

PUBLIC DISCLOSURE

March 31, 2021

Mr. Reece McAlister
Executive Secretary
Georgia Public Service Commission
244 Washington Street, SW
Atlanta, GA 30334-5701

RE: Georgia Power Company's Semi-Annual Coal Combustion Residuals Asset Retirement Obligation (CCR ARO) reports; Docket No. 43083

Dear Mr. McAlister:

Enclosed for filing in compliance with the Georgia Public Service Commission's ("Commission") July 29, 2019 Order Adopting Stipulation as Amended in Docket No. 42310 ("2019 IRP Final Order") is Georgia Power Company's (the "Company") Semi-Annual CCR ARO Report ("Report"). The Company files this Report to update the Commission on the Company CCR ARO compliance strategy activities through December 31, 2020 and other notable updates. Enclosed are the trade secret and public disclosure versions of the Report made in accordance with the Georgia Public Service Commission's Alternative Electronic Filing Procedures issued on March 17, 2020.

This filing contains certain information that is being filed under the Commission's trade secret rules as explained in the enclosed document regarding the basis for the assertion. If you have any questions, please call Cheryl Johnson at 404-506-6837.

Sincerely,

/s/ Kelley Balkcom

Kelley Balkcom
Director, Regulatory Affairs
Georgia Power Company

Enclosure

BEFORE THE GEORGIA PUBLIC SERVICE COMMISSION

**SEMI-ANNUAL COAL COMBUSTION RESIDUALS
ASSET RETIREMENT OBLIGATION REPORT
DOCKET NO. 43083**

GEORGIA POWER COMPANY

**BASIS FOR THE ASSERTION THAT THE
INFORMATION SUBMITTED IS A TRADE SECRET**

In accordance with the order of the Georgia Public Service Commission, Georgia Power Company (“Georgia Power” or the “Company”) hereby submits the Coal Combustion Residuals Asset Retirement Obligation (“CCR ARO”) Program Semi-Annual Program Status Report (“Report”) in Docket No. 43083. In the Report, the Company has submitted details related to its environmental compliance strategies, including projected and current cost estimates for CCR ARO ash pond closures and landfill projects (the “Information”), that constitute trade secret information of the Southern Company, Georgia Power, and its affiliates and is therefore protected from public disclosure under Commission Rule 515-3-1-11.

The Information derives economic value from not being generally known to, and not being readily ascertainable by proper means by other persons who can obtain economic value from its disclosure or use. Specifically, the Information contains competitively sensitive details on the site specific and CCR unit specific costs the Company is expected to incur to close its ash ponds and landfills as well as the timing and issuance of future contracts. Publicly disclosing these costs would allow bidders and vendors to tailor proposals according to the Company’s expected costs, setting an artificial floor on bidding, to the detriment and harm of the Company and its customers by not allowing the Company to conduct a proper solicitation and obtain the best cost estimates for future consulting work. Disclosure of the Information could harm the Company and its customers in its efforts to obtain optimal pricing in current or future negotiations. In addition, the Company’s competitors are not generally required to disclose similar information, and to require the Company to do so would put it at an economic disadvantage.

The Information is subject to extensive efforts to maintain its confidentiality. Only select Georgia Power and Southern Company personnel and their legal counsel are granted access to the Information. Those personnel receive access only on a “need to know” basis. If a party outside of Georgia Power and Southern Company and their legal counsel are granted access to the Information, the party is required to sign a confidentiality agreement with respect to the Information.

Aaron Mitchell, first being duly sworn, deposes and states that he has reviewed the Report and that, to the best of his knowledge, the specific information designated as trade secret therein constitutes trade secrets pursuant to Article 27, Chapter 1, Title 10 of the Georgia Code.

/s/ Aaron Mitchell
Aaron Mitchell
Environmental Affairs Director
Georgia Power Company

Subscribed and sworn to before me this [_31_] day of March, 2021.

Notary Public

My Commission expires:

Coal Combustion Residuals Asset Retirement Obligation Program Semi-Annual Program Status Report

Georgia Power Company

March 31, 2021

FORWARD-LOOKING STATEMENT CAUTIONARY NOTE

Certain information contained in this report is forward-looking information based on current expectations and plans that involve risks and uncertainties. Forward-looking information includes, among other things, statements concerning environmental regulations, related compliance plans, and estimated expenditures. Georgia Power cautions there are certain factors that can cause actual results to differ materially from the forward-looking information that has been provided. The reader is cautioned not to put undue reliance on this forward-looking information, which is not a guarantee of future performance and is subject to a number of uncertainties and other factors, many of which are not within the control of Georgia Power. Accordingly, there can be no assurance that such suggested results will be realized. The following factors, in addition to those discussed in Georgia Power's Annual Report on Form 10-K for the fiscal year ended December 31, 2020 and subsequent securities filings, could cause actual results to differ materially from management expectations as suggested by such forward-looking information: the impact of recent and future federal and state regulatory changes, including tax, environmental, and other laws and regulations to which Georgia Power is subject, as well as changes in application of existing laws and regulations; the extent and timing of costs and legal requirements related to coal combustion residuals; current and future litigation or regulatory investigations, proceedings, or inquiries; the ability to control costs and avoid cost and schedule overruns during the development, construction and operation of facilities or other projects; the ability to construct facilities in accordance with the requirements of permits and licenses and to satisfy any environmental performance standards and the requirements of tax credits and other incentives; advances in technology; state and federal rate regulations and the impact of pending and future rate cases and negotiations, including rate actions relating to cost recovery mechanisms; catastrophic events such as fires, earthquakes, explosions, floods, tornadoes, hurricanes and other storms, droughts, pandemic health events, political unrest, or other similar occurrences; and the effect of accounting procurements issued periodically by standard-setting bodies. Georgia Power expressly disclaims any obligation to update any forward-looking information.

Georgia Power Company
Coal Combustion Residuals Asset Retirement Obligation Program
Semi-Annual Program Status Report
March 31, 2021

Table of Contents

I. EXECUTIVE SUMMARY.....	4
II. PROJECT UPDATES.....	9
Activity Overview	9
Ash Pond Locations.....	11
Landfill Locations	18
III. BENEFICIAL USE.....	22
Facility Level Updates	22
Request for Proposals.....	23
IV. FINANCIAL SUMMARY – FACILITY LEVEL	24
V. FINANCIAL AND SCHEDULE SUMMARY – CCR UNIT LEVEL.....	30
Financial Summary- CCR Unit Level	31
Schedule Summary- CCR Unit Level.....	44
VI. Appendix A.....	58

Georgia Power Company
Coal Combustion Residuals Asset Retirement Obligation Program
Semi-Annual Program Status Report
March 31, 2021

In accordance with the Georgia Public Service Commission's ("PSC") Final Order in the 2019 Integrated Resource Plan ("IRP") proceeding in Docket No. 42310, Georgia Power Company ("Georgia Power" or the "Company") provides this semi-annual report regarding the Asset Retirement Obligations ("ARO") for its Coal Combustion Residuals ("CCR") compliance strategy activities through December 31, 2020, and other notable updates occurring in 2021.

I. EXECUTIVE SUMMARY

Compliance with Federal and Georgia CCR Rules

Georgia Power is required to comply with both the Federal CCR Rule and Georgia CCR Rule at its ash ponds and CCR landfills. The Company has 29 ash ponds and 12 current CCR landfills at 12 sites across the state. To comply with these rules, Georgia Power's Environmental Compliance Strategy ("ECS"), was reviewed and approved by the PSC in the Company's 2019 IRP (Docket No. 42310). The latest annual update to the ECS was filed with the PSC in March 2021. The following table summarizes the Company's current PSC-approved closure strategy for its 29 ash ponds and 12 current CCR landfills.

Table 1. Georgia Power's Current Ash Ponds and CCR Landfills ("CCR Units")

	Ash Pond Closure Method			Current CCR Landfills
	Closure by Removal	Closure in Place	Total	
Arkwright				3
Bowen		1	1	1
Branch	5		5	
Hammond	3	1	4	1
Kraft	1		1	1
McDonough	1	3	4	
McIntosh	1		1	2
McManus	1		1	
Mitchell	3		3	
Scherer		1	1	1
Wansley		1	1	1
Yates	4	3	7	2
	19	10	29	12

Georgia Power's Environmental Compliance Strategy

As outlined in the ECS, Georgia Power's compliance strategy process has evolved and been refined to adapt to changing regulations. While the process itself will continue to necessarily evolve, the purpose of the process has remained unchanged and has always been to produce cost-effective compliance strategies which will maximize the benefit to customers while achieving environmental objectives and assuring compliance with all requirements. The Company will continue to provide transparent updates on its CCR ARO compliance strategy and activities to all stakeholders through annual ECS updates, semi-annual CCR ARO progress reports, ongoing regulatory permitting activities with the Georgia Environmental Protection Division ("EPD"), and ongoing compliance information routinely posted on the Company's external website.

Georgia Power's ash pond and landfill closure plans and compliance strategy are designed to comply with the Federal CCR Rule, as well as the more stringent requirements of the Georgia CCR Rule. The Georgia CCR Rule regulates all ash ponds and landfills in the state and establishes a comprehensive permitting program through which the EPD incorporates Federal and Georgia CCR Rule requirements, including aggressive compliance schedules. The EPD will review applications for all CCR Units, issue permits, and oversee ash pond closure activities to ensure they meet the requirements of the Georgia CCR Rule and are protective of human health and the environment. Georgia Power was required to submit a new CCR permit application to the EPD for all ash ponds and CCR landfills in November 2018. This submittal included previously closed CCR landfills and ash ponds.

Both the Federal CCR Rule and Georgia CCR Rule mandate strict regulatory deadlines to complete closure of ash ponds and the Company must comply with both rules, resulting in dual compliance requirements. While the more stringent Georgia CCR Rule incorporates the regulatory deadlines outlined in the Federal CCR Rule, it creates additional compliance requirements through the state's permitting process for the Company's ash ponds and landfills. The Federal CCR Rule includes regulatory deadlines for certain ash ponds incorporated into Georgia's CCR rule, but does not currently tie regulatory deadlines to permit issuance. Therefore, the Company is bound by these stringent regulatory deadlines, regardless of permit issuance, and must complete certain compliance requirements and proceed with work to meet these deadlines, including preparing ash pond closure studies, developing detailed engineering designs, commencing certain construction activities, as well as developing and implementing customized and comprehensive ash pond dewatering processes.

Extensive construction activities are being or will be implemented at each site, such as dewatering, excavation, ash consolidation/placement, installation of a cover system,

installation of engineering controls, and site restoration. The Company, relying significantly on the experience and knowledge of third-party experts, has evaluated the volume, complexity, and duration of these required activities on a site-specific basis and created comprehensive closure plans and construction schedules necessary to comply with the CCR Rules. The closure plans and schedule for the CCR Units are site-specific and each project is progressing with design, dewatering, or construction depending on individual project status.

Both Federal and Georgia CCR Rules specify interim and post closure care activities. This includes maintenance of the ash pond and landfill facilities, and ongoing groundwater monitoring after closure. The interim post closure care (“IPCC”) activities designate the time period following construction during which requirements to conduct monitoring and maintenance exist, before the post closure care (“PCC”) period begins.

Georgia Power’s overall program - including construction, IPCC, and PCC - is currently expected to span over 60 years, with a majority of spend projected over approximately the next 15 years during construction.

CCR Program Progress Summary

The Company continues to make progress on Georgia Power’s CCR program. Construction and engineering activities have advanced, permitting activities continue, groundwater monitoring and reporting is ongoing, and dewatering activities have progressed as more sites move into active construction.

As closure construction has progressed, Georgia Power has instilled a culture of safety and excellence on all active sites. Over 200,000 safe workhours have been performed since July 2020, with a total of over 550,000 safe workhours performed in 2020 and a cumulative program total of 2.8 million safe workhours without significant injury, as defined by Edison Electric Institute. Closure construction has progressed at 20 ash ponds at 9 facilities. The remaining 9 ponds are in various stages of engineering design, contracting, and/or early site preparation. Construction activities are conducted by qualified contractors whom are required to comply with regulatory and permit requirements, as well as robust design packages assembled by professional engineers.

To date, the EPD has issued four final permits. Site-specific closure plans and detailed engineering drawings were included in the Company’s permit applications previously submitted to the EPD. Quality assurance plans, which were also included in the Company’s permit applications, are implemented through third-party engineering firms and ensure that work is completed per approved permit drawings and in compliance with regulatory and permit requirements. Prior to issuing final permits and in order to gain

public input, the EPD issues draft permits for public review and comment. The EPD addresses comments it receives prior to issuing permits as final.

Georgia Power has installed comprehensive groundwater monitoring networks including more than 590 wells to actively monitor groundwater quality at ash ponds and landfills and has continued to add additional wells to these networks. The Company has hired independent, third-party engineers and groundwater professionals to install and maintain these groundwater monitoring well networks for each site. Third-party, independent engineers and geologists sample wells in the monitoring network, statistically analyze and evaluate the data, and write reports interpreting and summarizing results. Groundwater samples are analyzed by accredited, independent, third-party laboratories. In 2020 alone, 117 groundwater wells and piezometers were installed, more than 3,000 groundwater samples were collected, and the results were included in 62 routine groundwater reports submitted to the EPD and posted to Georgia Power's public website. Continuing into 2021, similar to 2020, there will be additional well installations, sampling, and reporting activities.

The EPD has approved and issued dewatering plans for eight of the Company's sites. These plans describe the water treatment system, controls, and monitoring that will be used during the dewatering process to assure the water discharged is in compliance with wastewater permits and protective of water quality standards. The dewatering activities occur under the direction of independent, third-party licensed wastewater operators throughout the duration of each closure project. The Company has also engaged independent, third-party contractors for effluent and receiving stream sampling, and accredited, independent laboratories for analysis. In 2020, independent wastewater treatment contractors treated approximately 711 million gallons of water and independent sampling contractors conducted 491 sampling events for the effluent and receiving streams, bringing program totals to over 1.6 billion gallons of water treated and over 1,000 sampling events for the effluent and receiving streams. This data is reported monthly to the EPD and also placed on Georgia Power's public website.

Georgia Power's CCR Asset Retirement Obligation

Prior to January 1, 2003, the Company included estimated costs for the future closure of ash ponds and landfills in the cost of removal component in depreciation rates. After mandatory adoption of the Financial Accounting Standards 143 — Asset Retirement Obligations in January 2003, now Accounting Standards Codification ("ASC") 410, the Company reclassified the costs to separate Federal Energy Regulatory Commission accounts, excluded the cost from depreciation rates, and began accounting for the cost as asset retirement obligations. Such costs have consistently been included in rates

established by the PSC since that time. From January 1, 2003 through December 31, 2020, the Company has spent \$741 million on CCR ARO activities.

Georgia Power consistently monitors and evaluates project assumptions, including, but not limited to, timing and schedule assumptions for permits and construction, project scope, and estimated future escalation. Georgia Power's current forecast applicable to retail customers is approximately \$8.1 billion, including the \$741 million in actual costs previously incurred.

The Company will continue to refine cost and closure plans as these projects progress. Future adjustments to the Company's current cost recovery methodology, approved by the PSC in the 2019 base rate case in Docket 42516, will be addressed through Georgia Power's 2021 compliance filing, as well as future base rate case proceedings.

Various factors could impact the Company's CCR ARO compliance efforts, construction schedules, permit approvals, and overall cost moving forward. These factors include, but are not limited to, regulatory deadlines, permitting issuance and requirements, state and federal rule amendments, legislative action, material procurement, ash volumes, design and/or scope changes, availability of qualified contractors, contractor performance, weather, completion of competitive bids and contracts for pending projects, water treatment plans and technology, optimization of groundwater monitoring networks, long term maintenance needs, potential to take advantage of beneficial use opportunities, the impact of emerging technologies throughout the life of the program, and other market and external factors.

In order to establish and implement appropriate mitigation efforts to reduce the probability and potential impacts of such risks, the Company is committed to actively managing the program and projects with continued focus on strategic project leadership and oversight, risk and change control processes, and further development and implementation of project controls as a whole by enhancing work practices to improve consistency, accuracy, and visibility across the program.

II. PROJECT UPDATES

Activity Overview

Georgia Power's CCR compliance strategy includes site-specific closure plans for each ash pond or landfill project. In order to advance the program and for the projects to comply with the Federal and Georgia CCR Rules, the Company has progressed design and engineering efforts, construction activities, permitting, groundwater monitoring and reporting, as well as dewatering projects.

Permitting

In compliance with Georgia's CCR Rule, and as further discussed in the Company's ECS, extensive permit applications for all CCR Units were submitted to the EPD in November 2018. The permit documents submitted to the EPD include voluminous compliance information on inspections, design criteria, operating criteria, groundwater monitoring, closure plans, post closure plans, quality control, and other similar information.

In 2020, a final permit for Plant McIntosh AP-1, Hammond AP-1 and Hammond AP-2 were issued by the EPD. Issuance of these final permits was substantially consistent with the application and did not significantly change the Company's existing scope, cost, or schedule assumptions. A final permit for Hammond AP-4 was issued by the EPD on January 27, 2021. Similarly, the issuance of this final permit was substantially consistent with the application and did not significantly change the Company's existing scope, cost, or schedule assumptions. The EPD permitting activities for the remaining projects are currently expected to continue through 2022. The Company continues to respond to the EPD's requests for information and comments to the permit applications submitted in 2018.

Dewatering

The Company's process for dewatering during ash pond closure treats the water to meet the requirements of the plants' wastewater permits, as well as dewatering plans approved by the EPD, to ensure compliance with water quality standards.

As of December 2020, the Company has received approval from the EPD for eight dewatering plans at plants Bowen, McDonough, McManus, McIntosh, Branch, Yates, Hammond and Mitchell. Similarly, Georgia Power will submit dewatering plans as necessary to the EPD for approval prior to commencement of dewatering at the remaining sites.

The dewatering activities occur under the direction of independent, third-party licensed wastewater operators throughout the duration of each closure project and, in most cases,

will continue into the PCC period to manage any ongoing water sources. This support will continue until sites are stabilized, or until permits are approved or modified. In addition, the Company has also engaged independent, third-party contractors for weekly effluent and bi-monthly receiving stream sampling throughout dewatering, as well as contracted with accredited independent laboratories for analysis.

The dewatering process is dynamic and complex. The treatment system demands are often impacted by rainfall and site-specific closure conditions. For these reasons, the required treatment technologies, labor, operating schedules, and associated costs may fluctuate during the closure process. The Company will adjust the individual site dewatering infrastructure to align with site needs during closure to ensure compliance and to optimize performance.

Groundwater

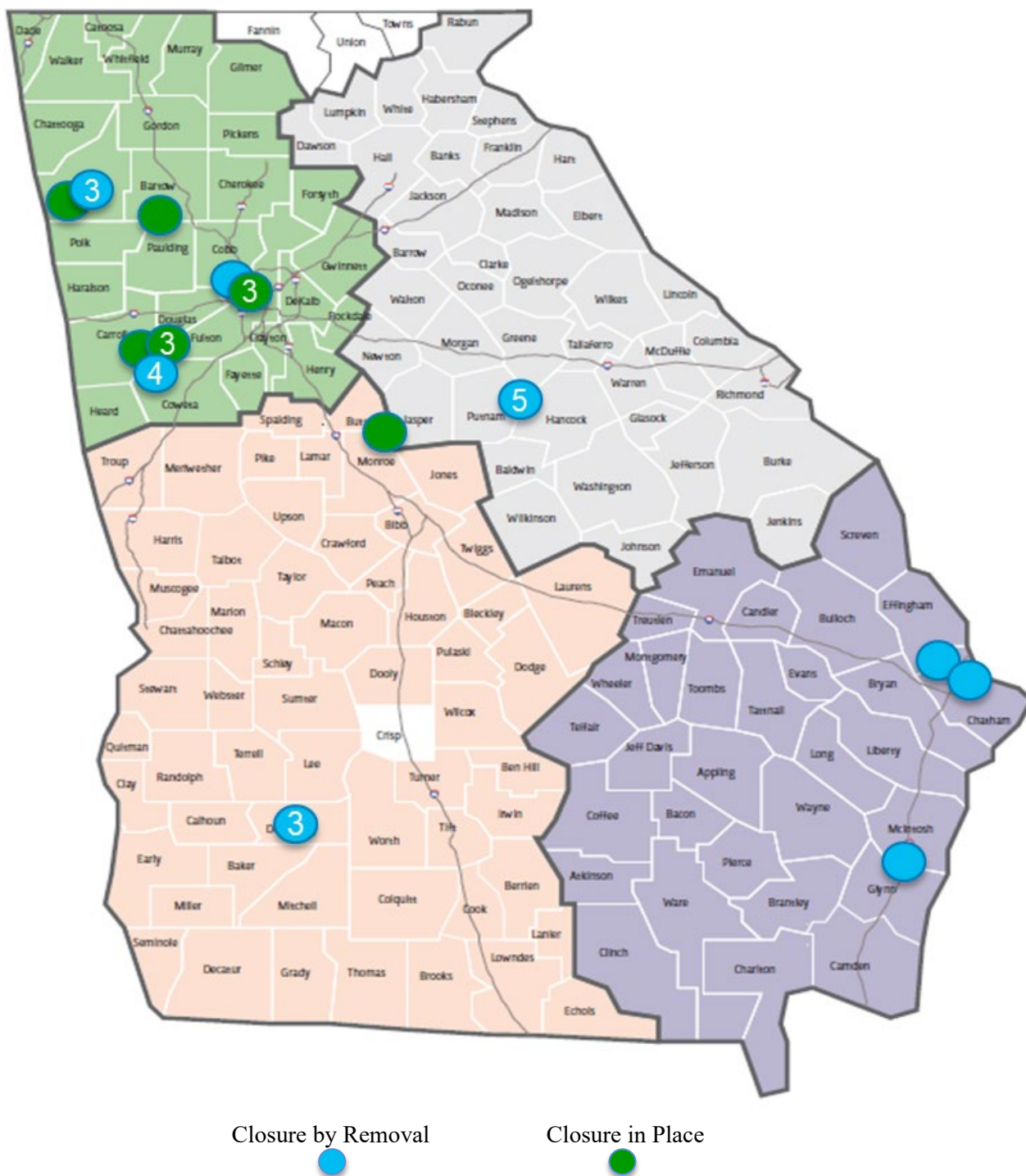
Georgia Power continues to monitor groundwater at ash ponds and landfills and report the results to the EPD, as well as post regular updates to the Company's website. Georgia Power has installed comprehensive groundwater monitoring networks, including more than 590 wells, at its facilities across the state to actively monitor groundwater quality at each site.

As required under the Federal and Georgia CCR Rules, the Company continues to perform regular testing for the compliance parameters listed in the Rules and has installed additional groundwater monitoring wells. These additional monitoring wells are used for further characterization of groundwater quality near the ash ponds. As the Company continues assessment of corrective measures ("ACM"), as required under the Federal and Georgia CCR Rules for applicable sites, additional activities will be occurring such as additional groundwater sampling, well and piezometer installation, and reporting to the EPD. Third-party, independent consultants will continue groundwater sampling, data evaluation and interpretation, and reporting, while accredited independent laboratories will continue performing analyses following the appropriate methodology and protocols.

The Company will continue to comply with groundwater monitoring requirements in the Federal and Georgia CCR Rules by conducting semi-annual groundwater monitoring and reporting for the sites during the closure process and in post closure. In many cases, PCC spans for decades into the future and will include inspecting the closed ash ponds and landfills to verify continued structural integrity, maintaining the integrity of the final cover system, and maintaining the groundwater monitoring network.

Ash Pond Locations

Georgia Power has 29 ash ponds at 11 sites.



Ash Pond Estimated Closure Timeframes

Ash pond estimated closure timeframes vary by location and are site-specific. As discussed previously, schedule duration and timing of each activity for the projects is influenced by numerous factors, including, but not limited to, state and federal regulatory actions and rule amendments, legislative action, necessary scope changes, weather, and other market and external factors. The summary provided below represents the individual ash pond closure strategy along with the currently estimated closure timeframe by site. Additional unit-specific schedule information formed by the appropriate factors in the project planning process is provided in the Financial and Schedule Summary portion of this report. The Company will continue to update project schedules as necessary.

Table 2. Ash Pond Estimated Closure Timeframes

	Closure By Removal	Closure In Place	Total	Estimated Closure Construction Completion*
Bowen		1	1	2036
Branch	5		5	2035
Hammond	3	1	4	2029
Kraft	1		1	2016
McDonough	1	3	4	2023
McIntosh	1		1	2021
McManus	1		1	2020
Mitchell	3		3	2027
Scherer		1	1	2031
Wansley		1	1	2029
Yates	4	3	7	2023
	19	10	29	

**For those sites with multiple ash ponds on-site, the date above reflects the last pond closure date on-site.*

Ash Pond Construction

The Company has made construction progress at 20 ash ponds (“AP”), at 9 facilities. A summary of construction status for these ponds is listed in Table 3 below.

Table 3. Ash Pond Construction Progress

	Closure by Removal	Closure in Place	IPCC	PCC
<u>Construction Complete</u>				
Branch AP-A	●		●	
<ul style="list-style-type: none"> Ash was removed from the 1-acre ash pond and consolidated with AP-E before the Georgia CCR Rule became effective. Site restoration has been completed. Georgia Power submitted a certification of ash removal from AP-A to the EPD in 2018 to provide documentation of the AP-A closure. AP-A is in IPCC. 				
Hammond AP-3		●	●	
<ul style="list-style-type: none"> AP-3 has been closed in place by grading the ash within the 25-acre footprint and installing an impermeable cover system that includes a geomembrane. A closure certification report was submitted for AP-3 to the EPD in 2018. AP-3 is in IPCC. The Company is moving forward with implementing TreeWells™ as advanced engineering to benefit the closure of AP-3. 				
Kraft AP-1	●		Managed by EPD Response and Remediation Program	Managed by EPD Response and Remediation Program
<ul style="list-style-type: none"> Ash was removed from the 7-acre ash pond to off-site permitted landfills prior to the Georgia CCR Rule becoming effective. Additionally, the removal was part of an expanded plant retirement project and was regulated by the EPD's Response and Remediation Program. Georgia Power submitted a certification of ash removal from AP-1 to the EPD in 2018 to provide documentation of the AP-1 closure. The EPD provided concurrence with the compliance status report in June 2020. 				
McManus AP-1	●		●	
<ul style="list-style-type: none"> Ash was removed from the 82-acre ash pond and placed in an off-site permitted landfill. A certification of ash removal was submitted to the EPD in 2019. In January 2020, the EPD acknowledged that CCR removal activities in AP-1 have been completed. Site restoration activities were completed in 2020. Although closure activities are complete and dewatering has ceased, operation of the water treatment system, consistent with the Dewatering Plan, remains in place as the Company works with the EPD to update permitting requirements to manage future surface water discharges. AP-1 is in IPCC. 				

	Closure by Removal	Closure in Place	IPCC	PCC
Yates AP-1	●		●	
<ul style="list-style-type: none"> Ash was removed from the 23-acre ash pond and placed in an on-site permitted landfill and consolidated with other ash ponds closing in place. Site restoration has been completed. A certification of ash removal was submitted to the EPD in 2019. In November 2020, the EPD acknowledged that CCR removal activities in AP-1 have been completed. AP-1 is in IPCC. 				
<u>Construction Underway or Significantly Completed</u>				
Bowen AP-1		●		
<ul style="list-style-type: none"> Early site preparations are underway on the 254-acre ash pond and initial dewatering is ongoing, consistent with the EPD-approved Dewatering Plan. Construction mobilization, which was previously expected to occur in late 2020, is now expected to begin in the first quarter of 2021, due in part to contractual negotiations at the site. A limited notice to proceed ("LNTP"), was issued in January 2021 while the Company engages in final contract negotiations for the prime contract award. 				
McDonough AP-1		●		
<ul style="list-style-type: none"> Closure construction is ongoing on the 25-acre ash pond. The closure includes installation of a geosynthetic cap cover system. Design for a barrier wall is underway consistent with plans for advanced engineering at this site and construction of the barrier wall is expected to be complete in 2023. 				
McDonough AP-2	●			
<ul style="list-style-type: none"> Ash was removed from the 7-acre ash pond and consolidated with AP-1 with some amounts placed in AP-3/4 in 2019. A certification of ash removal was submitted to the EPD in March 2020. In October 2020, the EPD acknowledged that CCR removal activities in AP-1 have been completed. Site restoration is underway. 				
McDonough AP-3 & AP-4		●		
<ul style="list-style-type: none"> Ash consolidation of the combined ash pond area of 79-acres to a smaller 64-acre footprint is underway and a geosynthetic cap cover system is being installed which will cover 69-acres. Advanced engineering incorporated into the closure construction includes an underslope drainage system and the continued use of temporary advanced engineering wells. With the design complete and construction substantially complete, the advanced engineering systems are operational. 				

	Closure by Removal	Closure in Place	IPCC	PCC
McIntosh AP-1	●			
<ul style="list-style-type: none"> Ash removal from the 22-acre ash pond is underway and ash is being placed in the on-site permitted landfill. Closure construction began in early 2020. Active dewatering is underway and ash removal will continue into 2021. 				
Mitchell AP-1, AP-2, AP-A	●			
<ul style="list-style-type: none"> Ash removal began in the second quarter 2020 from the combined ash pond area of 104-acres and is being transported for beneficial use. The primary contractor mobilized in early 2020. Dewatering commenced in the first quarter of 2021. 				
Yates AP-A	●			
<ul style="list-style-type: none"> Ash has been removed from the 9-acre ash pond and consolidated with AP-3 and AP-B' being closed in place. Restoration activities at AP-A are ongoing. A certification of ash removal was submitted to the EPD in October 2020. 				
Yates AP-B	●			
<ul style="list-style-type: none"> Ash has been removed from the 6-acre ash pond and consolidated with AP-3 and AP-B' being closed in place. A certification of ash removal is currently scheduled to be completed and submitted in 2021. 				
Yates AP-2	●			
<ul style="list-style-type: none"> Ash is being removed from the 60-acre ash pond and consolidated with AP-3 and AP-B being closed in place. Dewatering is ongoing. 				
Yates AP-3, AP-B		●		
<ul style="list-style-type: none"> Ash from other Plant Yates ponds is being consolidated within the footprint of the combined AP-3 and AP-B pond area of 88 acres. Following ash consolidation, a geosynthetic cap cover system will be installed to complete closure. Advanced engineering incorporated into the closure construction includes construction of a subsurface hydraulic conveyance system. Surface water from AP-3, AP-B is being managed per the approved Dewatering Plan. 				

	Closure by Removal	Closure in Place	IPCC	PCC
Yates AP-C		●		
<ul style="list-style-type: none"> The former ash pond has been incorporated into the on-site permitted landfill, R6, and is being closed in place in accordance with the current landfill permit requirements. 				

Final construction certification documents for Branch AP-A, Hammond AP-3, Kraft AP-1, Yates AP-1, as well as a certification of removal for McManus AP-1, McDonough AP-2, and Yates AP-A have been filed with the EPD. The EPD issued CCR removal acknowledgement letters for McManus AP-1, Yates AP-1, and McDonough AP-2. The Company will continue to meet all regulatory compliance requirements while the EPD reviews these documents.

Pre-Construction Activities

A summary of progress for the remaining 9 ash ponds is listed in Table 4 below. The Company has made significant progress with ongoing work including engineering studies, design, closure evaluations, constructability reviews, and other pre-construction activities for all sites, including sites where significant construction activities have not yet begun. These pre-construction activities help ensure the closure activities can be completed effectively, taking into account site-specific conditions and permit requirements. In addition, the Company is making necessary preparations and taking actions related to contracting for the various stages of work associated with the closure of these ponds. All of the following ash ponds are in various stages of design, permitting, contracting, or early site preparatory work.

Table 4. Ash Pond Pre-Construction Activities

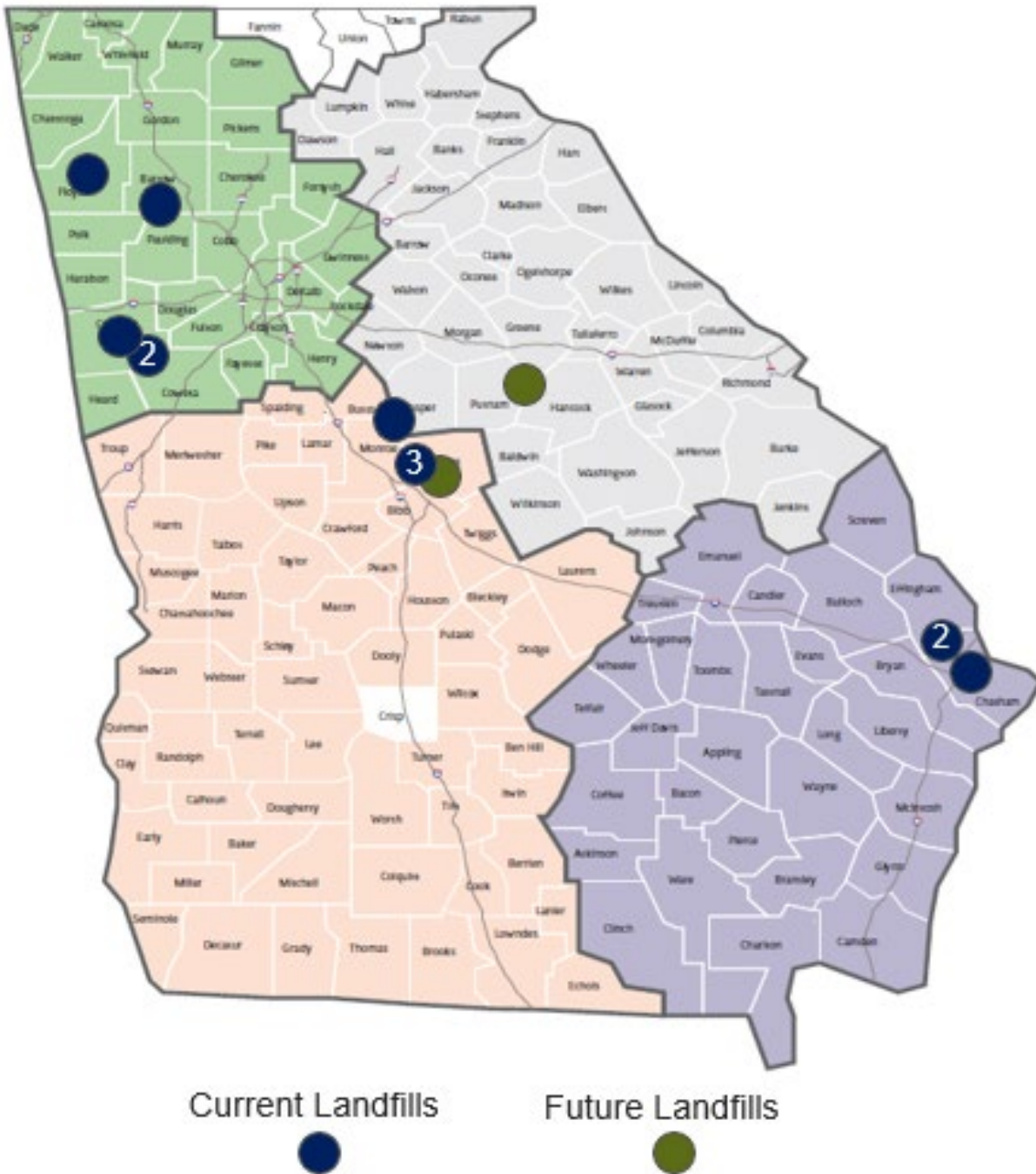
	Detailed Design	Active Dewatering	Bid Process	Early Site Preparation*
Branch AP-B, AP-C, AP-D, AP-E	In progress	●		●
<ul style="list-style-type: none"> Dewatering has commenced and is operational consistent with the Dewatering Plan. The detailed design for Ponds B, C, D, and E is ongoing. Early site preparation activities are underway, such as construction of stormwater diversion features and further site development to support dewatering. Permitting is underway for a new landfill to accept CCR from the ash pond closures and the letter of Site Acceptability for the new landfill was received from the EPD in June 2020. 				

	Detailed Design	Active Dewatering	Bid Process	Early Site Preparation*
Hammond AP-1, AP-2	Design at 90%	●	Underway	●
<ul style="list-style-type: none"> Dewatering commenced in the first quarter of 2021. Bid request for proposals have been developed and issued. Bids are expected to be received, and an award made, during the first half of 2021. Work is continuing with the removal of ash from AP-2 to the Company-owned off-site permitted landfill. 				
Hammond AP-4	In progress	●		
<ul style="list-style-type: none"> Dewatering commenced in the first quarter of 2021. The Company is optimizing and progressing the detailed design package. AP-4 will be closed by removal to a Company owned off-site permitted landfill, Huffaker Road or other off-site permitted landfill. Site restoration will be completed following CCR removal. Upon finalizing a detailed design, a bid is planned to be initiated for the prime contractor. 				
Scherer AP-1	Design at 90%			
<ul style="list-style-type: none"> Optimizing and progressing the detailed design package. Early site preparation work is scheduled to begin in late 2021. Advanced engineering incorporated into the closure construction plan includes expansion of the final cover system to minimize stormwater infiltration. 				
Wansley AP-1	Design at 60%			
<ul style="list-style-type: none"> An enhanced design is progressing and a constructability review of the closure plan is underway to support an estimate update currently expected later this year. The schedule will be further updated as appropriate. Bids were issued for ash pond dewatering and for early site work. Dewatering and early site work preparation is scheduled to begin in late 2021. Design for a deep soil mix ("DSM"), containment structure with a concrete façade will be incorporated into the closure. The concrete façade is part of the advanced engineering to enhance the closure by providing a physical impediment to the flow of water. 				

**Early site preparation includes activities such as contractor mobilization, setup of temporary facilities, laydown area construction, stormwater control, etc.*

Landfill Locations

Georgia Power has 12 existing landfills and 2 new landfills planned that will be permitted to support closures into the future at 9 sites.



Landfill Estimated Closure Timeframes

The time of landfill closure differs by location and depends on various factors. These factors include status of plant operations, unit capacity factors, available landfill capacity, and whether the landfill is designated to support ash pond closure activities. Landfill closure dates at operational plants are significantly influenced by generation output and how much operational ash is sold for beneficial use and not disposed of in the on-site landfill. The Company will continue to update landfill closure timeframes based on the factors described below.

Table 5. Landfill Estimated Closure Timeframes

	Current CCR Landfills	Future new permitted landfills	Total	Estimated Closure Construction Completion*
Arkwright	3	1	4	2030
Bowen	1		1	2041
Branch		1	1	2035
Hammond	1		1	2029
Kraft	1		1	2020
McIntosh	2		2	2021
Scherer	1		1	2030
Wansley	1		1	2051**
Yates	2		2	2021
	12	2	14	

*For those sites with multiple landfills or cells, the date above reflects the last cell closure date on-site.

**The estimated closure construction completion date and associated cash flows for the Wansley landfill are subject to adjustments based on the Company's 2022 IRP filing and subsequent PSC order.

Landfill Activities

Georgia Power is complying with federal and state requirements at its 12 existing CCR landfills. Five of the 12 landfills either support current plant operations or ash pond closure projects and are actively operated under existing Solid Waste Permits. The remaining seven landfills are closed or undergoing closure under their existing Solid Waste Permits. All landfill permits are in the process of being updated by the EPD in compliance with the Georgia CCR Rule to include additional regulatory requirements.

- **Arkwright**: 3 CCR units closed under solid waste regulations applicable at the time of closure. The landfills are planned to be consolidated into a new future permitted on-site landfill.
- **Bowen**: 1 CCR landfill to remain as part of ongoing plant operations. The landfill will undergo closure when permitted capacity is reached or when CCR disposal is no longer needed.
- **Hammond Huffaker**: 1 CCR landfill to be closed following placement of CCR from certain ash ponds at Hammond.
- **Kraft Grumman Road**: 1 CCR landfill closed in 2019 and in IPCC. A final construction certification report was submitted to the EPD in 2019. The Company completed additional restoration activities and is conducting additional groundwater studies.
- **McIntosh**: 1 CCR landfill is in PCC - additionally, 1 CCR landfill is planned to be closed following disposal of CCR from the excavation of AP-1. A cell within this landfill is currently in IPCC.
- **Scherer**: 1 CCR landfill to remain as part of ongoing plant operations. The landfill will undergo closure when permitted capacity is reached or when CCR disposal is no longer needed.
- **Wansley**: 1 CCR landfill to remain as part of ongoing plant operations. The landfill will undergo closure when permitted capacity is reached or when CCR disposal is no longer needed.
- **Yates**: The Gypsum landfill has been removed and is currently in IPCC. A final construction certification report was submitted to the EPD in 2017. In October 2020, the EPD acknowledged that CCR removal activities have been completed. Additionally, the CCR landfill, R6, is currently being closed.

As part of its overall scope of the closure projects, Georgia Power will also permit two new on-site landfills to support closures at the following facilities into the future:

- **Arkwright**: New landfill will receive ash from other on-site landfills. Permitting activities are ongoing.
- **Branch**: New landfill will hold CCR from the removal of ash ponds on-site. Permitting activities are ongoing. The letter of Site Acceptability for the new landfill was received from the EPD in June 2020.

Final construction certification documents for the Yates Gypsum Landfill and the Kraft Grumman Road Landfill have been filed with the EPD. The EPD sent a CCR removal acknowledgement letter for Plant Yates Gypsum Landfill in October 2020. Additionally,

the Company plans to file the closure certification report for McIntosh Landfill 4 in 2021 once the ash pond removal and the final cover system installation is complete.

III. BENEFICIAL USE

Georgia Power's ECS describes the Company's efforts related to the beneficial use of operational coal ash, as well as the Company's partnership with the Electric Power Research Institute ("EPRI"), and other utilities across the industry in the development of a center for beneficial use of harvested CCR, located at Plant Bowen. The Ash Beneficial Use Center ("ABUC"), at Plant Bowen will strive to develop additional beneficial uses and progress technologies to process ash for beneficial use with an aim to reduce future costs to the CCR closure projects.

The core capability of the center is pre-processing ponded ash for use in technology demonstrations. Pre-processing includes drying, classifying, storing and delivering the ash. The center is currently expected to be commissioned by the end of the first quarter of 2021. The first project currently planned, involving the processing and characterization of different ponded ashes from multiple ponds, is under development. This project will provide baseline information about the performance and energy requirements of the center components, as well as providing a comparison of the relative beneficiation potential of the different ashes. Additionally, the first round of emerging technologies for development and demonstration is under evaluation, and projects involving the production of lightweight aggregate from ash and the extraction of valuable minerals are being considered. EPRI is also pursuing external funding opportunities through grant proposals submitted to the Department of Energy.

Georgia Power is also seeking to identify opportunities and maximize the value for the beneficial use of stored coal ash at its active and retired plants across the state. The net costs of and benefits from beneficial use of stored coal ash at these sites will be applied to mitigate CCR ARO costs for the benefit of customers. Two updates are included below.

Facility Level Updates

Plant Mitchell

The Company has finalized plans at Plant Mitchell to remove the stored coal ash at its three ash ponds for beneficial use. Over the next several years, approximately two million tons of ash are planned to be removed from the site to help create Portland cement, which is used to make concrete. These plans will reduce the amount of ash required to be removed to an off-site landfill saving landfill space and ultimately serve to produce a valuable product. Through December 2020, approximately 43,400 tons of ash have been removed from the site for this purpose. Progress into 2021 has been moderated by on-site

improvements to enhance transportation efficiencies, as well as the ability of end users to receive and process the ash for beneficial use.

Request for Proposals

In December 2019, Georgia Power announced a request for proposals (“RFP”), for the beneficial use of stored coal ash. Interested bidders were asked to submit information and complete pre-qualification questionnaires in January 2020. In July 2020, a pre-bid meeting was held with the pre-qualified bidders with next steps including submissions of proposals in the fourth quarter of 2020. Georgia Power is undertaking a thorough review of the multiple submissions, meeting with bidders, and expects to complete the RFP process in 2021. Georgia Power is seeking to identify opportunities from the proposals that bring value to the CCR program, can be incorporated into the CCR strategy, and ultimately allow for more ash to be beneficially used from ash ponds and landfills.

IV. FINANCIAL SUMMARY – FACILITY LEVEL

During the fourth quarter of 2020, Georgia Power completed an assessment of its estimates to close the CCR Units in compliance with the Federal and Georgia CCR Rules at all of its active and retired generating plants. Cost estimates were refined and revised to reflect updates to the timing of future cash outlays and other project factors.

The current forecasted spend is the best estimate Georgia Power has, at this time, for this long-term compliance program spanning over 60 years into the future. The Company's cost estimates are based on various assumptions related to closure and post-closure costs, timing of future cash outlays, inflation and discount rates, and the methods for complying with closure requirements. Georgia Power will continue to update its cost estimates and ARO liabilities periodically as additional information related to these assumptions becomes available including, but not limited to, regulatory and legislative changes, permitting requirements, design completion, construction bids and progress, contract finalization, post closure requirements, and/or other factors.

Updated assumptions as of the fourth quarter of 2020 have resulted in a change in the Company's cash flows since the previous CCR ARO semi-annual progress report, which represented activities through July 31, 2020 and was filed with the PSC on October 1, 2020. Cash flows for the portfolio in the year 2020 came in below the level previously expected, primarily due to activity at four sites as described in Table 9 below. Activities associated with the 2020 variance have been re-forecasted into future periods as appropriate. Cash flows in years 2021 and 2022 have also been adjusted to reflect updated project assumptions. These adjustments include, but are not limited to, a shift in the expected mobilization of the prime contractor at Plant Hammond, which contributes to a decrease in cash flow in the year 2021 as compared to the previous forecast. Additionally, the Company's current forecast reflects a more gradual ramp up in closure activities at Plant Bowen based on updated assumptions regarding the prime contractor's work plans at the site, which contributes to a decrease in cash flow in the year 2022 as compared to the previous forecast.

Tables 6, 7, and 8 below contain the latest projected estimates for Georgia Power's CCR ARO ash pond closure and landfill projects. These estimates incorporate the assumptions discussed in the preceding paragraphs.

Table 6. Current Cost Estimates for CCR ARO Ash Pond Closure Projects

Ash Ponds

(\$ in Millions)

Facility	Project-to-Date Actuals Through December 2020*	2021 Forecast	2022 Forecast	2023-2025 Forecast	2026-2028 Forecast	2029 and Beyond Forecast	Total
Bowen	\$ 96.7	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
Branch	\$ 61.0	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
Hammond	\$ 65.9	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
Kraft	\$ 8.4	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
McDonough	\$ 88.5	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
McIntosh	\$ 9.0	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
McManus	\$ 99.1	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
Mitchell	\$ 41.3	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
Scherer	\$ 3.8	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
Wansley	\$ 10.5	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
Yates	\$ 181.5	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
Ash Pond Subtotal	\$ 665.6	\$ 264.1	\$ 316.0	\$ 1,316.2	\$ 1,486.7	\$ 2,434.0	\$ 6,482.6

Retail Cost Estimates

*Project-to-Date Actuals represent costs incurred from January 1, 2003 through December 31, 2020.

Note: Details may not add to totals due to rounding.

Table 7. Current Cost Estimates for CCR ARO Landfill Projects

Landfills

(\$ in Millions)

Facility	Project-to-Date Actuals Through December 2020*	2021 Forecast	2022 Forecast	2023-2025 Forecast	2026-2028 Forecast	2029 and Beyond Forecast	Total
Arkwright	\$ 24.5	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
Bowen	\$ 0.0	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
Branch	\$ -	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
Hammond	\$ 0.3	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
Kraft	\$ 12.9	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
McIntosh	\$ 6.9	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
Scherer	\$ 0.0	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
Wansley	\$ 0.0	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
Yates	\$ 30.6	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
Landfill Subtotal	\$ 75.2	\$ 22.4	\$ 36.9	\$ 245.5	\$ 256.8	\$ 1,005.6	\$ 1,642.3

Retail Cost Estimates

*Project-to-Date Actuals represent costs incurred from January 1, 2003 through December 31, 2020.

Note: Details may not add to totals due to rounding.

Table 8. Current Cost Estimates for CCR ARO Ash Pond Closure and Landfill Projects

(\$ in Millions)

Facility	Project-to-Date Actuals Through December 2020*	2021 Forecast	2022 Forecast	2023-2025 Forecast	2026-2028 Forecast	2029 and Beyond Forecast	Total
Ash Pond Subtotal	\$ 665.6	\$ 264.1	\$ 316.0	\$ 1,316.2	\$ 1,486.7	\$ 2,434.0	\$ 6,482.6
Landfill Subtotal	\$ 75.2	\$ 22.4	\$ 36.9	\$ 245.5	\$ 256.8	\$ 1,005.6	\$ 1,642.3
Total	\$ 740.8	\$ 286.5	\$ 352.8	\$ 1,561.7	\$ 1,743.5	\$ 3,439.6	\$ 8,124.9

Retail Cost Estimates

*Project-to-Date Actuals represent costs incurred from January 1, 2003 through December 31, 2020.

Note: Details may not add to totals due to rounding.

Table 9. 2020 Year-to-Date Actual versus Budget Comparison

	January - December 2020 Actuals	January - December 2020 Budget*	January - December 2020 Variance
Arkwright	\$ 4.0	REDACTED	REDACTED
Bowen	\$ 25.4	REDACTED	REDACTED
Branch	\$ 29.8	REDACTED	REDACTED
Hammond	\$ 12.0	REDACTED	REDACTED
Kraft	\$ 1.3	REDACTED	REDACTED
McDonough	\$ 15.3	REDACTED	REDACTED
McIntosh	\$ 7.7	REDACTED	REDACTED
McManus	\$ 13.2	REDACTED	REDACTED
Mitchell	\$ 26.1	REDACTED	REDACTED
Scherer	\$ 2.0	REDACTED	REDACTED
Wansley	\$ 3.4	REDACTED	REDACTED
Yates	\$ 39.8	REDACTED	REDACTED
Total	\$ 179.8	\$ 263.0	\$ (83.2)

Retail Cost Estimates

*Budget associated with the 2021 compliance filing submitted to the PSC in Docket No. 42516 on October 1, 2020.

Note: Details may not add to totals due to rounding.

2020 Year-to-Date Actual versus Budget Summary

Table 9 summarizes 2020 actual costs for CCR ARO activities at all sites compared to the budget associated with the 2021 compliance filing submitted to the PSC in Docket No. 42516 on October 1, 2020. The variance to the forecast for the portfolio is primarily driven by the following four sites:

- Branch: The variance to forecast is primarily associated with the timing of cash flows for ongoing stormwater diversion work and permitting and design activities associated with the new future on-site landfill that will support closure. The Company is working to optimize pre-construction activities such as site-wide water management while the landfill design is being finalized and approved.
- McDonough: The variance to forecast is primarily associated with the timing of cash flows associated with cap and cover work, backfill sourcing, materials placement and restoration. The change in timing was primarily due to weather and impacts from the COVID-19 pandemic.
- Mitchell: Due to the change in closure strategy at Plant Mitchell from a three-year closure to an eight-year closure strategy through beneficial use, a change in design for on-site transportation infrastructure was appropriate in order to better align with

anticipated transportation needs regarding volume, frequency, and handling capacity of end users. The optimization of the transportation design included a reduction in rail infrastructure needed and a modified rail loadout facility which impacted the construction progress and rail use in 2020. Additionally, in 2020, the project experienced some early delays with commencement of construction activities, and the demand for the material from the Portland cement kilns was less than forecasted due in part to overall market factors, handling and operational capacity at the kilns, and the COVID-19 pandemic.

- Yates: The variance to forecast is primarily associated with the timing of cash flows based on updated schedule assumptions and **REDACTED REDACTED REDACTED REDACTED REDACTED REDACTED REDACTED REDACTED REDACTED REDACTED**. The project experienced weather delays in 2020 which impacted schedule and production.

V. FINANCIAL AND SCHEDULE SUMMARY – CCR UNIT LEVEL

The Company maintains cost and schedule information for each of its CCR Units. Site-specific cost and schedule information for each of its CCR Units is detailed further below.

The Company, with input from third-party experts, has developed forecasts for these long term projects, some of which span more than 60 years, based on a combination of factors including, but not limited to, regulatory considerations, engineering studies, detailed closure design, constructability reviews, construction progress, water treatment considerations, operational needs, and PCC requirements for its sites.

The Company is actively managing these long-term projects and will continue to make updates to reflect upward and downward pressures on cost and schedules for each project. There are several activities or factors in the near term that will be closely monitored as the portfolio of projects mature that could impact costs and schedule including the completion of detailed design for all sites, active construction progress, completion of competitive bids and contracting for pending projects, approval and implementation of remaining dewatering plans, the potential to take advantage of beneficial use opportunities during closure, and additional environmental regulatory actions and requirements. Similarly, there are factors that could impact the projects in the long-term as construction activities are completed and sites enter post closure. These factors include the development of future beneficial use opportunities as the ash market matures, refinement of labor assumptions, optimization of groundwater monitoring networks, advancement of water treatment technologies, refinement of long term maintenance assumptions for grass and closure turf, and realization of the overall impact of emerging technologies on the program.

The fourth quarter 2020 assessment reflects the Company's latest forecast information. The company's total current estimate at completion ("EAC"), is consistent with the October 1, 2020 report. Cash flows have been adjusted to reflect updated project and schedule assumptions.

As design, engineering, and contracting activities advance, sites will continue to update cost estimates and cash flow projections. Currently, the Company expects new estimates at some sites to be realized by the end of 2021. Estimating and forecasting activities are also expected to be performed during future years of the program.

The Company continues to focus on further development and implementation of project controls, enhancement and documentation of work practices to improve the consistency, accuracy, and visibility of progress across the program, and multitude of site-specific CCR projects.

Financial Summary- CCR Unit Level

The cost summaries include project-to-date actuals through December 31, 2020, and current estimated cost forecasts for each site, including each ash pond and landfill. Additionally, costs by activity are grouped into the categories listed below.

- **Previous Closure Costs**: Actual costs incurred prior to January 1, 2014.
- **Program Management**: Compliance activities including, but not limited to, permitting, groundwater monitoring, corrective action, program oversight, and management reserve which was established for the program in the fourth quarter of 2020.
- **Front End Planning**: Activities including design to 90-percent, third-party constructability reviews, and other technical and engineering costs.
- **Detailed Engineering Costs**: Activities associated with the detailed engineering design and engineering support during construction.
- **Construction**: Construction activities for the CCR unit-specific closure plans. Construction activities include, but are not limited to, procurement, water treatment, site preparation, transportation improvements, site maintenance, beneficial use costs and credits during closure, stability and performance monitoring, ash excavation, ash transport, ash consolidation and placement, installation of a cover system, installation of advanced engineering controls, site restoration, and landfill development to support ash pond closures. Construction activities also include construction indirect costs such as temporary facilities, project and construction management, quality assurance, quality control, and temporary facilities.
- **Post Closure Costs**: The time period after principle construction during which requirements to conduct monitoring, manage water, and conduct maintenance exist. This category represents both the actual and/or estimated IPCC and PCC costs for the site.

Arkwright

Table 10. Arkwright Current Estimated Cost by Ash Pond / Landfill

(\$ in Millions)

Ash Pond / Landfill	Closure Method	Project to Date Actuals Through December 2020	2021 Forecast	2022 Forecast	2023-2025 Forecast	2026-2028 Forecast	2029-2084 Forecast	Total
Arkwright AP-1,2,3, Landfill	Closure by removal and consolidation to permitted landfill	\$ 24.5						REDACTED
Total		\$ 24.5						

Retail Cost Estimates

Note: Details may not add to totals due to rounding

Table 11. Arkwright Current Estimated Cost by Executive Cost Code

(\$ in Millions)

	Project to Date Actuals Through December 2020	2021 Forecast	2022 Forecast	2023-2025 Forecast	2026-2028 Forecast	2029-2084 Forecast	Total
Previous Closure Cost							
Program Management							
Front End Planning							
Detailed Engineering Costs							REDACTED
Construction							
Post Closure Costs							
Total	\$ 24.5						

Retail Cost Estimates

Note: Details may not add to totals due to rounding

Notes:

2020 year-to-date actuals through December of \$REDACT consist primarily of water management (transportation & disposal), groundwater monitoring, front-end planning design and engineering, and third-party permitting support. Activities expected during 2021 include continued water management, groundwater monitoring, and front-end planning.

Bowen

Table 12. Bowen Current Estimated Cost by Ash Pond / Landfill

(\$ in Millions)								
Ash Pond / Landfill	Closure Method	Project to Date Actuals Through December 2020	2021 Forecast	2022 Forecast	2023-2025 Forecast	2026-2028 Forecast	2029-2084 Forecast	Total
AP-1	Advanced closure in place with liner	\$ 96.7						
Bowen CCR Landfill	Active landfill / closure in place	\$ 0.0					REDACTED	
Total		\$ 96.7						

Retail Cost Estimates
Note: Details may not add to totals due to rounding

Table 13. Bowen Current Estimated Cost by Executive Cost Code

(\$ in Millions)							
	Project to Date Actuals Through December 2020	2021 Forecast	2022 Forecast	2023-2025 Forecast	2026-2028 Forecast	2029-2084 Forecast	Total
Previous Closure Cost							
Program Management							
Front End Planning							
Detailed Engineering Costs							REDACTED
Construction							
Post Closure Costs							
Total	\$ 96.7						

Retail Cost Estimates
Note: Details may not add to totals due to rounding

Notes:

2020 year-to-date actuals through December of \$REDACT consist primarily of front-end planning and detailed engineering design services, ash pond closure site preparation, dewatering water treatment work, electrical & instrumentation procurements, bid package development, and groundwater monitoring. Activities expected during 2021 include dewatering, groundwater monitoring, permitting, completion of contracted site prep work, and mobilization of the prime ash pond closure contractor.

Branch

Table 14. Branch Current Estimated Cost by Ash Pond / Landfill

(\$ in Millions)

Ash Pond / Landfill	Closure Method	Project to Date Actuals Through December 2020	2021 Forecast	2022 Forecast	2023-2025 Forecast	2026-2028 Forecast	2029-2084 Forecast	Total
AP-A	Closure by removal to permitted landfill	\$ 1.3						
AP-B	Closure by removal to permitted landfill	\$ 8.7						
AP-C	Closure by removal to permitted landfill	\$ 6.2						
AP-D	Closure by removal to permitted landfill	\$ 4.7						
AP-E	Closure by removal to permitted landfill	\$ 40.2						
Landfill	Closure in place	\$ -						
Total		\$ 61.0						

Retail Cost Estimates

Note: Details may not add to totals due to rounding

Table 15. Branch Current Estimated Cost by Executive Cost Code

(\$ in Millions)

	Project to Date Actuals Through December 2020	2021 Forecast	2022 Forecast	2023-2025 Forecast	2026-2028 Forecast	2029-2084 Forecast	Total
Previous Closure Cost							
Program Management							
Front End Planning							
Detailed Engineering Costs							
Construction							
Post Closure Costs							
Total	\$ 61.0						

Retail Cost Estimates

Note: Details may not add to totals due to rounding

Notes:

2020 year-to-date actuals through December of \$REDACT consist primarily of dewatering water treatment, groundwater monitoring, ash pond water management, detailed engineering design & technical services permitting support, plant costs, and construction management. Activities expected during 2021 include construction of the long-term dewatering water treatment system, stormwater diversion system, groundwater monitoring, plant costs, and construction management.

Hammond

Table 16. Hammond Current Estimated Cost by Ash Pond / Landfill

(\$ in Millions)								
Ash Pond / Landfill	Closure Method	Project to Date Actuals Through December 2020	2021 Forecast	2022 Forecast	2023-2025 Forecast	2026-2028 Forecast	2029-2084 Forecast	Total
AP-1	Closure by removal to permitted landfill	\$ 6.8						
AP-2	Closure by removal to permitted landfill	\$ 13.2						
AP-3	Advanced closure in place	\$ 24.9						
AP-4	Closure by removal to permitted landfill	\$ 21.0						
Huffaker Road CCB Facility	Closure in place	\$ 0.3						
Total		\$ 66.1						

Retail Cost Estimates

Note: Details may not add to totals due to rounding

Table 17. Hammond Current Estimated Cost by Executive Cost Code

(\$ in Millions)							
	Project to Date Actuals Through December 2020	2021 Forecast	2022 Forecast	2023-2025 Forecast	2026-2028 Forecast	2029-2084 Forecast	Total
Previous Closure Cost							
Program Management							
Front End Planning							
Detailed Engineering Costs							
Construction							
Post Closure Costs							
Total	\$ 66.1						

Retail Cost Estimates

Note: Details may not add to totals due to rounding

Notes:

2020 year-to-date actuals through December of \$REDACT consist primarily of the excavation of ash from AP-2 to an offsite permitted landfill, permitting, detailed design work, groundwater monitoring, and IPCC costs for AP-3. Activities expected during 2021 include commencing dewatering, groundwater monitoring, mobilization of the prime ash pond closure contractor, and development of bid proposals and associated information in preparation for contracting final closure of AP-1 and AP-2.

Kraft**Table 18. Kraft Current Estimated Cost by Ash Pond / Landfill**

(\$ in Millions)

Ash Pond / Landfill	Closure Method	Project to Date Actuals Through December 2020	2021 Forecast	2022 Forecast	2023-2025 Forecast	2026-2028 Forecast	2029-2084 Forecast	Total
AP-1	Closure by removal to permitted landfill	\$ 8.4						
Grumman Road Landfill	Closure in place	\$ 12.9						REDACTED
Total		\$ 21.3						

Retail Cost Estimates*Note: Details may not add to totals due to rounding***Table 19. Kraft Current Estimated Cost by Executive Cost Code**

(\$ in Millions)

	Project to Date Actuals Through December 2020	2021 Forecast	2022 Forecast	2023-2025 Forecast	2026-2028 Forecast	2029-2084 Forecast	Total
Previous Closure Cost							
Program Management							
Front End Planning							
Detailed Engineering Costs							REDACTED
Construction							
Post Closure Costs							
Total	\$ 21.3						

Retail Cost Estimates*Note: Details may not add to totals due to rounding***Notes:**

2020 year-to-date actuals through December of \$REDACT consist primarily of ongoing IPCC monitoring and maintenance costs. Activities expected during 2021 include the continuation of IPCC monitoring and maintenance, additional restoration activities, permitting, and additional groundwater studies.

McDonough

Table 20. McDonough Current Estimated Cost by Ash Pond / Landfill

(\$ in Millions)								
Ash Pond / Landfill	Closure Method	Project to Date Actuals Through December 2020	2021 Forecast	2022 Forecast	2023-2025 Forecast	2026-2028 Forecast	2029-2084 Forecast	Total
AP-1	Advanced closure in place	\$ 15.7						
AP-2	Closure by removal	\$ 11.5						
AP-3	Advanced closure in place	\$ 28.1						
AP-4	Advanced closure in place	\$ 33.2						
Total		\$ 88.5						

Retail Cost Estimates
Note: Details may not add to totals due to rounding

Table 21. McDonough Current Estimated Cost by Executive Cost Code

(\$ in Millions)							
	Project to Date Actuals Through December 2020	2021 Forecast	2022 Forecast	2023-2025 Forecast	2026-2028 Forecast	2029-2084 Forecast	Total
Previous Closure Cost							
Program Management							
Front End Planning							
Detailed Engineering Costs							
Construction							
Post Closure Costs							
Total	\$ 88.5						

Retail Cost Estimates
Note: Details may not add to totals due to rounding

Notes:

2020 year-to-date actuals through December of \$REDACT consist primarily of prime contractor work for pond closure, dewatering, water treatment, and groundwater monitoring. Activities expected during 2021 include continued prime contractor work, dewatering water treatment, groundwater monitoring, permitting, and detailed engineering design.

McIntosh

Table 22. McIntosh Current Estimated Cost by Ash Pond / Landfill

(\$ in Millions)								
Ash Pond / Landfill	Closure Method	Project to Date Actuals Through December 2020	2021 Forecast	2022 Forecast	2023-2025 Forecast	2026-2028 Forecast	2029-2084 Forecast	Total
AP-1	Closure by removal to permitted landfill	\$ 9.0						
Landfill 3	Closure in place	\$ 1.6						
Landfill 4	Closure in place	\$ 5.3						
Total		\$ 16.0						

Retail Cost Estimates

Note: Details may not add to totals due to rounding

Table 23. McIntosh Current Estimated Cost by Executive Cost Code

(\$ in Millions)							
	Project to Date Actuals Through December 2020	2021 Forecast	2022 Forecast	2023-2025 Forecast	2026-2028 Forecast	2029-2084 Forecast	Total
Previous Closure Cost							
Program Management							
Front End Planning							
Detailed Engineering Costs							
Construction							
Post Closure Costs							
Total	\$ 16.0						

Retail Cost Estimates

Note: Details may not add to totals due to rounding

Notes:

2020 year-to-date actuals through December of \$REDACT consist primarily of prime contractor work for pond closure, dewatering, water treatment, groundwater monitoring, permitting, and IPCC monitoring and maintenance costs for LF4. These activities are expected to continue through into 2021.

McManus

Table 24. McManus Current Estimated Cost by Ash Pond / Landfill

(\$ in Millions)

Ash Pond / Landfill	Closure Method	Project to Date Actuals Through December 2020	2021 Forecast	2022 Forecast	2023-2025 Forecast	2026-2028 Forecast	2029-2084 Forecast	Total
AP-1	Closure by removal to permitted landfill	\$ 99.1						
								REDACTED
Total		\$ 99.1						

Retail Cost Estimates

Note: Details may not add to totals due to rounding

Table 25. McManus Current Estimated Cost by Executive Cost Code

(\$ in Millions)

	Project to Date Actuals Through December 2020	2021 Forecast	2022 Forecast	2023-2025 Forecast	2026-2028 Forecast	2029-2084 Forecast	Total
Previous Closure Cost							
Program Management							
Front End Planning							
Detailed Engineering Costs							REDACTED
Construction							
Post Closure Costs							
Total	\$ 99.1						

Retail Cost Estimates

Note: Details may not add to totals due to rounding

Notes:

2020 year-to-date actuals through December of \$REDACT consist primarily of prime contractor work for physical completion of the pond closure and restoration, ongoing ash pond dewatering and water treatment, and groundwater monitoring and compliance reporting. The prime contractor work was completed and the contractor demobilized July 2020. Activities expected during 2021 include continuation of IPCC which principally includes groundwater compliance monitoring and reporting activities and ongoing water treatment until regulatory approval is received to cease the dewatering/water treatment activities.

Mitchell

Table 26. Mitchell Current Estimated Cost by Ash Pond / Landfill

(\$ in Millions)								
Ash Pond / Landfill	Closure Method	Project to Date Actuals Through December 2020	2021 Forecast	2022 Forecast	2023-2025 Forecast	2026-2028 Forecast	2029-2084 Forecast	Total
AP-A	Closure by removal to permitted landfill and beneficial reuse	\$ 1.2						
AP-1	Closure by removal to permitted landfill and beneficial reuse	\$ 18.2						
AP-2	Closure by removal to permitted landfill and beneficial reuse	\$ 21.9						
Total		\$ 41.3						

Retail Cost Estimates

Note: Details may not add to totals due to rounding

Table 27. Mitchell Current Estimated Cost by Executive Cost Code

(\$ in Millions)							
	Project to Date Actuals Through December 2020	2021 Forecast	2022 Forecast	2023-2025 Forecast	2026-2028 Forecast	2029-2084 Forecast	Total
Previous Closure Cost							
Program Management							
Front End Planning							
Detailed Engineering Costs							
Construction							
Post Closure Costs							
Total	\$ 41.3						

Retail Cost Estimates

Note: Details may not add to totals due to rounding

Notes:

2020 year-to-date actuals through December of \$REDACT consist primarily of detailed engineering, site preparation and maintenance, groundwater monitoring, construction of dewatering plant and water management infrastructure, and continued prime contractor work, including excavation and transportation of ash for beneficial use. These activities are expected to continue during 2021.

Scherer

Table 28. Scherer Current Estimated Cost by Ash Pond / Landfill

(\$ in Millions)								
Ash Pond / Landfill	Closure Method	Project to Date Actuals Through December 2020	2021 Forecast	2022 Forecast	2023-2025 Forecast	2026-2028 Forecast	2029-2084 Forecast	Total
AP-1	Advanced closure in place	\$ 3.8						
Landfill	Active landfill / closure in place	\$ 0.0						REDACTED
Total		\$ 3.8						

Retail Cost Estimates

Note: Details may not add to totals due to rounding

Table 29. Scherer Current Estimated Cost by Executive Cost Code

(\$ in Millions)							
	Project to Date Actuals Through December 2020	2021 Forecast	2022 Forecast	2023-2025 Forecast	2026-2028 Forecast	2029-2084 Forecast	Total
Previous Closure Cost							
Program Management							
Front End Planning							
Detailed Engineering Costs							REDACTED
Construction							
Post Closure Costs							
Total	\$ 3.8						

Retail Cost Estimates

Note: Details may not add to totals due to rounding

Notes:

2020 year-to-date actuals through December of \$REDACT consist primarily of front end planning, groundwater monitoring, and permitting. Activities expected during 2021 include permitting, groundwater monitoring, front end planning, and general bid package development.

Wansley

Table 30. Wansley Current Estimated Cost by Ash Pond / Landfill

(\$ in Millions)

Ash Pond / Landfill	Closure Method	Project to Date Actuals Through December 2020	2021 Forecast	2022 Forecast	2023-2025 Forecast	2026-2028 Forecast	2029-2084 Forecast	Total
AP-1	Advanced closure in place	\$ 10.5						
Landfill	Active landfill / closure in place	\$ 0.0						REDACTED
Total		\$ 10.5						

Retail Cost Estimates*Note: Details may not add to totals due to rounding*

Table 31. Wansley Current Estimated Cost by Executive Cost Code

(\$ in Millions)

	Project to Date Actuals Through December 2020	2021 Forecast	2022 Forecast	2023-2025 Forecast	2026-2028 Forecast	2029-2084 Forecast	Total
Previous Closure Cost							
Program Management							
Front End Planning							
Detailed Engineering Costs							REDACTED
Construction							
Post Closure Costs							
Total	\$ 10.5						

Retail Cost Estimates*Note: Details may not add to totals due to rounding***Notes:**

2020 year-to-date actuals through December of \$REDACT consist primarily of groundwater monitoring and front end planning advancing detail design. Activities expected during 2021 include the continuation of front end planning and ground water monitoring, as well as permitting, bid package development, and early site prep contractor mobilization.

Yates

Table 32. Yates Current Estimated Cost by Ash Pond / Landfill

(\$ in Millions)

Ash Pond / Landfill	Closure Method	Project to Date Actuals Through December 2020	2021 Forecast	2022 Forecast	2023-2025 Forecast	2026-2028 Forecast	2029-2084 Forecast	Total
AP-1	Closure by removal	\$ 16.0						
AP-2	Closure by removal	\$ 66.1						
AP-3	Advanced closure in place	\$ 62.5						
AP-A	Closure by removal	\$ 17.1						
AP-B	Closure by removal	\$ 13.6						
AP-B'	Advanced closure in place	\$ 6.2						
Gypsum Landfill	Inactive landfill / closure by removal to permitted landfill and beneficial reuse	\$ 4.1						
R6 Landfill	Inactive landfill / closure in place	\$ 26.5						
Total		\$ 212.1						

Retail Cost Estimates

Note: Details may not add to totals due to rounding

Table 33. Yates Current Estimated Cost by Executive Cost Code

(\$ in Millions)

	Project to Date Actuals Through December 2020	2021 Forecast	2022 Forecast	2023-2025 Forecast	2026-2028 Forecast	2029-2084 Forecast	Total
Previous Closure Cost							
Program Management							
Front End Planning							
Detailed Engineering Costs							
Construction							
Post Closure Costs							
Total	\$ 212.1						

Retail Cost Estimates

Note: Details may not add to totals due to rounding

Notes:

2020 year-to-date actuals through December of \$REDACT consist primarily of closure construction material purchase, dewatering water treatment, construction management, site work/maintenance, and organics waste management. Activities expected during 2021 include the continuation of construction and dewatering activities, IPCC monitoring and maintenance for AP-1 and the gypsum landfill.

Schedule Summary- CCR Unit Level

The following Gantt charts include schedule summaries for each site, with activities for each ash pond and landfill grouped into the categories listed below:

- **Ash Ponds:**

- **Name of the Unit:** Includes the overall duration of closure activities.
- **Site Regulatory:** For scheduling purposes, assumed to begin with the effective date of the Federal CCR Rule. Includes permitting activities, permit renewals, dewatering plan development and associated compliance documentation, and other required compliance activities.
- **Engineering/Procurement/Front-End Planning:** Project planning and construction preparations including engineering design, third-party constructability reviews, contracting milestones for dewatering, quality assurance, and construction contracts, and other technical and engineering activities.
- **Construction/Water Management:** Includes prime contractor mobilization and milestones for closure and restoration along with water management, dewatering, and water treatment milestones.
- **Interim Post-Closure Care (IPCC):** Includes water management related activities that extend beyond construction, groundwater monitoring, general site maintenance in the interim of PCC, and other compliance activities.
- **Post-Closure Care (PCC):** Includes water management related activities that extend beyond construction and IPCC, groundwater monitoring, general site maintenance through PCC, and other compliance activities.

- **Landfills:**

- **Name of the Unit and Landfill Cell:** Includes the overall duration of activities.
- **Active Landfill:** Includes timeframe the landfill cell was or projected to be active and receiving CCR.
- **Cell Closure/ Capping/Closure Construction/Water Management:** Includes closure construction milestones, water management activities, and compliance activities related to the final closure.

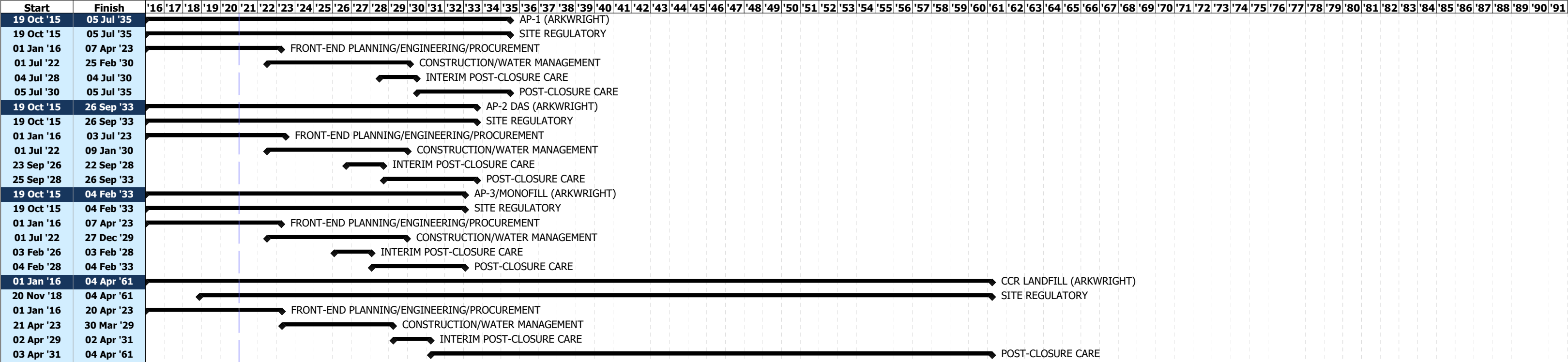
- **Interim Post-Closure Care (IPCC)**: Includes water management related activities that extend beyond construction, groundwater monitoring, general site maintenance in the interim of PCC, and other compliance activities.
- **Post-Closure Care (PCC)**: Includes water management related activities that extend beyond construction and IPCC, groundwater monitoring, general site maintenance through PCC, and other compliance activities.

Arkwright

Ash Pond Closure Portfolio

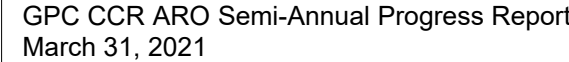
PUBLIC DISCLOSURE

Gantt Chart by Plant



Ash Pond Closure Portfolio

Gantt Chart by Plant

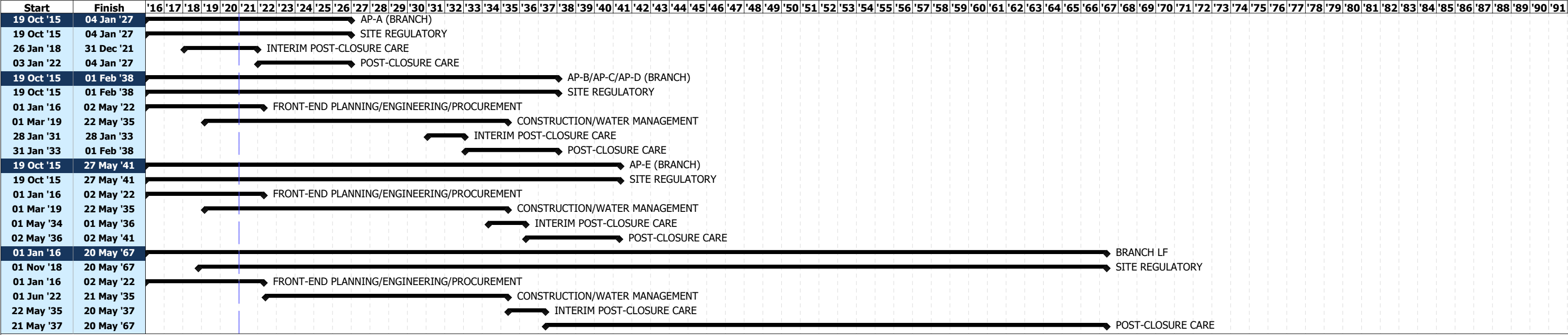


Ash Pond Closure Portfolio

PUBLIC DISCLOSURE

Branch

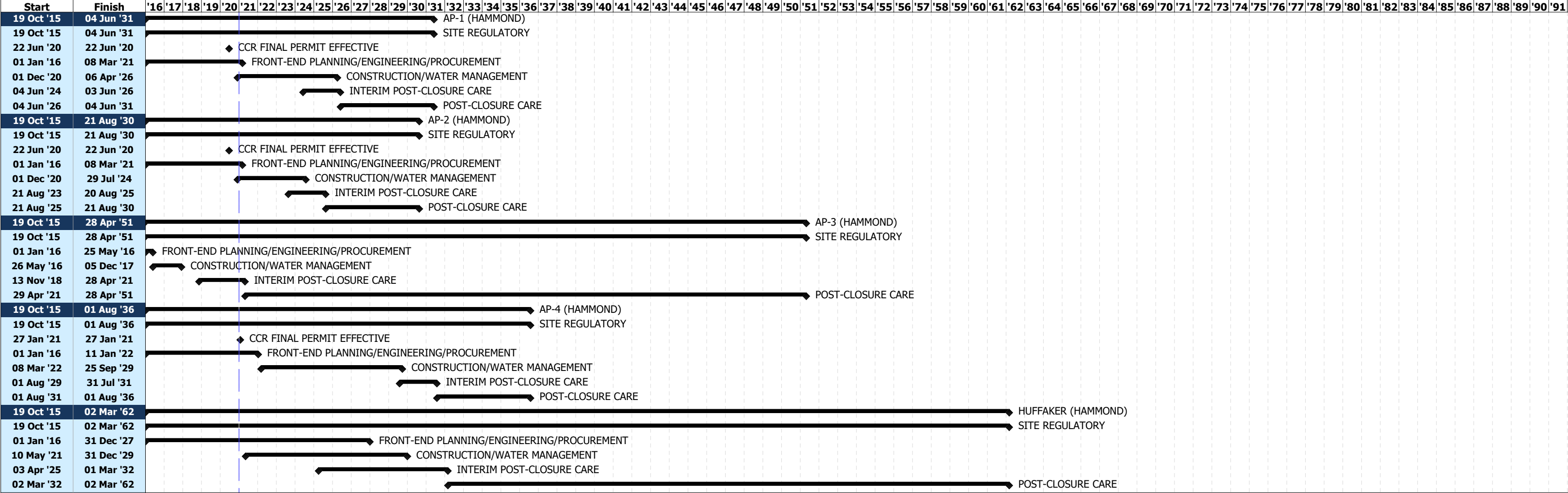
Gantt Chart by Plant



Ash Pond Closure Portfolio

Hammond

Gantt Chart by Plant

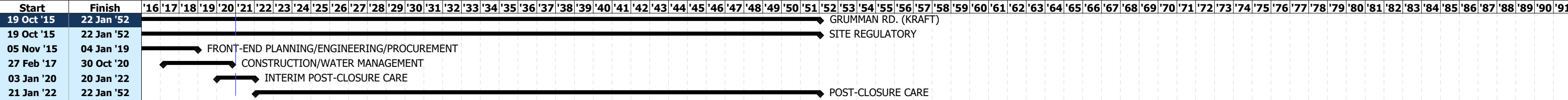


Kraft

Ash Pond Closure Portfolio

PUBLIC DISCLOSURE

Gantt Chart by Plant

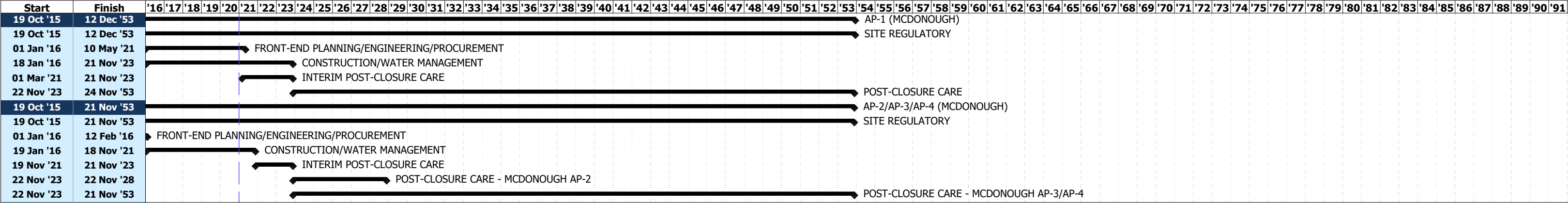


McDonough

Ash Pond Closure Portfolio

PUBLIC DISCLOSURE

Gantt Chart by Plant

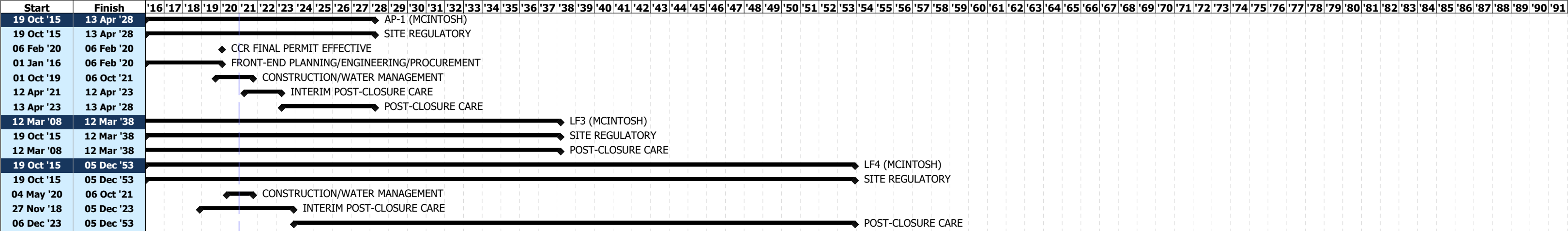


Ash Pond Closure Portfolio

PUBLIC DISCLOSURE

McIntosh

Gantt Chart by Plant

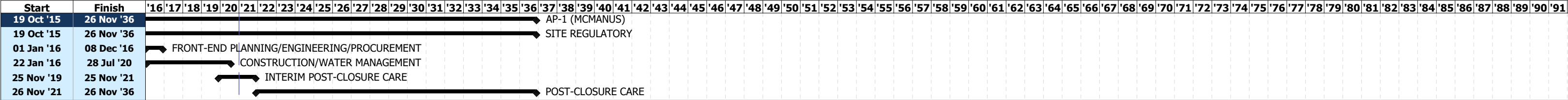


McManus

Ash Pond Closure Portfolio

PUBLIC DISCLOSURE

Gantt Chart by Plant

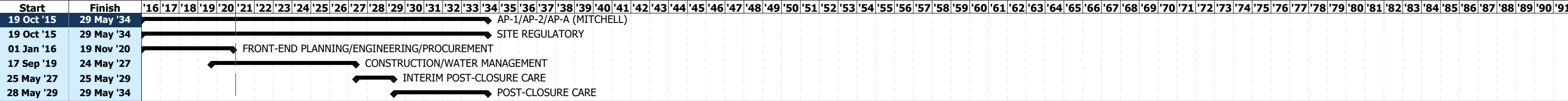


Mitchell

Ash Pond Closure Portfolio

PUBLIC DISCLOSURE

Gantt Chart by Plant

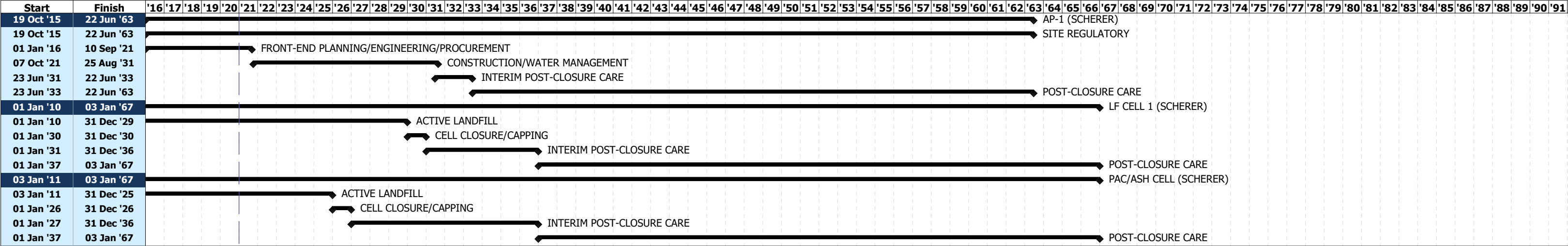


Scherer

Ash Pond Closure Portfolio

PUBLIC DISCLOSURE

Gantt Chart by Plant

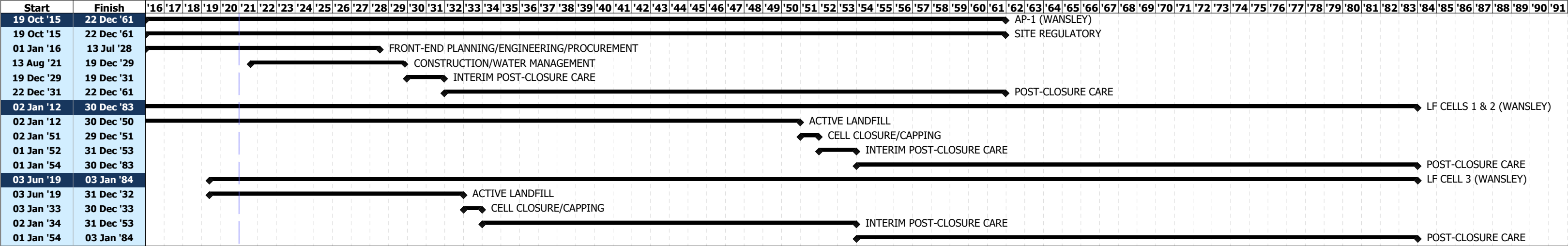


Wansley

Ash Pond Closure Portfolio

PUBLIC DISCLOSURE

Gantt Chart by Plant

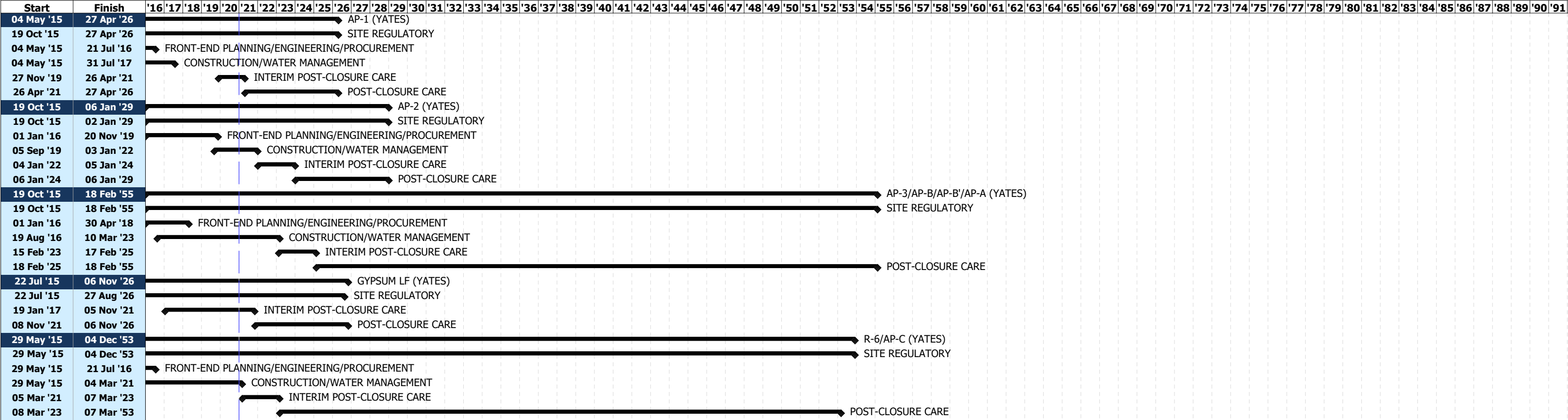


Yates

Ash Pond Closure Portfolio

PUBLIC DISCLOSURE

Gantt Chart by Plant



VI. APPENDIX A

Abbreviations and Terminology

ABUC	Ash Beneficial Use Center
ACM	Assessment of Corrective Measures
AP	Ash Pond
ARO	Asset Retirement Obligation
ASC	Accounting Standards Codification
CCR	Coal Combustion Residual
DSM	Deep Soil Mix
EAC	Estimate at Completion
ECS	Environmental Compliance Strategy
EPD	Environmental Protection Division
EPRI	Electric Power Research Institute
GPC	Georgia Power Company
IPCC	Interim Post Closure Care
IRP	Integrated Resource Plan
LF	Landfill
LNTP	Limited Notice to Proceed
PCC	Post Closure Care
PSC	Georgia Public Service Commission
RFP	Request for Proposal