INTRODUCTION – PLANT MITCHELL ASH POND CLOSURE PERMITTING

Plant Mitchell is located approximately eight (8) miles south of Albany, Georgia in a primarily rural area along the Flint River. There are three (3) Coal Combustion Residual (CCR) units (two are classified under state definition as NPDES-CCR Surface Impoundments and one is classified as a Dewatered Surface Impoundment) on the Plant Mitchell site proposed to be closed through CCR removal (Closure by Removal).

Plant Mitchell ceased generating electricity prior to October 19, 2015 (the effective date of the Federal CCR Rule) and as a result, the three (3) ash ponds at Plant Mitchell are not subject to the Federal CCR Rule. However, permitting and closure activities for these ponds are regulated under Georgia Environmental Protection Division (GA EPD) Rule 391-3-4-.10 (State CCR Rule). As required by the State CCR Rule, Georgia Power Company (GPC) has prepared the enclosed documents to support the permit application to close these three (3) ash ponds.

The following sections summarize the Plant Mitchell ash ponds and the general permit requirements addressed in this application.

CCR Surface Impoundments Description

Ash Ponds 1 and 2

Construction of Ash Pond 1 began in January 1962 and its operation started in December of the same year. Ash Pond 1 covers approximately 53 acres and has an estimated 1,047,000 cubic yards of CCR inplace. Ash Pond 2 is located adjacent and to the south of Ash Pond 1. Ash Pond 2 was constructed in 1979 and began operations in May 1980. Ash Pond 2 covers approximately 44 acres and contains an estimated 1,100,000 cubic yards of CCR.

Ash Ponds 1 and 2 are defined under the State CCR Rule as CCR unit type "NPDES-CCR Surface Impoundment". Permit requirements for NPDES-CCR Surface Impoundments are defined in the State CCR Rule 391-3-4-.10(9)(c)7. The Closure by Removal of these two (2) ash ponds will result in the excavation and removal of an estimated 2.1 million cubic yards of CCR.

Ash Pond A

Ash Pond A was the original ash pond constructed when Plant Mitchell began operations in 1948. Ash Pond A encompasses approximately seven (7) acres and contains an estimated 31,200 cubic yards of CCR. GPC took Ash Pond A out of service in 1962, removed the earthen dikes around the pond and covered the CCR with several feet of earthen fill. Ash Pond A did not receive CCR and did not contain liquids on or after October 19, 2015. Based on this, Ash Pond A is defined under the State CCR Rules as a "Dewatered Surface Impoundment" and permit requirements for Dewatered Surface Impoundments are defined in State CCR Rule 391-3-4-.10(9)(c)8.

Since 1962, the area previously occupied by Ash Pond A has been used for plant operations and power generation and transmission structures, and the underlying CCR serves as an alternative foundation material for structural fill and is considered a past beneficial use of CCR prior to the federal and state CCR

Rules. Since Ash Pond A pre-dates the Federal CCR Rule and the Georgia State CCR Rule, it is not required to meet the demonstration criteria for beneficial use of CCR as defined in 391-3-4.10(2)4 and as discussed in the preamble of 40 CFR 257.53¹.

The structures currently located within the footprint of Ash Pond A include a 230-kv switchyard, a 115-kv switchyard, a former 93 MW combustion turbine facility, and several 115-kv transmission towers and associated guy wires. However, as part of an on-going plant demolition activities, the 230-kv switchyard and the former 93 MW combustion turbine facility will be razed and the CCR underneath the footprint of these two facilities will be removed. Additionally, GPC will remove CCR from the remaining Ash Pond A footprint that can be safely excavated without jeopardizing the stability of existing structures or the operation of the facility. The existing 115-kv switchyard and the 115-kv transmission towers will remain in active service and therefore, the CCR underneath these structures will continue to serve as beneficial use foundation material.

Volume of CCR to be Removed

As stated in the previous paragraphs, although the CCR in the Ash Pond A area meets the definition of a past beneficial use material, GPC will remove approximately 23,700 cubic yards of CCR from Ash Pond A, in addition to the estimated 2.1 million cubic yards of CCR to be removed from Ash Ponds 1 and 2. Also, as discussed in other sections of the application, the past beneficial use CCR to be left in place is covered by earthen fill and the CCR structural fill exists approximately 5 to 15 feet below the ground surface and approximately 20 feet above the high seasonal groundwater table of the uppermost aquifer.

Multi-Unit CCR Groundwater Monitoring System

Because Ash Ponds A, 1, and 2 are located adjacent to each other, the three (3) ash ponds will be monitored with one multi-unit CCR groundwater monitoring system.

In accordance with State CCR Rule 391-3-4-.10(6), GPC prepared a Groundwater Monitoring Plan (included in Exhibit 6) and installed a multi-unit groundwater monitoring system within the uppermost aquifer at Ash Ponds A, 1 and 2. This multi-unit groundwater monitoring system consists of groundwater monitoring wells and groundwater piezometers all located around the combined perimeter of the three ash ponds. Since August 2016, independent groundwater samples from each monitoring network groundwater well have been collected and analyzed for 40 CFR 257, Subpart D, Appendix III and Appendix IV test parameters to establish a background statistical dataset. As of October 2018, eight (8) out of eight (8) rounds of background sampling events are completed. The site has been in assessment monitoring since October 2019.

Following the CCR removal from Ash Ponds A, 1, and 2, GPC proposes to conduct post-CCR-removal groundwater monitoring for five (5) years to verify the completion of closure by removal for the three ash ponds by demonstrating that the groundwater monitoring concentrations do not exceed the groundwater protection standards established pursuant to 40 CFR 257.95(h) for constituents listed in Appendix IV.

¹ See page 21302 of the Federal Register, Vol. 80, No. 74, Friday, April 17, 2015, Supplementary Information, B.: "This rule does not regulate practices that meet the definition of a beneficial use of CCR. Beneficial uses that occur after the effective date of the rule need to determine if they comply with the criteria contained in the definition of "beneficial use of CCRs." This rule does not affect past beneficial uses (i.e., uses completed before the effective date of the rule.)"

Closure Plan

Since all of the CCR units will be closed in a similar manner (through CCR removal), the applicable permit requirements for Ash Pond A as a Dewatered Surface Impoundment (State CCR Rule 391-3-4-.10(9)(c)8) and for Ash Pond 1 and Ash Pond 2 as NPDES-CCR Surface Impoundments (State CCR Rule 391-3-4-.10(9)(c)7) are included in one permit application. Consistent with the "closure through removal" under State CCR Rule 391-3-4-.10(9)(c)7(vii), a Closure Plan narrative was prepared and is included in this permit application. Items other than the Groundwater Monitoring Plan listed under Rule 391-3-4-.10(9)(c)7 are not required for Closure-By-Removal permits. The enclosed Closure Plan describes the CCR unit closure-by-removal activities, including organics management, dewatering, stormwater and wastewater management, and fugitive dust control. Design drawings depicting existing conditions, interim conditions (post-CCR removal), and final conditions (post-dike removal) are included in support of the permit application.

CCR Permitting Requirements

GPC has prepared this permit application for closure by removal of Ash Ponds A, 1 and 2 to address State CCR Rule criteria specified for NPDES-CCR Surface Impoundments (for Ash Ponds 1 and 2) and a Dewatered Surface Impoundment (for Ash Pond A) as required in State CCR Rule 391-3-4-.10(9)(b), 391-3-4-.10(9)(c)7 and 391-3-4-.10(9)(c)8 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 Exhibit 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 Exhibit 4 of Part A of the Permit Application.

- 391-3-4-.10(9)(b)3. Property boundary survey and legal description. The property boundary survey and legal description is included in Sheet Number 3 of the Permit Drawings included in Exhibit 8 of this 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, cost estimates for CCR removal activities and post CCR removal groundwater monitoring for Ash Ponds 1, 2, and A will be provided to GA EPD under separate cover. The costs include all items necessary for a third party to complete the project in accordance with the Closure Plan included herein. The cost estimates provided to GA EPD will be based on an area of 104 total acres and in 2021 dollars and adjusted annually for inflation.

• 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 Exhibit 3 of Part A of this Permit Application.

NPDES-CCR Surface Impoundment Permit Application Requirements (For Ash Ponds 1 and 2)

• 391-3-4-.10(9)(c)7(i) - Technical report of geological and hydrogeological units within the disposal site.

GPC is closing Ash Ponds 1 and 2 by removal consistent with the "closure through removal" under State CCR Rule 391-3-4-.10(9)(c)7(vii), which only requires that a closure narrative be provided. However, GPC prepared a geological and hydrogeological report and it is included in Exhibit 1 of Part B of this Permit Application.

- 391-3-4-.10(9)(c)7(ii) Potentiometric surface map of the water table.
 A potentiometric surface map of the water table is presented in Figure B-1B of the Groundwater Monitoring Plan included in Exhibit 6 of Part A of this Permit Application.
- 391-3-4-.10(9)(c)7(iii) Siting report which includes identification of wetlands, floodplains, and seismic impact zones.

A Siting Report is not required for Ash Ponds 1 and 2, because GPC is closing Ash Ponds 1 and 2 by removal consistent with the "closure through removal" under State CCR Rule 391-3-4-.10(9)(c)7(vii), which only requires that a closure narrative be provided.

- 391-3-4-.10(9)(c)7(iv) Closure plan that includes at a minimum:
 - 391-3-4-.10(9)(c)7(iv)(i) Narrative describing how the CCR unit will be closed including the elimination of free liquids and stabilization of remaining waste or by closure through removal of CCR.

A Closure Plan is included in Exhibit 7 of Part A of the Permit Application.

• 391-3-4-.10(9)(c)7(iv)(ii) - Identification of any pipes, utilities, or other penetrations through or beneath the impoundment. The inspection frequency and method of evaluation should be provided.

A pipe penetration report is not required for Ash Ponds 1 and 2, because GPC is closing Ash Ponds 1 and 2 by removal consistent with the "closure through removal" under State CCR Rule 391-3-4-.10(9)(c)7(vii), which only requires that a closure narrative be provided.

• 391-3-4-.10(9)(c)7(iv)(iii) - *Final cover analysis*.

A final cover analysis is not required for Ash Ponds 1 and 2, because GPC is closing Ash Ponds 1 and 2 by removal consistent with the "closure through removal" under State CCR Rule 391-3-4-.10(9)(c)7(vii), which only requires that a closure narrative be provided.

- 391-3-4-.10(9)(c)7(v) Stability analysis that at a minimum includes the following:
 - 391-3-4-.10(9)(c)7(v)(i) On-site or local soil conditions that may result in significant differential settling.
 - 391-3-4-.10(9)(c)7(v)(ii) On-site or local geologic or geomorphologic features.
 - 391-3-4-.10(9)(c)7(v)(iii) On-site or local human-made features or events, both surface and subsurface.

A stability analysis is not required for Ash Ponds 1 and 2, because GPC is closing Ash Ponds 1 and 2 by removal consistent with the "closure through removal" under State CCR Rule 391-3-4-.10(9)(c)7(vii), which only requires that a closure narrative be provided. GA EPD Safe Dams Program has classified the Ash Pond 1 earthen dikes (dam identification number 101-016-4002) and Ash Pond 2 earthen dikes (dam identification number 101-0015) as Category II dams. The Ash Pond A earthen dikes were removed in 1962 and Ash Pond A is fully incised, therefore it does not have a dam identification number. Southern Company Engineering and Construction Services completed slope stability analyses for Ash Ponds 1 and 2 in 2010. Results of analyses indicated that slope stability factor of safety criteria were satisfied with marginal factors of safety reported for shallow failure surfaces of the Ash Pond 1 downstream dam, and Ash Pond 2 upstream dam. The marginal factors of safety were considered acceptable on the basis of actual stable field performance and the routine monitoring and inspections.

- 391-3-4-.10(9)(c)7(vi) Groundwater monitoring plan in accordance with Rule 391-3-4-.10(6). In accordance with State CCR Rule 391-3-4-.10(6), GPC prepared a Groundwater Monitoring Plan (included in Exhibit 6 of Part A of this Permit Application) and installed a multi-unit groundwater monitoring system within the uppermost aquifer at Ash Ponds A, 1 and 2. This multi-unit groundwater monitoring system consists of groundwater monitoring wells and groundwater piezometers located around the combined perimeter of the three ash ponds. Since August 2016, independent groundwater samples from each monitoring network groundwater well have been collected and analyzed for 40 CFR 257, Subpart D, Appendix III and Appendix IV test parameters to establish a background statistical dataset. As of October 2018, eight (8) out of eight (8) rounds of background sampling events are completed. The site has been in assessment monitoring since October 2019.
- 391-3-4-.10(9)(c)7(vii) Closure through removal of CCR is subject only to (iv)(I) above and is not subject to the financial assurance requirements of Rule 391-3-4-.13.

In compliance with applicable securities laws and regulations, cost estimates for CCR removal activities and post CCR removal groundwater monitoring for Ash Ponds 1, 2, and A will be provided to GA EPD under separate cover. The costs include all items necessary for a third party to complete the project in accordance with the Closure Plan included herein. The cost estimates provided to GA EPD will be based on an area of 104 total acres and in 2021 dollars and adjusted annually for inflation.

Dewatered Surface Impoundment Permit Application Requirements (For Ash Pond A)

• 391-3-4-.10(9)(c)8(i) - Demonstration that closure procedures have minimized the threat to human health and the environment.

A Closure Plan is included in Exhibit 7 of Part A of the Permit Application. The Closure Plan contains detailed closure procedures for fugitive dust control, organic management, pond dewatering process, stormwater and contact water management, NPDES industrial wastewater discharge permit, wastewater management, CCR excavation and removal criteria, geotechnical instrumentation, borrow area management, karst mitigation, railroad loadout facility, groundwater monitoring, demolition of ash pond infrastructure, stability and final cover analyses, and drawings.

GPC is closing Ash Pond A by removal. A small fraction of (less than 0.5%) the CCR contained within the three ash ponds, may exist underneath the existing 115-kv switchyard and the existing transmission structures within Ash Pond A, and will be left in place (past beneficial use). This past beneficial use of CCR to be left in place is approximately 5 to 15 feet below the ground surface and approximately 20 feet above the high seasonal groundwater table of the uppermost aquifer.

• 391-3-4-.10(9)(c)8(ii) - Stability analysis

GPC is closing Ash Pond A by removal of the CCR. Therefore, the requirement of this section of the Rule is not applicable for Ash Pond A.

• 391-3-4-.10(9)(c)8(iii) – *Final cover analysis*.

GPC is closing Ash Pond A by removal of the CCR. Therefore, the requirement of this section of the Rule is not applicable for Ash Pond A.

 391-3-4-.10(9)(c)8(iv) - Groundwater monitoring plan in accordance with Rule 391-3-4-.10(6). In accordance with State CCR Rule 391-3-4-.10(6), GPC prepared a Groundwater Monitoring Plan (included in Exhibit 6 of Part A of this Permit Application) and installed a multi-unit groundwater monitoring system within the uppermost aquifer at Ash Ponds A, 1 and 2. This multi-unit groundwater monitoring system consists of groundwater monitoring wells and groundwater piezometers located around the combined perimeter of the three ash ponds. Since August 2016, independent groundwater samples from each monitoring network groundwater well have been collected and analyzed for 40 CFR 257, Subpart D, Appendix III and Appendix IV test parameters to establish a background statistical dataset. As of October 2018, eight (8) out of eight (8) rounds of background sampling events are completed. The site has been in assessment monitoring since October 2019.

EXHIBIT 2. APPLICATION FORM

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

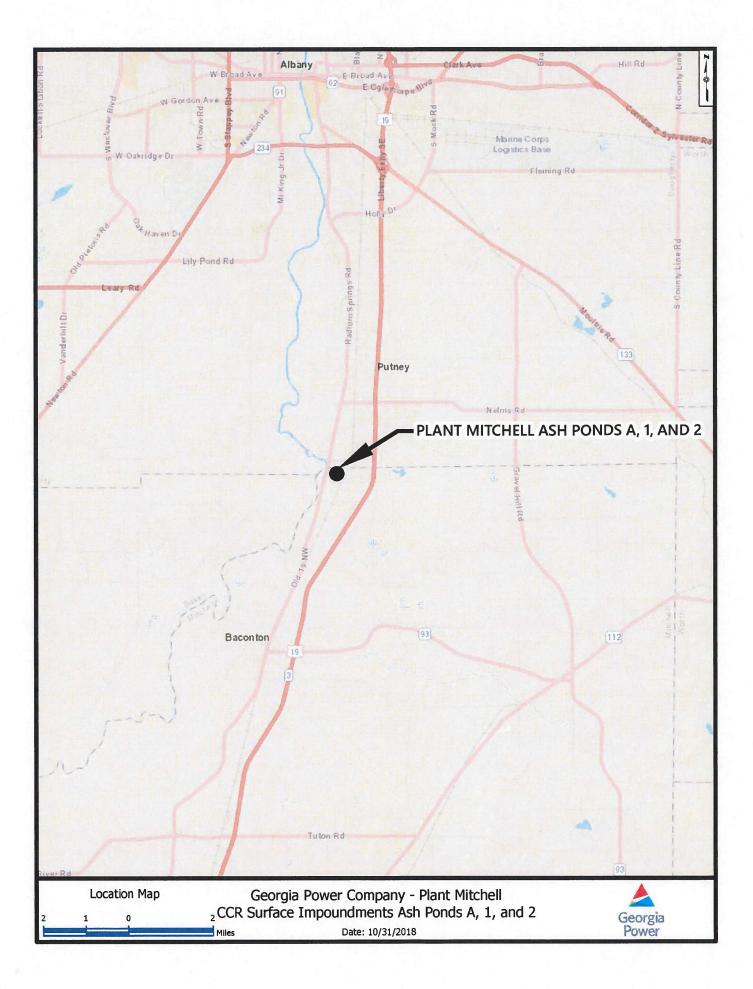
County: _____

Facility Name:

CCR Unit - Application	f or Soli Please type o		landling Permit		
I. APPLICANT INFORMATION	X				
Owner's Name or Registered Corporation Name: Geo	rgia Power Co	mpany – Plant M	litchell		
Facility Address: 5200 Radium Springs Road	Phone: 404-506-6505				
City: Albany	State: GA	ZIP Code:	31705		
Authorized Official: Aaron D. Mitchell		Title: Gene	eral Manager – Environmental Affairs		
Mailing Address: 241 Ralph McGill Blvd. NE, BIN 10221	Phone: 404	4-506-6505	6-6505		
City: Atlanta	State: GA	ZIP Code:	ZIP Code: 30308		
Email Address: GPCENV@SOUTHERNCO.COM	Facility CCR Website(s): www.georgIapower.com				
II. PROPERTY DETAILS: Complete below and attach a street or highway map indicating the site/facility location. Application must be accompanied by written zoning confirmation.					
County: Dougherty and Mitchell Counties	City: Albany				
Co-ordinates (in decimal degrees, near facility center):	31.437867°N	I, 84.133828°W			
Property for Processing/Disposal is: 🛛 Owned 🗆	Leased (please	e complete owner o	details below)		
Property Owner (if leased):					
Address:		Phone:			
City:		State:	te: Zip:		
III. APPLICATION TYPE:					
🕱 New Permit 🛛 Major Modification to Exis	New Permit Major Modification to Existing Permit		□ Transfer of Permit		
□ Other					
IV. CCR UNITS: List all CCR units covered under this ap	oplication				
Ash Pond A Ash Pond 1 Ash Pond 2					

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: 11/7/18 Date: My commission expanded, commission expansion 7th day of November Sworn to and subscribed before me this -rrglA Notary Public: Duna & Moder CONT A COUNT

2 Min-FM GCA Upd - Aphilication for Solid Vesicle Bandhing Rentify, Key SST42018



Send with completed application to: Environmental Protection Division, Solid Waste Mana 4244 International Parkway, Suite 104 Atlanta, GA 30354-3902		County: Facility:					
Solid Waste Handling Permit							
Supplemental Form for O.C.G.A. 12-8-23.1(a)(3)(B)							
(Please type or print)							
I. INFORMATION: This form must be completed by each owner, or an authorized official of a corporation, holding a 5% or greater ownership share. This form must be notarized.							
Name of Facility Applying for Solid Waste Handling Permit: Georgia Power Company – Plant Mitchell							
Owner's Name or Registered Corporation Name: Georgia Power Company							
Authorized Official: Aaron D. Mitchell	Title: General Manager – Environmental Affairs						
Mailing Address: 241 Ralph McGill Boulevard, BIN 10221 Phone: (404) 506 - 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, 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 intentionally misrepresented or concealed any material fact in the application submitted to the director?				X			
(2) 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 obtained or attempted to obtain the permit by misrepresentation or concealment?				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 explanations for each question above answered "yes."							
Signature:							
Date: 11/7/18							
Sworn to and subscribed before me this 7th day of November, 2018. Notary Public: Dana & Modeun My commission expires & Sublic Sublic States							
Notary Public: Dana & Molecon My commission expires & PUBLIC							
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EXHIBIT 3. PROFESSIONAL ENGINEER CERTIFICATION

March 29, 2022

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

Dear Mr. Dunn:

Wood Environment & Infrastructure Solutions, Inc (Wood). 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. Kenneth R. Daly, P.E., with Wood, is the Engineer of Record for this permit application. He is registered in the state of Georgia and has more than 25 years of experience in Engineering.

"I certify under penalty of law that this document and all 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 application requirements of the Georgia Environmental Protection Division Solid Waste Rule 391-3-4-.10 for Management of Coal Combustion Residuals have been met."

ATTEST:

Wood Environmental & Infrastructure Solutions, Inc. Engineering Firm

Kenneth R. Daly, P.E. Name of Professional Engineer Signature NA PEA28595 3/29/2022 Date

EXHIBIT 4. LOCAL ZONING OR LAND USE CONFIRMATION



October 19, 2017

Mr. 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: Zoning Verification, Plant Mitchell CCR Surface Impoundments Location: 5200 Radium Springs Road, Dougherty County Tax Parcel No: 00174/00001/093

Mr. Cown,

The Official Zoning Map for Dougherty County, Georgia, adopted by the Board of County Commissioners on September 21, 2009, and as amended thereto, shows that the above captioned property is zoned M-2 (Heavy Industrial District). This site is properly zoned for its current use as a power plant and related activities including the surface impoundments (ash ponds).

According to our records, there are no outstanding zoning code violations for the subject property.

Please contact me at (229) 438-3932, if I can be of further assistance.

Sincerely,

Paul Forgey, AICP, Director

PLANNING, DEVELOPMENT SERVICES & CODE ENFORCEMENT

MITCHELL COUNTY BOARD OF COMMISSIONERS

Commissioners: Reggie C. Bostick Julius Hatcher Benjamin Hayward B. Keith Jones David Sullivan 26 North Court Avenue Camilla, Georgia 31730 Rhone: 229-336-2000

Rebecca Reese, Clerk

October 23, 2017

Mr. 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 Mitchell

Permit Application - CCR Surface Impoundments

Dear Mr. Cown:

The Georgia Power CCR Surface Impoundments located at Plant Mitchell, 5200 Radium Springs Road, Albany, Georgia, comply with local zoning and land use ordinances.

Sincerely,

Hayward AC

Benjamin Hayward, Chairman

Mitchell County Board of Commissioners