including boring logs, was submitted subsequent to the issue of the Draft report.**

100	Section 3.5.1		Pease add statement explaining that Georgia Power has completed all of the recommendations made by the Georgia Department of Natural Resources.	
100	Section 3.5.1, first paragraph	Southern Power provided copies...	Georgia Power provided copies...	
100	Section 3.5.1,third bullet	Vegetation on the fabiform..	Vegetation on the fabriform	Change spelling of "fabriform"
100	Section 3.5.2, first paragraph	...safety program run by Southern Power Generation Hydro Services.	...safety program run by Southern Company Generation Hydro Services.	
100	Section 3.5.2, first paragraph, first sentence	2009	Add period after 2009, after parenthesis	
100	Section 3.5.2, first paragraph		Spelling – "fourth"	
100	Section 3.5.2, first paragraph	Reports for each quarter within the period were not provided; it is unclear if inspections were not performed at these times or if the reports were not provided.	Georgia Power provided all quarterly reports that were generated for the time period that was requested by CHA. On several occaisions, inspections were conducted, the results were communicated, but a final report was not generated.	
101	Section 3.5.2, second paragraph- first sentence	...inspection report for the forth quarter of 2009...	...inspection report for the fourth quarter of 2009...	
101	Section 3.5.2, last paragraph	All piezometers are read by plant personnel at least weekly.	All piezometers are read by plant personnel at least monthly.	
101	Section 3.5.2, last paragraph			Please remove quotation marks, with statement beginning with "measurements have continued...

101	Section 3.5.3, very last sentence on page	Southern Company...prepared by engineering consultants.	Southern Company...prepared by outside engineering consultants.	No outside engineering consultants have been used.
107	Section 4.1.2		Ash Pond B dike has been shown to no longer be a liquid waste containing structure.	**This section should be revised upon review of the exploration report and water levels for B dike.**
108	Section 4.2.1		Please revise this section.	**This section should be revised upon review of the exploration report and water levels for B dike.**
108	Section 4.2.2,	3rd bullet		Completed - The Report, Plant Branch C Dike Drain Exploration and Installation (BRA - API 0069)
109	Section 4.2.2	last bullet		As per the 5th recommendation, we have installed rip-rap on the upstream side of the south dike to prevent water lapping the edge of the dike.
109	Section 4.2.3, 1st sentence	.... and a dike on the southeast edge...	Please delete this reference	Pond D1 has only one dike.
109	Sectin 4.2.3, bullet		Please delete this bullet.	No such dike exists.
110	Section 4.2.4, last bullet		A small area of sloughing was noted on the downstream slope of the access road and the concrete lined ditch ...	This area is on the slope between the channel and the access road along the toe.
110	Section 4.3			Please add a sentence stating that all animal burrows have been repaired.

110	Sect 4.4, second paragraph, first sentence	We understand that the piezometers are read weekly by plant personnel and Southern Company reviews the instrumentation data on a quarterly basis.	We understand that the piezometers are read monthly by plant personnel and Southern Company reviews the instrumentation data on a monthly basis.	
111	Section 4.5, last paragraph, 1st sentence	....a hydrologic and hydrology analysis be performed for Ash Pond E.	Delete	**This was completed and provided to CHA subsequent to the issue of the Draft report.**
Entire Section 4				**It is anticipated that significant revisions may be made to this Section of the Report based upon CHA's review of the supplemental information provided subsequent to the issuance of the Draft Report. In addition, we are making some specific comments below.**
	Page 92, Sec 3.3.1	...stability information for Ash Pond C based the configuration of the	...stability information for Ash Pond C based on the configuration	Missing the word "on"
Appendix A				
Ash Pond B Inspection Checklist Form,	CHA's comment for Item 21	Current outlet pipe is buried and exits into the plant - not observed. Old outlet is inactive.	Delete sentence - there is no outlet pipe. Old outlet has been abandoned/sealed.	
Ash Pond B, C, D, and E Impoundment Inspection forms	page 1			Does this form pertain to the NPDES regulated impoundment and discharge or, does it pertain to the dikes for B, C, D and E.?

Ash Pond C Inspection Checklist Form	CHA's comment for Items 16 & 20	; water siphoned to Pond B.	; water siphoned to Plant.	
Ash Pond C Inspection Checklist Form	CHA's comment on Item 23	Portion of impoundment abuts Lake Sinclair.		There was no water abutting the toe of the dike. Lake sinclair is somewhat downstream of the toe.
Ash Pond C Inspection Checklist Form	Page 1	IMPOUNDMENT FUNCTION - Fly ash, pyrite, bottom ash disposal - currently polishing pond	IMPOUNDMENT FUNCTION- currently polishing pond	Receives no liquid borne fly ash, pyrite, or bottom ash
Ash Pond C Inspection Checklist Form	page 3	CONFIGURATION - Combination Incised/Diked	Combination of Cross- valley/side hill	Configuration could be considered Cross-valley/Side hill
Ash Pond C Inspection Checklist Form	page 4	Other Type of Outlet: Two 36" dia. HDPE siphons to B Pond.	Two 36" dia. HDPE siphons to Plant.	
Ash Pond C Inspection Checklist Form	page 5	Failure at site is marked YES	Failure at site is marked NO	This was not a dam safety issue and should not be included in this report. A copy of the submission notes has been provided to CHA
Ash Pond D Impoundment Inspection	page 1	IMPOUNDMENT FUNCTION - Fly ash, pyrite, bottom ash disposal - currently polishing pond	Currently a polishing pond. Delete: fly ash, pyrite, bottom ash disposal.	Ash Pond D does not reveive any water - borne CCBs. Sluice return water from Ash Pond D is only flow.
Ash Pond D Impoundment Inspection	page 4	Outlet: 48" inside diameter	Remove 48".	No outlet of tis type.
Ash Pond D Impoundment Inspection	page 4	Material: Checked Corrugated metal;	Remove check for Corrugated Metal	

Ash Pond D Impoundment Inspection	page 4	Material (other); Checked Culvert to open channel.	Remove: Check for culvert to open channel	Other: Concrete lined open channel