BEFORE THE STATE OF GEORGIA PUBLIC SERVICE COMMISSION

In Re:	)	
Georgia Power Company's	)	
2023 Integrated Resource Plan Update,	)	Docket No. 55378
Application for Certification of Plant	)	
Yates Unit 8-10	)	
	)	

POST-HEARING BRIEF OF

THE SIERRA CLUB AND SOUTHERN ALLIANCE FOR CLEAN ENERGY

INTRODUCTION

The testimony and evidence presented to the Georgia Public Service Commission ("Commission") over the course of these proceedings demonstrates that the proposed combustion turbine ("CT") units 8, 9, and 10 at Plant Yates should not be certified. Instead, the Commission should:

1) Defer certification until after the results of the ongoing capacity request for proposal process are available, so that the Commission can ascertain whether capacity resources that are lower cost, less risky, and more timely available than the Yates CTs can be procured to meet the needs of Georgia Power's customers;
2) If the Commission ultimately does certify the Yates CTs, it should implement sufficient guardrails to prevent fuel costs from being entirely passed on to customers.

ARGUMENT

A. <u>The Commission Should Defer Certification of the Proposed Yates CT Units</u>

As demonstrated by the testimony of Albert Lin, the Commission should defer certification of the proposed Yates CT units. As Georgia Power concedes, the units will not be

available until well after the winter 2026/2027 capacity shortfall the Company projects; moreover, Georgia Power has underway right now a Request for Proposal ("RFP") process to acquire additional capacity, specifically including bids for resources available *more than a year before* Yates 9 and 10 and as much as 11 months before Yates 8, would come online. In face of this, the Company's demand that this Commission suspend the normal procedures for capacity resource certification in favor of the Yates CTs is unsupported.

All-source competitive solicitation processes are beneficial ways of ensuring that "all possible options to serve anticipated load growth have been adequately examined and analyzed," SC-SACE Ex. 2, Direct Testimony and Exhibits of Albert Lin 5:13-14 (hereinafter "Lin Direct"), *see also* Lin Direct Exhibit AL-2, and are in fact the default process for acquiring capacity resources. *See* Commission Rule 151-3-4-.04(3)(b). Georgia Power is currently undertaking an all-source RFP process (indeed, bids in that process were finalized before the July 24, 2024 hearing in this matter), and that process specifically contemplates resources available as early as January 1, 2026:

> 2.1.1. GPC seeks offers to sell capacity and energy from Capacity Resources that can commence delivery in the Winter 2029 – Winter 2031 timeframe (December 2028 – December 2030). **Participant may propose a Capacity Resource that is available earlier than Winter 2029, but no earlier than January 1, 2026**, and GPC will determine if the proposed option is an economical option that meets customer needs.

Georgia Power Company, All-Source Capacity Request for Proposals for 2029-2031, at 20 (emphasis added). By contrast, the Yates CT units' commercial operation dates are not until December 1, 2026, May 1, 2027, and August 1, 2027 for Yates Units 8, 9, and 10, respectively. Direct Testimony of Jeffrey R. Grubb and Michael A. Bush (May 21, 2024) 7:18-21 (hereinafter

"Company Direct"). As such, the RFP process could identify resources that are available between 11 and 19 months before the Yates CT units come online.

This time period matters: the Company perceives a capacity need starting much earlier than the Yates CTs would be available to meet that need, and as such, the Yates units will not be able to fulfill the purpose for which Georgia Power claims they are necessary. As Georgia Power testified, the "1,300 megawatts" of Yates Unites 8-10 "is required as early as the winter of 2026/2027."[1] Company Direct 4:21-22. Resources coming online in the spring and summer of 2027 are obviously not available to meet a need starting in the winter of the preceding year.

Moreover, the Yates CT units are unlikely to actually provide the promised 1,300 megawatts of capacity even if they do reach commercial operation. No gas supply (firm, or otherwise) has been secured for the CTs, meaning that they will compete with other Georgia Power assets—including more efficient combined cycle units—for gas in times of high capacity needs. When there isn't gas for the CTs,[2] Georgia Power intends to run them on diesel oil instead, which reduces their generation capacity *by nearly a fifth*. *See* Company Direct. 6:2-7 (noting that switching from gas to diesel lowers the capacity of each unit from 441 megawatts to just 357).

[1] In its rebuttal testimony, the Company appears to claim that the Yates 8-10 units would "serve Georgia Power's demonstrated capacity need beginning in the winter of ***2025/2026***." Rebuttal Testimony of Jeffrey R. Grubb and Michael A. Bush (July 10, 2024) 6:9-10 (emphasis added) (hereinafter "Company Rebuttal"). Even if this Commission had not already certified certain power purchase agreements beginning in 2024 to meet that need, it is ludicrous to argue that the Yates CT resources reaching commercial operation in 2026 and 2027 are somehow available to meet a need in 2025.

[2] In a discovery response, the Company admitted that the Yates CT units would "primarily run on fuel oil during peak winter and summer periods"—precisely the times when the additional system capacity needs the units are intended to address would be present. SC-SACE Ex. 1, Company Response to Data Request No. STF-JKA-2-22(d).

Accordingly, there is an opportunity before this Commission to defer certification of the Yates CT units in order to take advantage of the ongoing RFP process: this process may well have *already* received bids for resources less costly and/or available sooner than the Yates CTs, which would ultimately serve customers far better. Since immediate certification of Yates would not provide even partial service until 2026, as Mr. Lin testified, it would be "prudent" for the Commission to defer certification so as to "use . . . the All-Source RFP procurement process already underway in Georgia" which would "allow the Commission to obtain more information and make a better decision." Lin Direct 31:11-17.

B. The Commission should not allow full pass-through of fuel costs for the Yates CTs

As Albert Lin demonstrated in his testimony, the policy of passing through all fuel costs to ratepayers presents definite and increasing customer cost risks as well as a moral hazard condition. This is particularly true where Georgia Power intends to operate the Yates CTs on far less efficient fuel oil at possibly higher price per unit of energy for any significant amount of the total time they would be utilized as capacity resources. Moreover, while the 2023 IRP Update Stipulation seeks to shield ratepayers from some of the risks associated with the *construction* of the Yates CTs, it does nothing to protect ratepayers from the cost risks associated with the *operation* of the units, which Staff conceded at hearing were the most significant costs. Accordingly, if the Commission certifies the Yates CT units, it should disallow full pass-through of the associated fuel costs.

1. Passing through all fuel costs presents significant moral hazard

Automatic pass-throughs of fuel prices are a relic of an earlier age when nearly all generation sources had fuel costs; particularly today, where gas represents an increasingly

volatile and disproportionate share of the utility space's costs, such total pass-throughs increase the size and frequency of costs impacting only the customer.

As Albert Lin testified, fuel cost recovery mechanisms that place all of the risk on ratepayers are a product of the 1970s, but the "generation, management, and conservation of electricity has changed and evolved materially since 1979." Lin Direct 6:13-14. Indeed, whereas half a century ago "virtually all technologies to generate electricity required some type of fuel," that is not the case today, where "various forms of technology" such as solar and wind, "require little or no fuel." Lin Direct 6:16-18. As a result, some technologies—such as natural gas plants in general and the proposed Yates CTs in particular—benefit from fuel cost pass-throughs, while other technologies do not; such "asymmetries run the risk of producing poor economic and commercial choices where the cost and risk of major investments will not be evaluated correctly." 8:10-13. Specifically, such policies invite moral hazard in situations like the present Yates CT units certification request:

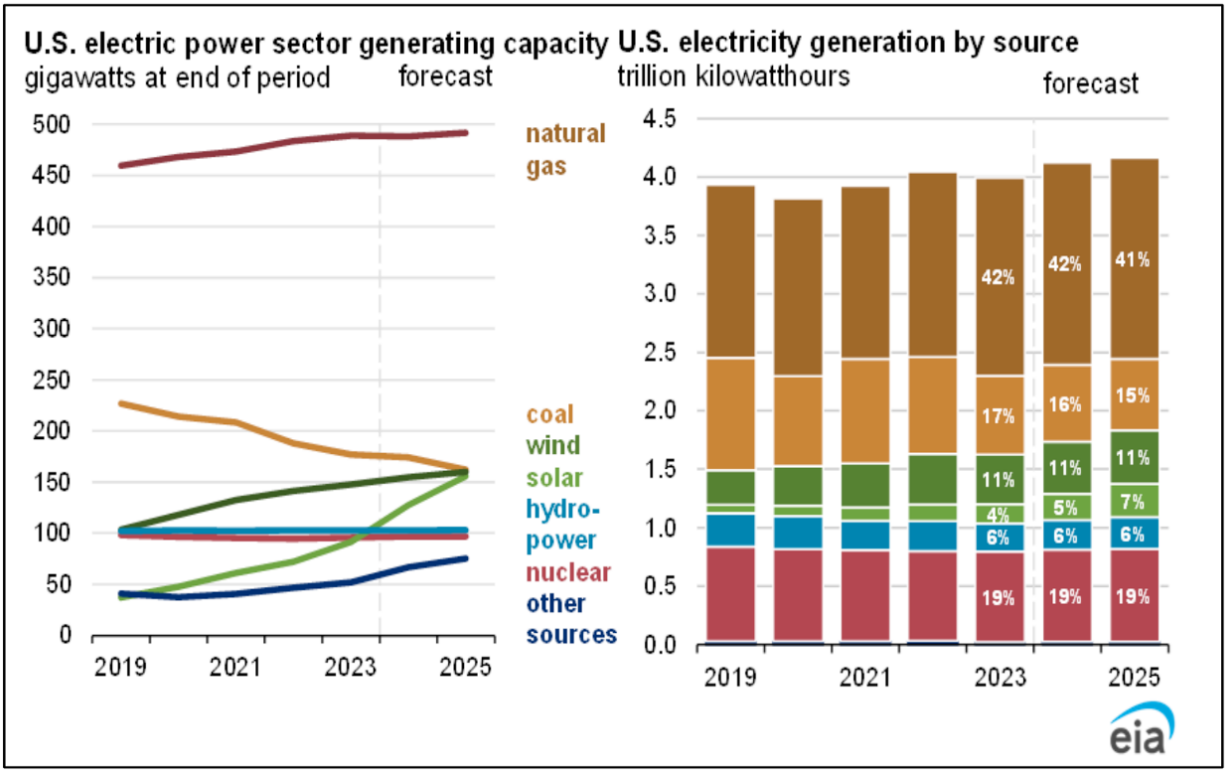
> [M]oral hazard is mostly focused on the risk to customers for fuel costs to operate the Yates generation assets once constructed. With a [fuel cost recovery policy] that shifts the largest operating cost item to another party, the utility may be increasing the financial cost to the electricity system's customers whether intentionally or unintentionally . . . thereby leaving the customers to absorb the price volatility and total fuel cost.

Lin Direct 10:14-20.

This problem is exacerbated by the increasingly volatile gas market and increasing overreliance on gas that Georgia Power seeks. As Mr. Lin testified, natural gas is the top fuel by a wide margin for generating electricity. This concentration of natural gas used by electricity generators has made the electricity industry the biggest customer for natural gas, up from an insignificant party just 15 years ago. Further, the highly cyclical nature of electricity load is

placing operational pressure on the natural gas industry to also try to support the cyclical daily and seasonal peak to trough loads.

Figure 1: US electric power sector generating capacity US electricity generation by source

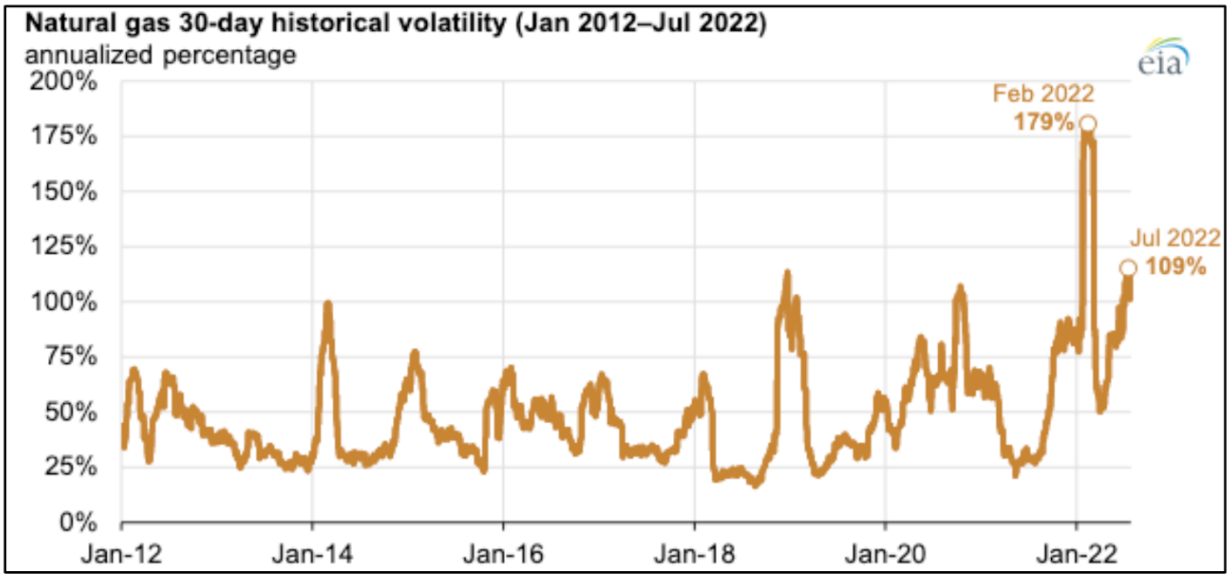


Lin Direct 12.[3]

Monthly price swings for natural gas often exceed 50%, and that volatility is increasing over time, in part due to the increased reliance on gas by the utility sector—indeed, the large price swings in 2022 "were preceded by many points in time of extreme price volatility including five (5) incidents where prices moved by over 100%." Lin Direct 14:7-8.

[3] *Source: US Department of Energy, Energy Information Administration, available at: https://www.eia.gov/outlooks/steo/images/Fig30.png.*

Figure 3: Natural gas 30-day historical volatility (Jan 2012-July 2022)

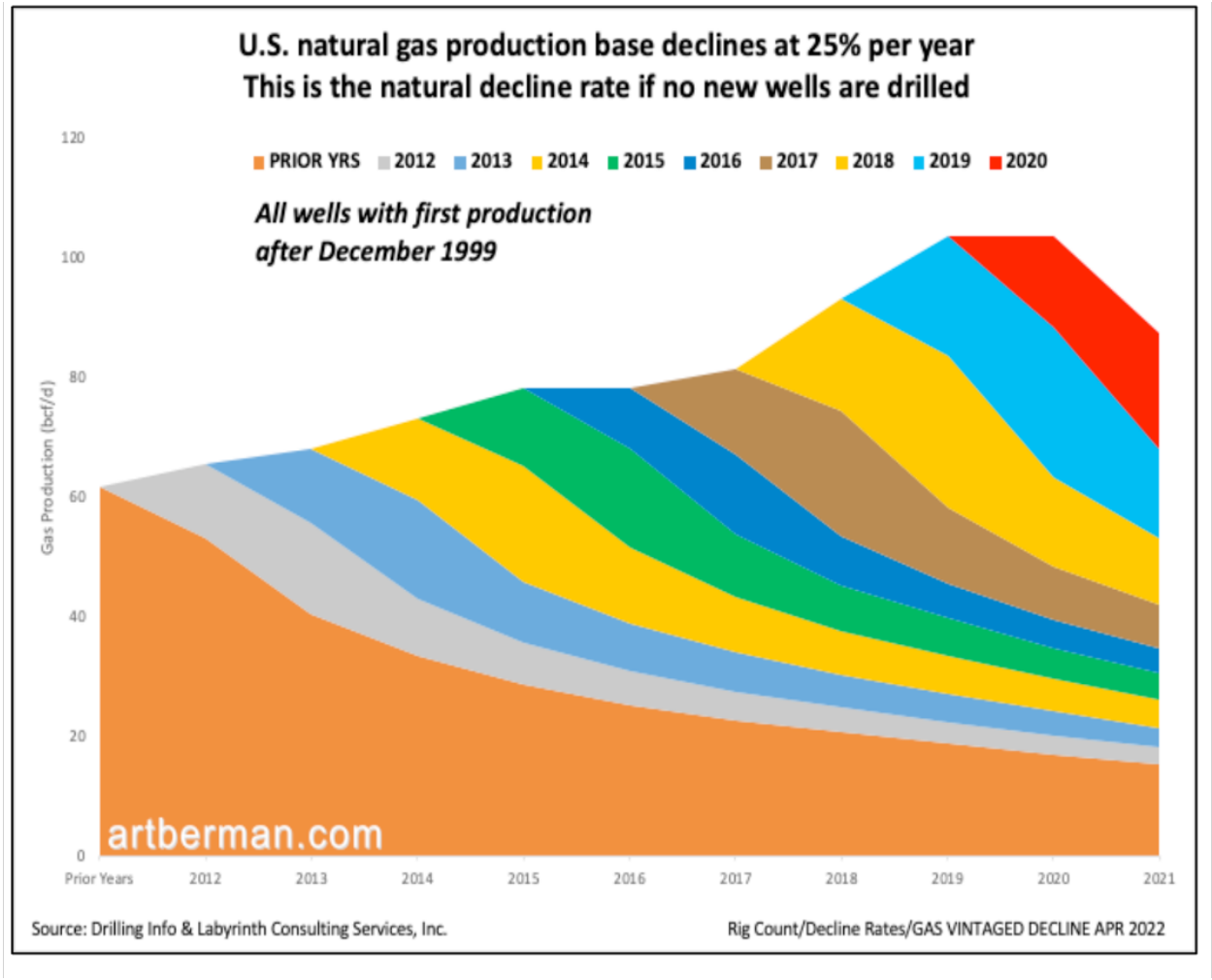


Lin Direct 14.[4]

Gas price volatility and overall gas prices are likely to get worse as time goes on, for at least two key reasons. First, much of the growth in natural gas production has been dependent on "directional/horizontal drilling and hydraulic fracturing," and the production volume of each well reliant on these extraction techniques "declines very rapidly in the first few years"—a situation "very different from conventional wells which produce at a much more stable and predictable rate." Lin Direct 19:6-11.

[4] *Source: US Department of Energy, Energy Information Administration, "U.S. natural gas price saw record volatility in the first quarter of 2022" (August 24, 2022), available at: https://www.eia.gov/todayinenergy/detail.php?id=53579.*

Figure 7: US natural gas production decline rate



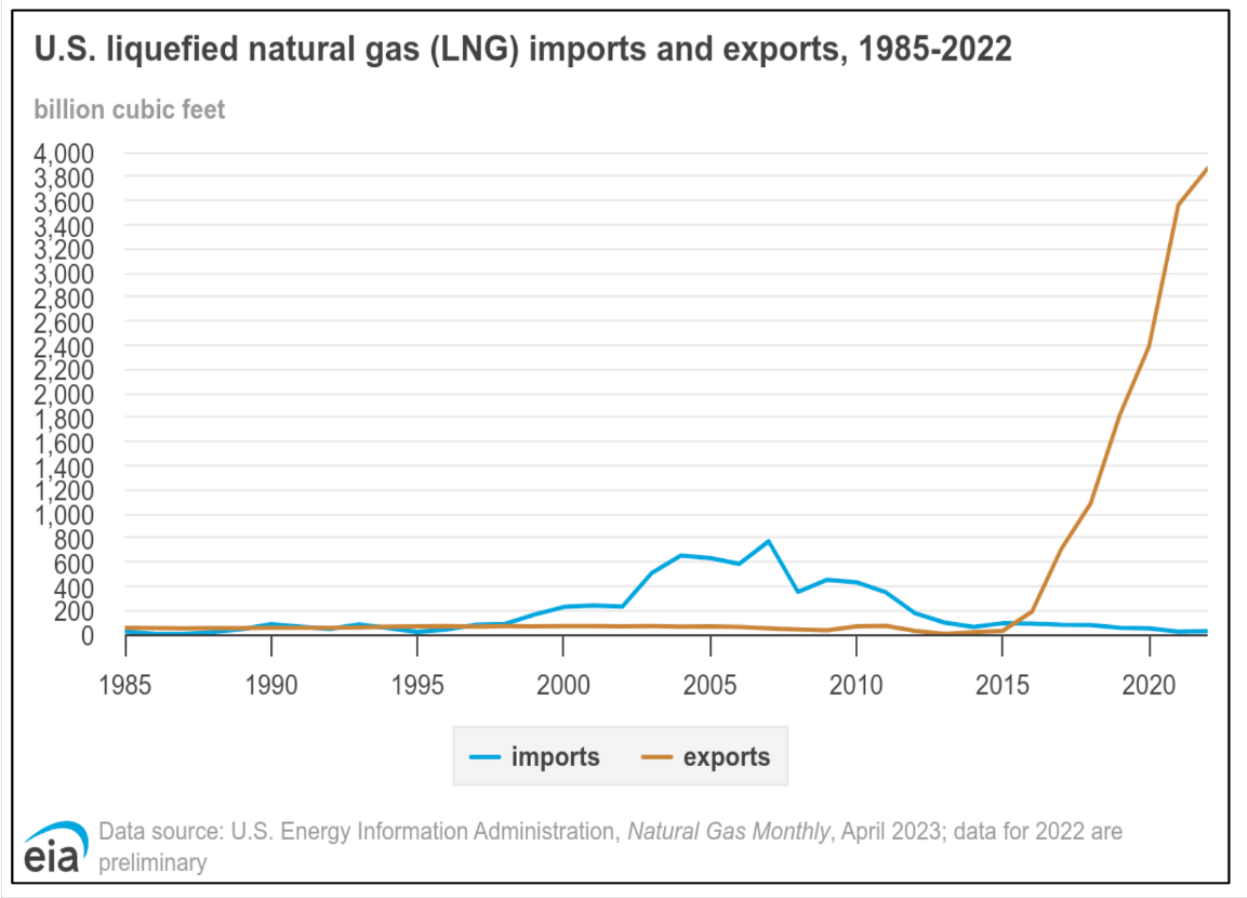
Lin Direct 21.[5] Currently, there is an "average of a 25% overall production decline" which means that "the industry must increase production 25% just to get back to the prior year's level." Lin Direct 20:12-14. This increasingly frantic production treadmill places downward pressure on supplies, just as demand is increasing.

Second, increasing liquified natural gas ("LNG") export capability means that the U.S. gas market is increasingly exposed to international prices, which are higher than U.S. prices. Lin Direct 27:10-12. Indeed, if the U.S.'s LNG export capacity "build out continues as approved and

[5] *Source: Labyrinth Consulting Services, Inc.*

permitted, the USA will ship about 26% of all natural gas in 2030, up from the current proportion of 13.6%." Lin Direct 29:6-7.

Figure 11: US Liquified natural gas imports and exports, 1985-2022

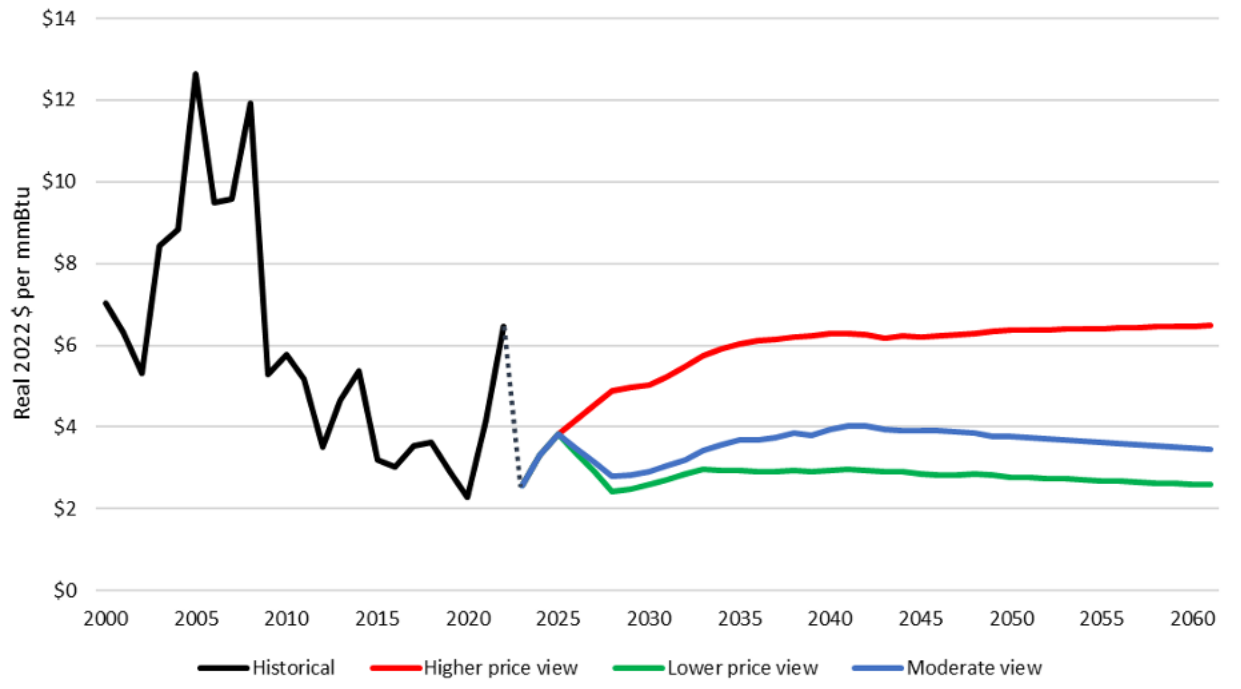


Lin 28.[6] As a result, domestic gas customers will face dramatically increasing competition with international buyers who are willing to pay higher prices, placing significant upward pressure on the prices paid by Georgia Power's customers. Accordingly, there is substantial risk to ratepayers from the Yates CT units if the fuel costs are entirely passed through to customers.

[6] *Source: US Department of Energy, Energy Information Administration, Natural gas explained (last updated Aug. 11, 2023), available at: https://www.eia.gov/energyexplained/natural-gas/liquefied-natural-gas.php.*

In face of this, the Company argues that it *did* regard gas prices in selecting the Yates CTs outside of the normal RFP process. However, that analysis included only a narrow range of gas prices which does not even capture what has been experienced over the last twenty years:

Figure 4: Views of future price of Natural Gas at Henry Hub



Southern Company 2023 Integrated Resource Plan Update Resource Mix Study, Figure 4. Indeed, Georgia Power assumed *declining* long term natural gas prices, and relied on a "moderate" price case that is very similar to the "lower price view."[7] Further, when asked at hearing if the Company would be willing to bear some portion of fuel costs if those fuel costs ended up being *higher* than what the Company projected, Georgia Power's witnesses demurred.

Q: So is the company willing to bear some of the fuel costs if they end up being higher than the company predicted and presented to the Commission?

[7] The Company also looked at Henry Hub gas prices, despite the fact that the Company does not procure gas from the Henry Hub market, and is instead subject to smaller regional markets and their more supply-constrained prices.

A: (Witness Grubb) No.

July 24, 2024 Hearing Transcript 80:16-19 (hereinafter "Hearing Trans."). Simply put, the Company was unwilling to put its money where its mouth was. The Commission should not allow Georgia Power to shift the entirety of that fuel cost risk to its customers.[8]

1. The Stipulation safeguards do not mitigate this risk

Although Georgia Power claims that the stipulation adopted by the Commission in this docket provides some protection to ratepayers, the stipulation fails to mitigate huge sources of risk that the Company would place on its customers.

As Public Interest Staff witness Steven D. Roetger conceded during cross examination, the most significant fraction of costs for a CT unit like those the Company proposes at Plant Yates is not the construction costs, but the ongoing operation costs, including fuel costs—that in fact, "the largest risk comes with the price of fuel." Hearing Trans. 129:13-14 (Roetger). Construction costs are accordingly a much smaller part of the overall risk:

Q: Is it correct to say that with a combustion turbine that situation is flipped; the construction costs are a lower proportion overall than the overall costs?

A: Well, yes, in very simple terms.

Hearing Trans. 128:11-14. Nonetheless, the provisions in the stipulation would not cover *any* of the operating costs—*see* Hearing Trans. 127:20-21 ("Q: Okay. But [the stipulation] doesn't cover operating costs? A: No.")—meaning their entire risk would be borne by Georgia Power's

[8] To the extent that the Commission believes that the fuel cost recovery statute, O.C.G.A. § 46-2-26, precludes any disallowance of fuel cost pass-throughs, that is an additional reason why the Commission should not certify additional gas-fired units that would increase the risk borne by ratepayers of high fuel prices.

customers. In other words, the stipulation only protects against the least risky aspect of cost and leaves customers completely vulnerable to fuel cost increases.

Similarly, the Company's witnesses conceded during cross examination that there were multiple categories of cost risks that the Company was unwilling to bear even if those costs exceeded what the Company projected and presented to the Commission. For example:

1) Increased costs associated with burning oil, instead of gas, would be borne by customers and not the Company;[9]
2) If the Yates CT units do not reach commercial operation on the schedule the Company presented to the Commission, and the Company has to procure replacement capacity, the Company intends for customers to pay for that additional replacement capacity cost;[10] and
3) Even if gas costs are higher than the Company evaluated in its submission to the Commission, the Company is unwilling to bear those increased costs.[11]

As such, certifying the proposed Yates CT units, even with the modest construction cost protections in the stipulation, nonetheless exposes ratepayers to extremely high and unwarranted levels of risk, given that the Yates CT units were not selected as the result of a competitive all-source RFP process. The Commission should, if it certifies them, limit fuel cost pass-throughs accordingly.

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[9] Hearing Trans. 78:22-24 ("The increased incremental cost of using oil versus gas, that gets passed on to customers; right? A: (Witness Grubb) Yes."); *see also id.* at 77:14-16 ([Grubb] "To run the units on oil is not as cost effective as on natural gas, that's correct.").

[10] Hearing Trans. 87:1-9 ([Grubb] observing that the "the market's pretty slim," for replacement capacity, and that "it could be a tight market"); *id.* at 87:10-14 ("Q: And in that potentially tight market, who would bear the cost of that -- the company or the customers -- of procuring that additional energy? A: (Witness Grubb) It would be -- it would be customers, I believe.")

[11] Hearing Trans. 80:16-19 ("Q: So is the company willing to bear some of the fuel costs if they end up being higher than the company predicted and presented to the Commission? A: (Witness Grubb) No.").

CONCLUSION

For the foregoing reasons, the Commission should defer certification of the Yates CT units, at least until the results of the RFP can be evaluated to determine whether or not there are less risky and lower cost resources available to meet the Company's asserted capacity needs. In the alternative, if the Yates CT units are certified, the Commission should disallow cost recovery for fuel costs associated with the Yates CT units if those costs exceed the "moderate view" gas prices that the Company relied on in its 2023 Integrated Resource Plan Update Resource Mix Study.

Respectfully submitted,

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