1. INTRODUCTION

OVERVIEW

Plant Yates is located at 708 Dyer Road, on approximately 2,400 acres on the east bank of the Chattahoochee River in Coweta County, Georgia, approximately eight miles northwest of the city of Newnan. Plant Yates originally operated seven coal-fired steam generating units. Five of the units were retired in 2015 and the two largest units were converted from coal to natural gas and currently operate as a natural gas electric generation plant owned by Georgia Power Company (Georgia Power).

Plant Yates is comprised of multiple Coal Combustion Residual (CCR) units which will be permitted separately according to Chapter 391-3-4-.10, Coal Combustion Residuals of the Georgia Rules for Solid Waste Management (State CCR Rules). Chapter 391-3-4-.10 incorporates by reference the provisions contained in the United States Environmental Protection Agency (USEPA) Title 40 of the Code of Federal Regulations 40 CFR 257 (Federal CCR Rule). Chapter 391-3-4-.10(9) of the State CCR Rules requires all CCR units in Georgia to obtain a solid waste handling permit.

The permit applications for Plant Yates CCR Units are as follows:

- CCR Landfill Gypsum Stack (Gypsum Stack) is an Inactive CCR landfill that was closed and all CCR removed. All removal and restoration activities were completed in late 2016;
- CCR Landfill R6 CCR Landfill is an Inactive CCR landfill that is being closed in place;
- CCR Surface Impoundment Ash Pond 1 (AP-1) is an Inactive CCR surface Impoundment that is undergoing closure by removal, closure construction has been completed;
- CCR Surface Impoundment Ash Pond 2 (AP-2) is an Existing CCR surface Impoundment that will be closed by removal; and
- CCR Surface Impoundments The Ash Management Area (AMA) waste footprint is located within the former footprints of Ash Pond 3 (AP-3) and Ash Pond B' (AP-B'). This multi-pond area is currently being consolidated and closed in place and contains CCR from AP-1, AP-2 (permitted separately as stated above), Ash Pond A (AP-A) and Ash Pond B (AP-B), all of which are undergoing closure by removal. AP-A was an Inactive CCR surface impoundment where closure construction was completed in June 2017. AP-B is an Existing CCR surface impoundment that is still undergoing closure construction.

Pursuant to the requirements of Chapter 391-3-4-.10(9), Georgia Power has prepared this permit application for the consolidation and closure of AP-A, AP-B, AP-B' and AP-3 in the AMA at Plant Yates.

DESCRIPTION OF THE PLANT YATES AMA CCR UNITS

As stated above, the AMA waste footprint, or consolidation area, is the area where the CCR from ponds AP-1, AP-2, AP-A and AP-B, which are being closed by removal, is being consolidated and closed in place. This permit application includes the AMA consolidation area (AP-3 and AP-B') as well as ash ponds AP-A and AP-

B, which are being closed by removal. Each of the ponds (former and existing), which are the subject of this permit application, are described in the following sections and shown on Figure 1 following the introduction.

Ash Pond A

AP-A was constructed in 1976 at Plant Yates as a temporary pond with a surface area of 8.9 acres. The original configuration of the ash pond was an engineered cross-valley embankment. AP-A, as well as the area downstream of the dike, however, was filled in and effectively eliminated the configuration of the original dike structure. Because AP-A was originally constructed for temporary purposes, Georgia Power has no design or construction documents.

In accordance with State CCR Rule 391-3-4-.10(2) which incorporates the definitions of the Federal CCR Rule (40 CFR 257.53), AP-A meets the definition of an Inactive Surface Impoundment, as the ash pond no longer received CCR on or after October 19, 2015 and still contained both CCR and liquids on and after October 19, 2015. Georgia Power began to comply with the requirements of the Federal CCR Rule for closure of inactive impoundments prior to the amendment of the Georgia Rules to include the regulation of CCRs. For AP-A, this consisted of initiating closure activities under the "3-year closure provision" provided in 40 CFR 257.100(b)(5) included in the Federal CCR Rules published in April 2015 but was removed from the amended Federal CCR Rules published in August 2016.

A Notification of Intent to Initiate Closure of AP-A was completed on December 7, 2015, as required by 40 CFR 257.100, and posted to the facility's operating record and to Georgia Power's website under Environmental Compliance. Approximately 725,000 cubic yards of CCR were removed from AP-A as part of the removal process which was completed in June 2017. The original dike was breached, and the former area of AP-A is not capable of retaining water. Stormwater runoff from AP-A flows overland and through ditches into AP-2 which maintains NPDES Permit GA0001473.

Drawings showing the current (post-removal) topography and location of AP-A are included in Part A of this permit package.

Ash Pond B

AP-B was constructed in 1976 at Plant Yates as a temporary pond with a surface area of 6.3 acres. The original configuration of the surface impoundment was an engineered cross-valley embankment. AP-B, as well as the area downstream of the dike, however, has been filled in, effectively eliminating the configuration of the original dike structure, leaving only about 10 feet of embankment protruding above the ground surface. Several breaches have been constructed in the dike protrusion, however the dike remnants still retain water. Any failure of dike remnants would not result in a release of ash. Stormwater runoff from AP-B flows overland and through ditches into the AP-2 which is maintains NPDES Permit GA0001473. AP-B was also originally constructed for temporary purposes similar to AP-A, and Georgia Power has no design or construction documents.

AP-B is considered an existing CCR surface impoundment as defined by State CCR Rule 391-3-4-.10(2) which incorporates the definitions of the Federal CCR Rule (40 CFR 257.53) because it received CCR both before and after October 19, 2015. AP-B will be closed through removal of the CCR from its footprint in accordance with State CCR Rules 391-3-4-.10(7)(b) which incorporates by reference the requirements of 40 CFR 257.102(c). All CCR being removed from AP-B will be placed in the consolidated AMA closure area. Drawings showing the approximate post-removal topography and location of AP-B are included in Part A of this permit package.

Ash Pond B'

AP-B' was constructed in 1976. The surface impoundment was constructed with a dam top elevation of 770 feet, a total storage volume of 480,000 cubic yards, and a surface area of 29.8 acres. The dam was raised to an elevation of 780 feet during the summer of 1977. Further construction occurred during October of 1977, when the pond was subdivided to create areas for dewatering CCR material hydraulically dredged from AP-2. Starting in 1978, ash dewatered in AP-B' was stored in the adjacent R6 Solid Waste Facility. As part of the 1977 embankment augmentation, a diversion channel was constructed to receive flow from storm culverts north of the pond and to route this flow around the perimeter of AP-B'. At this time, the auxiliary overflow spillway was also constructed. The dams were raised at a later date to an elevation of 784 feet.

AP-B' is considered an existing CCR surface impoundment as defined by State CCR Rule 391-3-4-.10(2) which incorporates the definitions of the Federal CCR Rule (40 CFR 257.53) because it received CCR both before and after October 19, 2015.

Ash Pond 3

AP-3 has a surface area of approximately 55 acres and a maximum dam height of 37 feet with a crest elevation of 755 feet. Available construction drawings and specifications indicate the AP-3 dam is constructed as a zoned embankment dam, with an impervious core surrounded on both sides with fill of higher permeability. Site preparation consisted of removing 10 feet of organic soil from the surface, resulting in a subgrade elevation of 718 feet for the dam. The impervious core was keyed into the subgrade an additional 10 feet to an elevation of 708 feet. The upstream face was built to a 2:1 slope, and the downstream face was sloped to 2.5:1. The impervious core was 15 feet wide at the top of the embankment and comprised the entire width of the crest. The core was widened with depth to an unknown degree but was tapered back to a width of 15 feet at the key foundation elevation.

AP-3 is considered an existing CCR surface impoundment as defined by State CCR Rule 391-3-4-.10(2) which incorporates the definitions of the Federal CCR Rule (40 CFR 257.53) because it received CCR both before and after October 19, 2015.

MULTI-UNIT CCR GROUNDWATER MONITORING SYSTEM

The AMA permit application package which encompasses the former CCR units AP-A, AP-B, AP-B' and AP-3, is located adjacent to the R6 CCR Landfill. Based on the configuration of these CCR units and the groundwater flow direction, the AMA permit area, and the R6 CCR Landfill, which is covered under a separate permit application, will be monitored with one multi-unit CCR groundwater monitoring network. A Groundwater Monitoring Plan (included in Section 6) was developed in accordance with State CCR Rule 391-3-4-.10(6) to monitor all CCR units included in these two permit application packages (R6, AP-A, AP-B, AP-B' and AP-3). The Groundwater Monitoring Plan is included in this permit application, as well as in the R6 CCR Landfill permit application, which was submitted under separate cover.

The multi-unit groundwater monitoring network consists of 19 upgradient groundwater monitoring wells and 10 downgradient groundwater monitoring well located around the combined perimeter of the R6 CCR Landfill.

PLANT YATES AMA PERMIT REQUIREMENTS

As defined In State CCR Rule 391-3-4-.10(2), which incorporates the definitions of the Federal CCR Rule (40 CFR 257.53), three of the ash ponds within the Plant Yates AMA permit application (AP-B, AP-B' and AP-3), meet the definition of an Existing Surface Impoundment, and one ash pond (AP-A) meets the definition of an Inactive Surface Impoundment. However for simplicity, this permit application, inclusive of AP-A, AP-B, AP-B' and AP-3, has been prepared to meet permitting requirements of an Existing Surface Impoundments. The permit requirements for Existing CCR Surface Impoundments are more extensive than those for Inactive Surface Impoundments.

This permit application addresses the closure of AP-A, AP-B, AP-B' and AP-3 in accordance with 391-3-4-.10(7)(b) which incorporates the closure requirements listed in 40 CFR 257.102 and is being submitted in accordance with Georgia Rules 391-3-4-.10(9)(a), 391-3-4-.10(9)(b), and 391-3-4-.10(9)(c)5 for existing CCR surface impoundments, as follows:

General CCR Unit Permit Application Requirements

- 391-3-4-.10(9)(b)1. A completed form designated by EPD.

 The completed form is included in Section 2 of Part A of the permit application.
- 391-3-4-.10(9)(b)2. Written verification that the site conforms to all local zoning or land use ordinances.

Zoning Confirmation is included in Section 4 of Part A of the permit application.

• 391-3-4-.10(9)(b)3. - Property boundary survey and legal description.

The permit boundary survey and legal description is included in the Closure Drawings in Section 9 of Part A of the permit application.

• 391-3-4-.10(9)(b)4. - Financial assurance mechanism meeting the criteria in Rule 391-3-4-.13.

In compliance with applicable securities laws and regulations, Georgia Power will provide specific cost estimates for remaining closure activities during the permit application review process as estimates are developed and finalized. These estimates will be available to EPD prior to issuance of the draft permit. Georgia Power will provide a demonstration of financial assurance upon approval of closure cost estimates by EPD.

• 391-3-4-.10(9)(b)5. - A qualified professional engineer's certification that all application requirements have been met.

The professional engineer's certification is included in Section 3 of Part A of the permit application.

Existing CCR Surface Impoundment Permit Application Requirements:

• 391-3-4-.10(9)(c)5.(i) - Location restriction demonstrations required by 40 CFR 257.60, 40 CFR 257.61, 40 CFR 257.62, 40 CFR 257.63, and 40 CFR 257.64.

The location restriction demonstrations for AP-B, AP-B' and AP-3, which are existing CCR surface impoundments, are included in Part B of the permit application.

The location restriction demonstrations for AP-A, which is an inactive surface impoundment, have been completed and were posted on the Georgia Power Company website under Environmental Compliance prior to April 17, 2020.

• 391-3-4-.10(9)(c)5.(ii) - Description of the CCR surface impoundment's design criteria required by 40 CFR 257.71 and 40 CFR 257.73.

The Plant Yates AMA surface impoundments are unlined and are being closed in accordance with 391-3-4-.10(7)(b) which incorporates the closure requirements in 40 CFR 257.101(b)(1).

- ✓ A permanent identification marker as set forth by 40 CFR 257.73(a)(1) was installed.
- ✓ The Emergency Action Plan as set forth by 40 CFR 257.73(a)(3) was not required because the surface impoundments covered in this application were determined to be "low hazard" potential (see the Initial Hazard Classification included in Part B of the permit application).
- ✓ The history of construction for each impoundment as set forth by 40 CFR 257.73(b) and (c). was prepared and is included in Part B of the permit application.
- ✓ Initial hazard potential classification, structural stability, and safety factor assessments as set forth by 40CFR 257.73(a)(2), (b), (d), (e), and (f), were prepared and are included in Part B of the permit application.
- ✓ The stability of the AMA in its final configuration is discussed in the Engineering Report included in Part B of the permit application.

• 391-3-4-.10(9)(c)5.(iii) - Description of how the CCR surface impoundment's operating criteria required by 40 CFR 257.80, 40 CFR 257.82, and 40 CFR 257.83 are met.

A dust control plan and inspection requirements related to closure of the surface impoundments is addressed in the Closure Plan included in Part A of this permit application. The hydrologic and hydraulic capacity requirements (inflow design flood control system) were completed for each of the four surface impoundments covered in this application and are included in Part B of the permit application.

- 391-3-4-.10(9)(c)5.(iv) Groundwater monitoring plan in accordance with Rule 391-3-4-.10(6).

 A Groundwater Monitoring Plan has been prepared for the Plant Yates AMA CCR Permit Application surface impoundments in accordance with 40 CFR 257.90, 40 CFR 257.91, and 40 CFR 257.93 through 40 CFR 257.98 and is included in Part A of the permit application. Independent groundwater samples from each monitoring well have been collected and analyzed for parameters in 391-3-4-.10(6)(b), which reference the constituents listed in 40 CFR 257, Subpart D, Appendices III and IV of the Federal Rules, to establish a background statistical analysis dataset. The results of the background sampling events have been posted to Georgia Power's environmental compliance website.
- 391-3-4-.10(9)(c)5.(v) Explanation of how closure and post-closure care requirements found in 40 CFR 257.101, 40 CFR.257.102, 40 CFR 257.103, and 40 CFR 257.104 will be met.

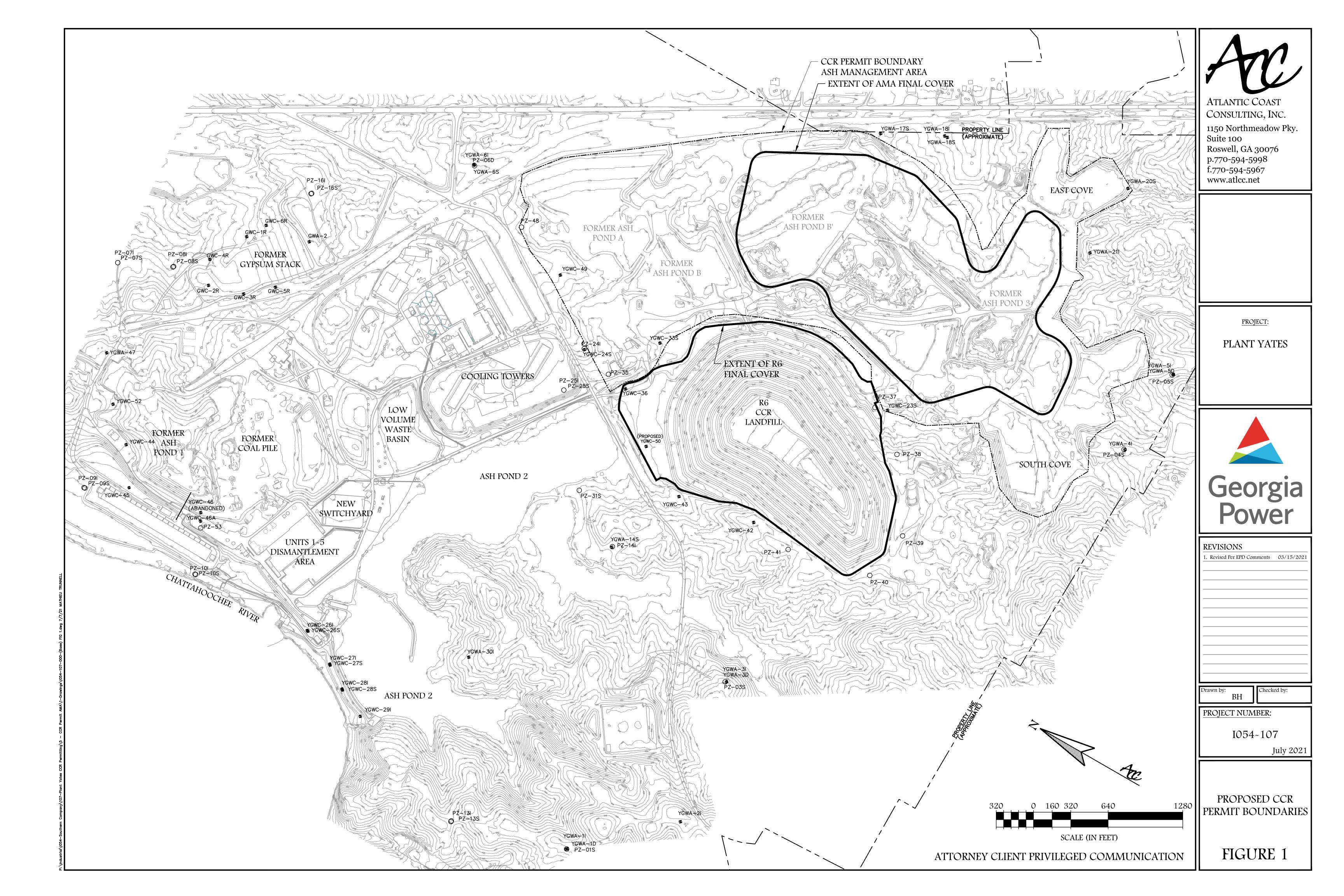
 This permit application includes both a Closure Plan and a Post Closure Plan in Part A of the
- Rule 391-3-4-.10(9)(c)5.(vi) Website address for information required to be posted by 40 CFR 257.105, 40 CFR 257.106, and 40 CFR 257.107.

permit application. The plans address the requirements of 391-3-4-.10(9)(c)5.(v).

The information required to be posted and applicable to the Plant Yates AMA surface impoundments is found in the Georgia Power website under Environmental Compliance.

(https://www.georgiapower.com/CCRRuleCompliance).

Documents will be retained for a minimum of five years as required by 40 CFR 257.105(b). Information required to be posted to the CCR Web site will be made available to the public for at least five years following the date on which the information was first posted to the CCR Web site in accordance with 40 CFR 257.107(c). Information required by 40 CFR 257.105 will be posted to the CCR Web site within 30 days of placing the pertinent information in the operating record, as required by 40 CFR 257.107(d).



2. APPLICATION FORM

Send completed application to:

Environmental Protection Division, Solid Waste Management Program 4244 International Parkway, Suite 104 Atlanta, GA 30354-3902

County:	
Facility Name:	

CCR Unit - Application for Solid Waste Handling Permit

(Please type or print)

	orgia Power Com	nany – Plant Va	tos	
Owner's Name or Registered Corporation Name: Ge				
Facility Address: 708 Dyer Road	Phone: (404) 506-6505			
City: Newnan	State: GA	ZIP Code:	30263	
Authorized Official: Aaron D. Mitchell		Title: Gene	ral Manager – Env	ironmental Affairs
Mailing Address: 241 Ralph McGill Blvd. NE	Phone: (404) 506-6505			
City: Atlanta	State: GA	ZIP Code:	30308	
Email Address: gpcenv@southernco.com	Facility CCR Website(s): www.georgiapower.com			
II. PROPERTY DETAILS: Complete below and attack must be accompanied by written zoning confirmation		/ map indicating	the site/facility loc	ation. Application
ounty: Coweta County City: Newnan				
Co-ordinates (in decimal degrees, near facility cente	r): Latitude: 33.4 5	4894, Longitud	le: -84.890649	
Property for Processing/Disposal is: 🛛 Owned	☐ Leased (please co	omplete owner d	etails below)	
Property Owner (if leased):				
Address:			Phone:	
City:		tate:	Zip:	
III. APPLICATION TYPE:				
New Permit □ Major Modification to E Other	Existing Permit	☐ Transfer o	f Permit	
•	Existing Permit	□ Transfer o	f P	ermit

Plant Yates Ash Management Area (AMA): Ash Pond A, Ash Pond B, Ash Pond B' and Ash Pond 3

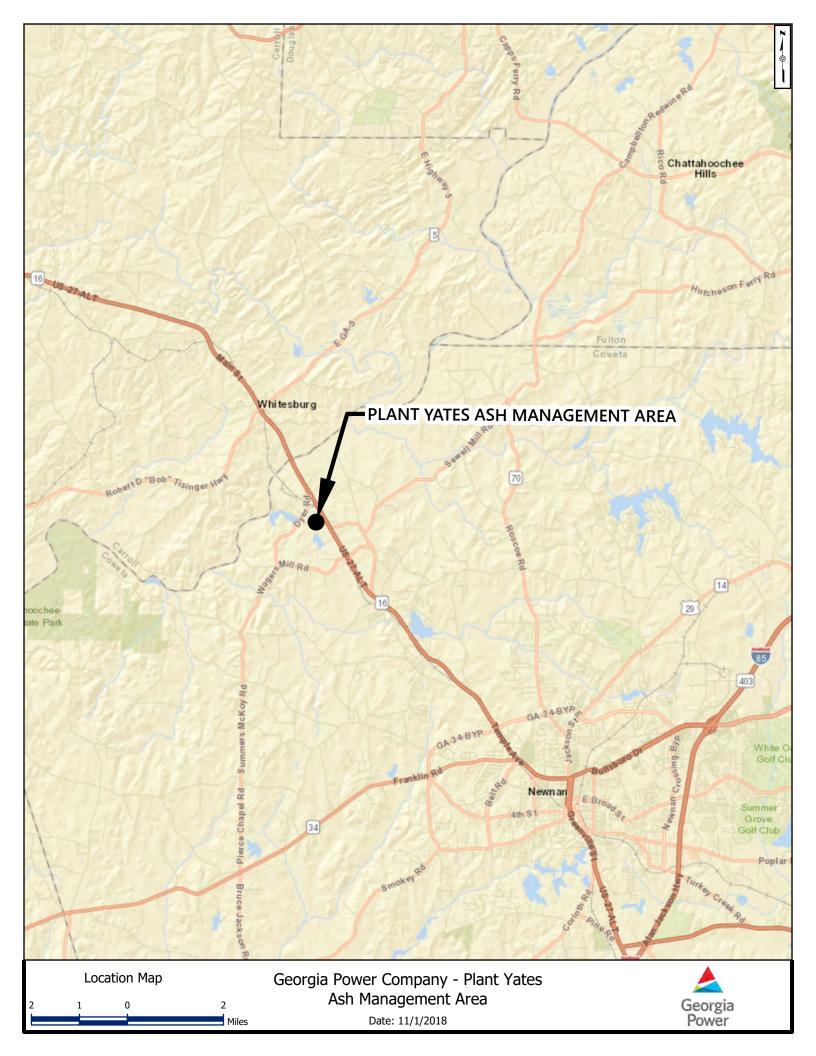
V. OWNERS: List all owners of the facility (defined as holding a 5% or greater share). All owners listed below must complete the Supplemental Form for O.C.G.A. 12-8-23.1(a)(3)(B)
Georgia Power Company
VI. SIGNATURE
Authorized Official's Signature:
Authorized Ciricial's Signature.
Date: 11/13/18
Sworn to and subscribed before me this 13 day of Nuember, 20 18 minutes. MCLESTONE
The state of the s
Notary Public: My commission expires: A NOTARY SEE
PUBLIC &
1 40ra 4, 250 4 1
COUNT WHITE

Send with completed application to:
Environmental Protection Division, Solid Waste Management Program
4244 International Parkway, Suite 104 Atlanta, GA 30354-3902

County: _	
Facility:	

Solid Waste Handling Permit

Supplemental Form for (Pleas	O.C.G.A. e type or print)		
I. INFORMATION: This form must be completed by each ow greater ownership share. This form must be notarized.	ner, or an authori	zed official of a corporation, holdir	ng a 5% or		
Name of Facility Applying for Solid Waste Handling Permit:	Plant Yates Ash M	anagement Area (AMA)			
Owner's Name or Registered Corporation Name: Georgia Po	wer Company				
Authorized Official: Aaron D. Mitchell		Title: General Manager – Environmental Affairs			
Mailing Address: 241 Ralph McGill Boulevard	Phone: (404) 50	6 - 6505			
City: Atlanta	State: GA	ZIP Code: 30308			
Email Address: gpcenv@southernco.com		'			
Α.			Yes	No	
(1) Has the applicant, or if the applicant is a corporation, p director, manager, or shareholder of five percent or more o partnership, or association intentionally misrepresented or submitted to the director?	of stock financial in	nterest in the corporation,		X	
(2) Has the applicant, or if the applicant is a corporation, p director, manager, or shareholder of five percent or more o partnership, or association obtained or attempted to obtain	of stock financial in	nterest in the corporation,		X	
(3) Has the applicant, or if the applicant is a corporation, partnership, or association, has any officer, director, manager, or shareholder of five percent or more of stock financial interest in the corporation, partnership, or association been convicted by final judgment, and all appeals have been exhausted, in the State of Georgia or any federal court of any felony involving moral turpitude within three years immediately preceding the application for a permit?				X	
(4) Has the applicant, or if the applicant is a corporation, partnership, or association, has any officer, director, manager, or shareholder of five percent or more of stock financial interest in the corporation, partnership, or association been convicted of any violations of any environmental laws punishable as a felony in any state or federal court within five years preceding the application for a permit?				X	
(5) Has the applicant, or if the applicant is a corporation, partnership, or association, has any officer, director, manager, or shareholder of five percent or more of stock financial interest in the corporation, partnership, or association knowingly, willfully, and consistently violated the prohibitions specified in Code Section 12-8-30.7?				X	
(6) Has the applicant, or if the applicant is a corporation, partnership, or association, has any officer, director, manager, or shareholder of five percent or more of stock financial interest in the corporation, partnership, or association been adjudicated in contempt of any court order enforcing any federal environmental laws or any environmental laws of the State of Georgia within five years preceding the application for a permit?				X	
B. On a separate sheet, please provide detailed explanation	ns for each question	on above answered "yes."			
Signature: Market					
Date: 11/13/18		mult. MCLE			
Sworn to and subscribed before me this day of		ission expiles			
Notary Public: Dans of Modern	My comm	ission expiles			
		COUNT			



3. PROFESSIONAL ENGINEER CERTIFICATION



November 12, 2018

Mr. Richard Dunn
Director
Georgia Environmental Protection Division
2 Martin Luther King Jr. Drive
Suite 1456
Atlanta, GA 30334-9000

Re: Professional Engineer Certification

Rule 391-3-4.10-(9)(b)5

Plant Yates - Ash Management Area

Dear Mr. Dunn:

Atlantic Coast Consulting, Inc. (ACC), is an engineering firm employing professional engineers in good standing in accordance with State statutes, and the firm has experience in the design and construction of solid waste disposal facilities. Joy E. Headrick, P.E., with ACC is the Engineer of Record for this permit application. She is registered in the state of Georgia and has more than 20 years of experience in Engineering.

"I certify under penalty of law that this document and attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I do hereby certify that the permit application requirements of the Georgia Environmental Protection Division Solid Waste Rule 391-3-4-.10 for Management of Coal Combustion Residuals have been met."



A		

Date

Atlantic Coast Consulting, Inc.	
Engineering Firm	
Joy E. Headrick, P.E.	
Name of Professional Engineer	
Signature	
Jan EH-	

11-12-18

630 Colonial Park Drive

(770) 594-5998 www.atlcc.net

Suite 110

4. LAND USE CONFIRMATION



22 East Broad Street Newnan, GA 30263 <u>www.coweta.ga.us</u> 770-254-2635 Fax - 770-254-2606

February 28, 2018

Jeffrey W. Cown Branch Chief Georgia Environmental Protection Division 2 Martin Luther King Jr. Drive, SE Suite 1054, East Floyd Tower Atlanta, GA 30334-9000

RE:

GA Power - Plant Yates

Permit Application – CCR Surface Impoundments

708 Dyer Rd, Newnan GA

Dear Mr. Cown:

Under the Coweta County Zoning & Development Ordinance Article 6 Section 69.1 Uses allowed,

(1) Improvements, buildings and facilities such as schools, roads, rights-of-way, railroad lines, pipelines, transmission lines and similar elements; which are owned and/or operated by government agencies and/or public utilities.

The Georgia Power CCR Surface Impoundments (AP-1, AP-2, AP-3, AP-A, AP-B, and AP-B') located at Plant Yates, 708 Dyer Road, Newnan Georgia is permitted under the Coweta County Zoning Ordinance as a customary accessory use in connection with the operation of an electric generating plant.

Of course, the County also would require any applicable EPD, EPA and Federal/State approval of the project.

If additional information is needed, please don't hesitate to contact our office.

Sincerely

Robert L. Tolleson

Division Director