Georgia Power

Bin 10230
241 Ralph McGill Boulevard, NE
Atlanta, GA 30308-3374

PUBLIC DISCLOSURE

September 15, 2023

Ms. Sallie Turner
Executive Secretary
Georgia Public Service Commission
244 Washington Street, SW
Atlanta, GA 30334-5701

RE: Coal Combustion Residuals Report on Outcome of Beneficial Use Request for Proposals, Docket No. 44160.

Dear Ms. Turner:

In accordance with the Georgia Public Service Commission's ("PSC" or the "Commission") Final Order in the 2022 Integrated Resource Plan proceeding in Docket No. 44160 ("2022 IRP"), Georgia Power Company ("GPC" or the "Company") hereby files the Coal Combustion Residuals Report on Outcome of Beneficial Use Request for Proposals (the "Report"). The Report includes information on the results of beneficial use RFP that was initiated in 2019, as well as the cost benefit analysis supporting the Company's beneficial use plan as required by the Commission's 2022 IRP Final Order.

This Report is being filed under the trade secret rules of the Commission. Therefore, a redacted version of this information and the basis for the trade secret assertion are also enclosed for public disclosure.

If you have any questions, please call me at 404-506-3044.

Sincerely,

/s/ Kelley M. Balkcom

Kelley Balkcom
Director, Regulatory Affairs
mmcclosk@southernco.com

STATE OF GEORGIA

BEFORE THE GEORGIA PUBLIC SERVICE COMMISSION

IN RE:	)	
	)	
Georgia Power Company's 2022	)	Docket No. 44160
Integrated Resource Plan	)	

VERIFICATION

Robert W. Mitchell, first being duly sworn, deposes and states that he has reviewed Georgia Power Company's report in the above-styled Docket and that the report was prepared at his direction and under his supervision and that the information included in such responses is accurate to the best of his knowledge and that the specific information designated as trade secret constitute trade secrets pursuant to Article 27 of Chapter 1 of Title 10 of the Official Code of Georgia.

Robert W. Mitchell
CCR PMO Director
Georgia Power Company

Subscribed and sworn to before me this 7th day of September 2023.

Notary Public

My Commission expires:

DANA L MCLEAN NOTARY PUBLIC COWETA COUNTY GEORGIA EXPIRES APRIL 26, 2026

4/26/24

Coal Combustion Residuals
Report on Outcome of Beneficial Use
Request for Proposals

Georgia Power Company

September 08, 2023

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 the expected financial impact of the beneficial use program. Georgia Power cautions that 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, 2022, 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, wars or other similar occurrences; and the effect of accounting pronouncements issued periodically by standard-setting bodies. Georgia Power expressly disclaims any obligation to update any forward-looking information.

Introduction

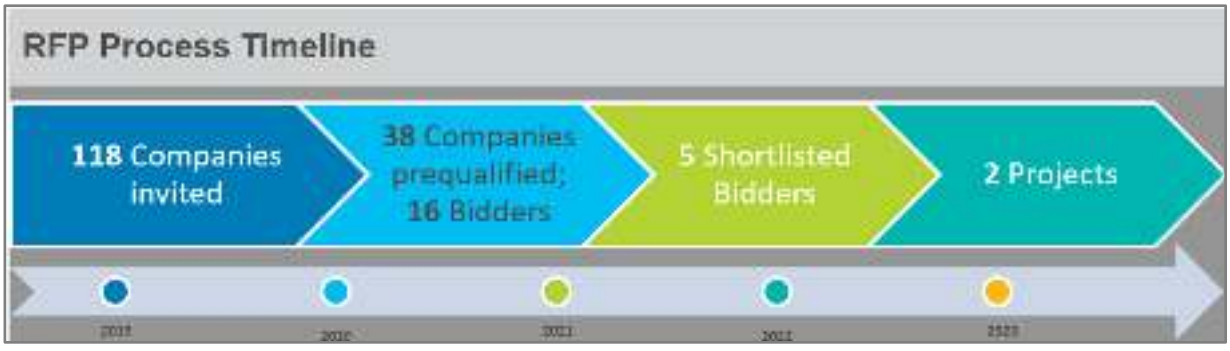
In accordance with the Georgia Public Service Commission's ("PSC" or the "Commission") Final Order in the 2022 Integrated Resource Plan ("IRP") proceeding in Docket No. 44160, Georgia Power Company ("Georgia Power" or the "Company") files this report on the results of beneficial use request for proposal ("RFP"). This Report will discuss both the results from the beneficial use RFP that was initiated in 2019 as well as the economic benefits to the Company's Coal Combustion Residual ("CCR") Asset Retirement Obligation ("ARO") Program resulting from the beneficial use projects selected through the RFP.

Beneficial Use RFP Process

In December 2019, Georgia Power announced an RFP seeking to identify opportunities and maximize the value for the beneficial use of stored coal ash at active and retired Georgia Power plants across the state. Georgia Power advertised the RFP and invited interested parties to participate. Initial bids were received from 16 bidders in October 2020. In early 2021, discussions were held with each of the entities that submitted proposals, and bidders were allowed to update their proposals.

The aforementioned proposals provided numerous options for consideration and a thorough review of the proposals was performed. A third-party engineering consultant supported the Company's evaluation to assess which proposals offered the most value to customers. The Company's evaluation included the effects of the various beneficial use proposals on closure plans, project timelines, project costs, project sequencing, and project infrastructure requirements. The results of the assessment indicated that the potential benefits are highly site-specific, and beneficial use can also add costs or complexity to the closure plans in certain cases. The RFP evaluation demonstrated that not all beneficial use proposals and opportunities present savings, confirming that a market-driven approach is in the best interest of customers over the long term.

In the third quarter of 2021, the Company initiated negotiations with top bidders. In May 2022, the company signed the first beneficial use contract and in May 2023, signed the second contract as a result of this RFP. As of September 07, 2023, Georgia Power has completed the RFP process.



Overall Program Results

As a result of the RFP process and project analysis, Plants Bowen and Branch will incorporate ash beneficial use in an effort to return an expected net positive benefit for customers. Expected benefits associated with these beneficial use projects include increased ash sales, reduced long term liability associated with onsite ash storage, and reduced closure costs[1]. Reduced costs could take the form of reduced ash volumes moved during closure, a reduced closure footprint, reduced landfill space needed to support closure, and/or reduced post closure care.

The market for ash beneficial use for ready-mix concrete in the Southeast United States is robust. With the reduction of coal-fired generation in recent years, there is opportunity to harvest ash from ash ponds and landfills to meet market demands.

However, as with any commodity, there are inherent market risks that could impact the assumed volumes and realized benefits of beneficial use in the future. While it is not possible to eliminate these risks altogether, the Company is leveraging a robust framework to mitigate these risks where possible and pursue opportunities that are expected to add value to customers. Georgia Power's market-driven approach for the beneficial use of stored coal ash is successful because it is informed by proposals from real market participants, currently available technologies, and bidder expectations for the quantities of ash that are realistic to place into the market without causing downward pressure on the market economics. Additionally, the project agreements include contractual mechanisms to ensure vendor performance for the construction of any needed infrastructure, operations, and market volume commitments.

This report provides the net present values resulting from the economic models used to support the Company's cost-benefit analysis for the beneficial use bid proposals. These values were developed using the market rate for ash sales and other assumptions available at the time of contract negotiations. Upon contract execution, the site teams have evaluated detailed implementation plans in order to incorporate the expected impact of the executed contracts, as well as the expected impacts to the pond closures, into the project's cost and schedule forecasts. Updates for Plant Bowen were complete during 2022 and reflected in the March 2023 CCR ARO Semi-Annual Report, while updates for Plant Branch are currently expected to be complete by year end and reflected through a future CCR ARO semi-annual reporting update.

[1] Costs incurred for compliance with state and federal CCR rules, as well as any credits associated with beneficial use sales of harvested ash, are accounted for through Georgia Power's ARO accounting of CCR costs and included in the CCR ARO cost recovery.

Plant Bowen

In June 2022, Georgia Power announced a beneficial use project at Plant Bowen, where millions of tons of coal ash are planned to be excavated for use in concrete. The harvested ash will be processed for beneficial use through particle size screening and drying to remove excess moisture. The system is designed to generate a marketable ash product specifically for cement replacement in concrete. Infrastructure development to accommodate the ash beneficiation work at Plant Bowen is ongoing. Transportation of ash from Plant Bowen for use in the ready-mix concrete market is expected to begin in 2024. Beneficial use at Plant Bowen will support the ongoing ash pond closure and is expected to reduce the amount of ash remaining onsite, which in turn is expected to reduce the final closure footprint with up to nine million tons of ash anticipated to be harvested, processed, and removed from the site over the duration of the project.

As shown in Figure 1, the cost-benefit analysis for the Plant Bowen project considered the costs of construction and operation of the beneficial use facility against the sales of ash. This calculation used the market rate of REDACTED of ash to generate an expected net present value ("NPV") of REDACTED. In this case, the projected beneficial use sales exceed the anticipated costs to construct and operate the beneficial use facility over a 15-year horizon, discounted to a net present value. This reflects the market value of ash at the time of contract negotiations from the first half of 2022. These NPV estimates reflect the benefits from the bid itself and are in addition to the other expected benefits to the pond closure as described in the previous section.

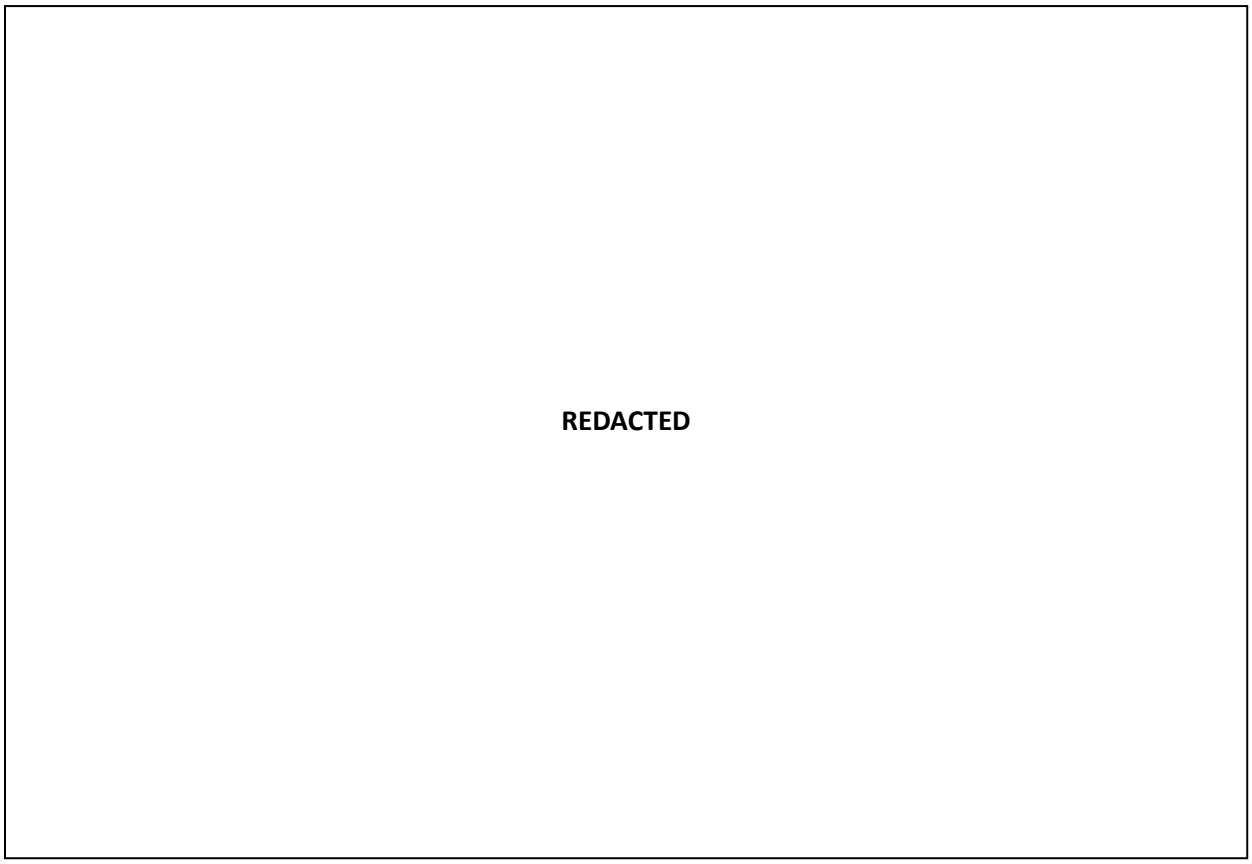


Figure 1: REDACTED

Plant Branch

In May 2023, Georgia Power finalized an agreement for a beneficial use project at Plant Branch where millions of tons of coal ash are planned to be excavated for use in concrete. At Plant Branch, the harvested ash will be processed through particle screening, drying, and thermal beneficiation. Thermal beneficiation creates a more marketable ash product by using heat to reduce the remaining carbon in the CCR material. Construction of this project will begin in 2023 and last through 2026. Upon completion, the project is expected to produce approximately 600,000 dry tons of ash for beneficial use each year. This beneficial use of ash will support the ash pond closure and is expected to reduce the amount of ash remaining onsite which in turn is expected to reduce the onsite landfill footprint with up to eight million tons of ash anticipated to be harvested, processed, and removed from the site over the duration of the project.

The cost-benefit analysis for the Plant Branch project considered the costs of construction and operation of the beneficial use facility against the sales of ash. This calculation used a market rate of REDACTED of ash to generate an expected net present value of REDACTED. In this case, the projected beneficial use sales exceed the anticipated costs to construct and operate the beneficial use facility over a 15-year horizon, discounted to a net present value. This rate reflects the market value of ash at the time of contract negotiations from the first quarter of 2023. These NPV estimates reflect the benefits from the bid itself and are in addition to the other expected benefits to the pond closure as described in the previous section.

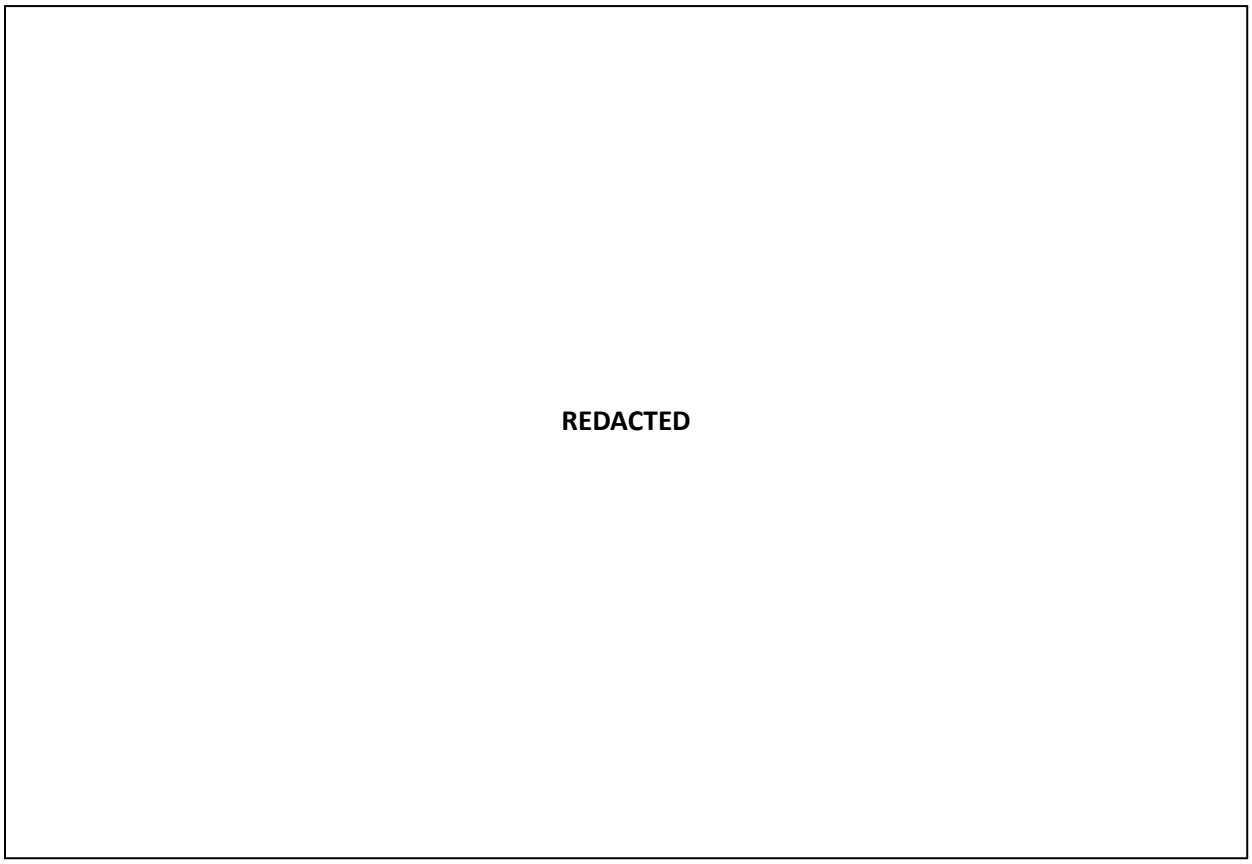


Figure 2: REDACTED

Conclusion

Through the beneficial use RFP, the addition of the two harvested ash beneficiation projects at Plants Bowen and Branch leverages the Company's CCR marketing experience to the benefit of customers. With these projects, the potential for closure cost savings and reduced long-term liability can begin to be realized. The Company will continue to look for additional opportunities to incorporate beneficial use and will update the PSC on the beneficial use program progress in the Semi-Annual CCR ARO Program Status reports.