

BEFORE THE PUBLIC SERVICE COMMISSION

STATE OF GEORGIA

In Re:

**GEORGIA POWER COMPANY'S
2023 INTEGRATED RESOURCE PLAN
UPDATE**

Docket No. 55378

DIRECT TESTIMONY OF PRIYA BARUA
ON BEHALF OF CLEAN ENERGY BUYERS ASSOCIATION

February 15, 2024

1 **I. Introduction and Summary of Recommendations.**

2 **Q: Please state your name.**

3 A: My name is Priya Barua.

4 **Q: By whom are you employed and in what position?**

5 A: I am Director of Market and Policy Innovation at Clean Energy Buyers Association
6 (CEBA).

7 **Q: Please describe your current role and your relevant professional experience.**

8 A: I have been with CEBA since 2019 and have been the Director of Market and Policy
9 Innovation since 2021. In my current role I oversee CEBA's Market Access Initiative,
10 which is focused on increasing customer access to cost-effective, reliable clean energy,
11 particularly in the Southeast and West regions, where customers do not have access to
12 organized wholesale markets and are therefore more restricted in the ways in which they
13 can procure clean energy. Previously, I worked at the World Resources Institute (WRI) for
14 almost 8 years, where I worked with energy customers to develop the Renewable Energy
15 Buyers' Principles¹ in 2014, which outlined six principles that customers are looking for
16 from utilities and other suppliers when buying clean energy from the grid. This was signed
17 by 75 corporate signatories. I then helped establish WRI's work on green tariffs. This work
18 included tracking and analyzing utility green tariff programs that emerged across the
19 country, starting with the first publication of *Emerging Green Tariffs in U.S. Regulated*
20 *Electricity Markets* in 2014, and supporting subsequent iterations of that publication and

¹ <https://cebayers.org/programs/education-engagement/buyers-principles/>.

1 associated maps, including the transfer of these resources to CEBA when I joined CEBA
2 in 2019. I also fostered collaborations between utilities and large energy buyers in
3 traditional, regulated markets, to develop customer clean energy programs that support an
4 efficient and economic transition to clean energy resources, through customer-utility
5 leadership forums between 2014-2018. This work included establishing and leading the
6 Special Clean Power Council (CPC) for Utilities and Buyers,² a two-year initiative with
7 six large IOUs and eight large commercial and industrial customers. I also authored the
8 publication: *Implementation Guide for Utilities: Designing Renewable Energy Products to*
9 *Meet Large Energy Customer Needs*³ in 2017. I have a Masters degree in Public Policy
10 from the Harvard Kennedy School and a Bachelor of Arts degree from Brandeis University.

11 **Q: Have you previously provided testimony before the Georgia Public Service**
12 **Commission?**

13 A: No, I have not.

14 **Q: Have you previously provided testimony in any proceedings before other regulatory**
15 **commissions?**

16 A: Yes. I recently testified before the Louisiana Public Service Commission in Docket No. U-
17 36697, regarding the design of a new green tariff proposed by Entergy Louisiana.

² <https://www.wri.org/initiatives/special-clean-power-council-customers-utilities-cpc>.

³ <https://www.wri.org/research/implementation-guide-utilities-designing-renewable-energy-products-meet-large-energy>.

1 **Q: Please describe CEBA.**

2 A: CEBA is a business trade association that activates a community of energy customers and
3 partners to deploy market and policy solutions for a carbon-free energy system. CEBA's
4 more than 400 members represent more than \$7.5 trillion in annual revenues and 18.5
5 million employees and include institutional energy customers of every type and size –
6 corporate and industrial companies, universities, and cities, as well as project developers
7 and service providers. CEBA's membership includes one-fifth of the Fortune 500 and some
8 of the largest buyers of renewable energy that conduct business operations across the
9 United States and Georgia, including an estimated 90 Georgia Power customers. CEBA's
10 corporate and industrial members include companies across a variety of sectors including
11 information technology, data centers, auto manufacturing, clean energy manufacturing,
12 heavy industry, food and beverage manufacturers, financial institutions, fast food
13 restaurants, hotels, retail chains, and more.

14 **Q: What is the purpose of your Direct Testimony?**

15 A: Many of Georgia Power's commercial and industrial customers need access to clean energy
16 to meet their sustainability commitments. Any utility with ambitious economic
17 development goals, such as those stated by the Company in this proceeding, should
18 understand that it must invest in clean energy to meet the needs of its customers. My Direct
19 Testimony explains why it is critical for Georgia Power to meet its new load growth with
20 clean generation resources and not the carbon-intensive resources Georgia Power has
21 proposed to procure without the benefit of competitive bidding. Along with CEBA's other
22 witness Mr. Ronald Lehr, my Direct Testimony supports specific recommendations for

1 how the Commission should resolve Georgia Power’s 2023 IRP Update to ensure that
2 Georgia can continue to support the clean energy needs of the businesses that power its
3 economy.

4 **Q: Please summarize your recommendations to the Commission.**

5 A: I recommend that the Commission:

- 6 1. Keep commercial, industrial, and institutional customers’ clean energy requirements in
7 mind as it evaluates Georgia Power’s proposals in this proceeding.
- 8 2. Direct Georgia Power to create a “sleeved power purchase agreement (PPA)” option
9 that allows customers to identify and contract for dedicated clean energy projects
10 through Georgia Power.
- 11 3. Direct Georgia Power to remove the program capacity and system size limitations in
12 the Customer-Connected Solar Program.
- 13 4. Direct Georgia Power to allow clean energy resources paired with BESS to participate
14 in both the DER Colocation Program and the DER Customer-Owned Program.
- 15 5. Adopt the recommendations of CEBA witness Mr. Ronald Lehr.

16 **II. CEBA’s Priorities and Goals**

17 **Q: What will you address in this section of your testimony?**

18 A: In this section of my testimony, I will provide more background on CEBA and CEBA
19 members’ priorities and goals to help the Commission understand why CEBA intervened
20 in this docket. This background provides context for CEBA’s specific recommendations
21 with respect to Georgia Power’s requests.

1 **Q: Please describe why CEBA was created.**

2 A: CEBA, formerly named the Renewable Energy Buyers Alliance (REBA), started as a
3 collaboration between four nonprofit organizations in 2014 to identify and address the
4 challenges and common needs faced by energy customers pursuing clean energy to achieve
5 their sustainability goals, and to educate and collaborate with key stakeholders in finding
6 solutions to meet them. What started as a discussion with 12 companies, grew to a
7 community of over 200 members, so REBA was “spun-off” as an independent stand-alone
8 membership organization in 2019. While REBA pursued a vision of a resilient, carbon-free
9 electricity system since its inception, it was rebranded as the Clean Energy Buyers
10 Association (CEBA) in 2021 to better align with that broader vision. CEBA is a 501c6
11 business association that activates a community of energy customers and partners to deploy
12 market and policy solutions for a carbon-free energy system. CEBA was founded based on
13 a simple idea: energy customers pursuing clean energy should have one organization to go
14 to for the resources necessary to achieve their clean energy goals. CEBA focuses on
15 unlocking markets for energy customers, catalyzing communities of customers for
16 deployment, and decarbonizing the grid for all.

17 CEBA coordinates closely with the Clean Energy Buyers Institute (CEBI), which
18 is a 501c3 public good charity that works to solve the toughest market and policy barriers
19 to achieve a carbon-free energy system. Together, the Clean Energy Buyers Association
20 and the Clean Energy Buyers Institute form the Clean Energy Buyers Alliance and share a
21 collective vision of customer-driven clean energy for all, with an aspiration to achieve a

1 90% carbon-free U.S. electric system by 2030 and to cultivate a global community of
2 energy customers driving expanded demand for clean energy.

3 **Q: In addition to participating in proceedings before state utility regulatory**
4 **commissions, how does CEBA support its members?**

5 A: CEBA provides a variety of educational resources and tools to help end-use energy
6 customers learn how to procure clean energy in the U.S. and across global markets. This
7 includes primers on procurement mechanisms, data on C&I clean energy procurement, a
8 comprehensive report on utility green tariff programs across the U.S., and resources around
9 decarbonizing supply chains, to name few. CEBA also provides peer-to-peer learning
10 opportunities for members to share challenges, industry best practices, and to collaborate
11 on solutions through industry conferences, monthly member calls, workshops, and
12 procurement boot camps for companies that are new to procuring clean energy. In addition,
13 CEBA advocates for federal and state legislative and regulatory policies that advance
14 reliable, cost-effective clean energy, increase customer access to clean energy, expand and
15 improve energy markets, and improve transmission planning.

16 **Q: Please describe the role that large voluntary energy customers have had in clean**
17 **energy development in the U.S.**

18 A: Since 2014, more than 200 commercial and industrial (C&I) energy customers have
19 voluntarily procured over 77 gigawatts (GW) of clean energy, equivalent to approximately
20 40% of all wind and solar capacity added to the U.S. grid during that time.⁴ This represents

⁴ Clean Energy Buyers Association, “CEBA Deal Tracker” available at <https://cebuyers.org/deal-tracker/>.

1 publicly announced procurement of clean energy by C&I customers through power
2 purchase agreements (PPAs), green tariffs, bilateral deals with utilities, energy customer
3 tax equity investments, and direct project ownership in the U.S. since 2014. In 2022, C&I
4 customers announced a record-breaking 16.9 GW of new clean energy deals, equivalent to
5 70% of the carbon-free energy capacity added to the U.S. electric grid in 2022. C&I
6 customers procured another 12.9 GW of clean energy in 2023.

7 CEBA's members have ambitious clean energy goals, and many of these members
8 now consider, if not prioritize, their ability to access clean energy when determining where
9 to locate new facilities and which existing facilities to expand.

10 **Q: Why did CEBA intervene in this docket?**

11 A: CEBA intervened in this docket because we are concerned that Georgia Power has
12 proposed to meet the significant load growth it is facing largely with uncompetitively
13 procured, and therefore costly, fossil fuel resources, including a PPA with its affiliate
14 Mississippi Power, which was ordered by its regulators to retire fossil fuel steam generating
15 capacity;⁵ a PPA with the Santa Rosa Energy Center, a combined-cycle natural gas plant;
16 and new utility-owned combustion turbines (CTs) that will be fueled by oil and natural gas.
17 CEBA's members are also concerned that none of the resources Georgia Power has
18 proposed in this docket would be procured through competitive bidding. Finally, CEBA is
19 concerned that some of the new load that Georgia Power is forecasting may not materialize
20 if Georgia Power increases the carbon intensity of its resource mix as it has proposed to do

⁵ Missouri Public Service Commission Docket No. 2018-AD-145.
https://www.psc.state.ms.us/InSiteConnect/InSiteView.aspx?model=INSITE_CONNECT&queue=CTS_ARCHIVE_Q&docid=655509.

1 in this docket, since many of the customers bringing new load have clean energy targets.
2 If this load does not materialize and Georgia Power overbuilds with fossil fuel capacity, it
3 would result in higher costs for existing customers and make it more difficult for existing
4 customers to meet their sustainability targets.

5 **Q: At a high level, what are the outcomes CEBA would like to see in this docket?**

6 A: CEBA witness Mr. Lehr and I both provide specific recommendations for how the
7 Commission should resolve this docket. At a high level, CEBA supports the following
8 outcomes for Georgia Power's 2023 IRP Update:

9 A. Georgia Power's forecasted future load should be met with least-cost, competitive
10 clean energy resources.

11 B. All new capacity additions should be as clean and cost-effective as possible, without
12 preference given to utility-owned gas generation resources or affiliate transactions.

13 C. Customers interested in voluntary clean energy purchases should be empowered to
14 contribute to Georgia Power serving its forecasted load.

15 D. Georgia Power should make progress on transmission expansion plans and increasing
16 the availability of market mechanisms to improve reliability and meet forecasted load
17 growth.

18 I urge the Commission to keep these customer priorities in mind as it evaluates Georgia
19 Power's proposals.

1 **III. Customer Demand for Clean Energy.**

2 **Q: What will you address in this section of your testimony?**

3 A: In this section of my testimony, I will address the importance of including clean energy in
4 a utility's resource mix to meet customer clean energy requirements in states with vertically
5 integrated utilities and no access to organized wholesale markets, like Georgia.

6 **Q: Why do large energy customers like CEBA's members care about the amount of clean
7 energy resources in a utility's resource mix?**

8 A: As CEBA discussed in its Petition to Intervene in this docket, CEBA's members have
9 ambitious sustainability commitments that require them to reduce the carbon emissions
10 profile of their electricity consumption. Many of these companies have goals to match
11 100% of their energy consumption with renewable energy. For example, approximately 60
12 CEBA members have committed to RE100, which is a global corporate renewable energy
13 initiative bringing together hundreds of large and ambitious businesses committed to 100%
14 renewable electricity.⁶ In addition, 131 members have set science-based emissions
15 reduction targets through the Science Based Targets initiative (SBTi).⁷ CEBA members
16 purchase clean energy through a variety of procurement mechanisms including virtual
17 power purchase agreements, physical power purchase agreements, retail contracts, onsite
18 clean energy, and utility green tariffs, depending on the market structure in a specific area.
19 Many C&I customers prefer to purchase energy from clean energy projects in the same
20 state or region as their operations, rather than sign virtual PPAs for projects located in other

⁶ See <https://www.there100.org/>.

⁷ <https://sciencebasedtargets.org/>.

1 states, for example. In Georgia, customers do not have access to retail choice or organized
2 wholesale markets and are therefore more restricted in the ways in which they can procure
3 clean energy. In vertically integrated states like Georgia, CEBA members' ability to meet
4 their clean energy commitments is largely tied to the emissions profile of their utility's
5 resource mix and availability of customer clean energy programs offered by the utility that
6 they may be eligible for. As a result, the ability of CEBA members that are Georgia Power
7 customers to meet their clean energy commitments is dependent on the Commission
8 approving a resource mix for Georgia Power's 2023 IRP Update that is as clean as possible
9 while ensuring least-cost principles, economic development goals, and reliable service
10 requirements are achieved.

11 Simply put, the ability of CEBA members that are Georgia Power customers to
12 meet their clean energy commitments depends in large part on how clean Georgia Power's
13 resource mix is.

14 **Q: Did Georgia Power consider the clean energy commitments that many of its large**
15 **customers have made when it developed its 2023 IRP Update?**

16 **A:** No. Georgia Power's witness panel was asked at the hearing on Georgia Power's Direct
17 Testimony whether they were aware of any specific clean energy commitments made by
18 any of its customers. Georgia Power's witness panel stated that, while they were generally
19 aware that some customers have made public commitments to purchase clean energy, they
20 were not aware of any specific customers that had made such commitments.⁸ Moreover,

⁸ Hearing Transcript, January 16, 2024 at 280.

1 Georgia Power's witness panel confirmed that Georgia Power did not account for its
2 customers' clean energy requirements when it developed its various proposals in this
3 docket.⁹

4 **Q: Why is this concerning?**

5 A: It is concerning for two reasons. First, and fundamentally, it is concerning that Georgia
6 Power does not appear to have designed a resource portfolio that is responsive to its own
7 customers' needs and demands. In the competitive environments in which CEBA's
8 members operate, companies exist to serve their customers and must respond to their
9 customers' needs to be successful. While I understand Georgia Power's motivation to serve
10 the many new commercial customers that want to do business in Georgia, Georgia Power's
11 efforts to serve new customer load should not come at the expense of undermining the
12 clean energy requirements of its existing customers. Second, Georgia Power's proposals to
13 add more fossil fuel resources into its resource mix in this docket send the wrong message
14 to the business community and large customers evaluating Georgia as a place to do
15 business. It is possible that some of the load that Georgia Power is forecasting in this docket
16 will not materialize if the Commission approves a resource mix that increases the carbon
17 intensity of electricity supplied by Georgia Power.

18 **Q: What do you recommend with respect to this issue?**

19 A: I recommend that the Commission keep in mind the clean energy requirements of many of
20 Georgia Power's current and prospective customers when evaluating Georgia Power's

⁹ Hearing Transcript, January 16, 2024 at 280-281.

1 proposals in this docket. To empower customers to meet their clean energy requirements,
2 the Commission should adopt CEBA’s specific recommendations for resolving this docket,
3 as set forth in my testimony and CEBA witness Mr. Lehr’s testimony.

4 **IV. Bring-your-own clean energy supply options.**

5 **Q: What will you address in this section of your testimony?**

6 A: In this section of my testimony, I will describe how Georgia Power can help meet the load
7 it forecasts in its 2023 IRP Update in part by enabling customers to bring dedicated supply
8 resources into the resource mix. I refer to the two options I will describe as “bring-your-
9 own clean energy supply” options or “BYO clean supply” for shorthand. CEBA proposes
10 both an off-site BYO clean supply option based on a sleeved PPA structure and an on-site
11 BYO clean supply option based on Georgia Power’s existing Customer-Connected Solar
12 Program, which I will describe below.

13 **Q: Before you describe these proposals, why should the Commission consider voluntary**
14 **clean energy customer programs in this docket, which is focused on resource**
15 **planning?**

16 A: I recognize that this is an IRP docket, which focuses on Georgia Power’s load forecast and
17 the resources Georgia Power needs to meet its forecasted load. However, Georgia Power
18 characterizes the circumstances surrounding this 2023 IRP Update as extraordinary
19 because of the unexpected and rapidly increasing load growth and capacity need it is facing.
20 As the adage goes: extraordinary times call for extraordinary measures. The BYO clean
21 supply options CEBA proposes are not extraordinary, but they are creative alternatives to
22 Georgia Power’s proposals, which are designed primarily to benefit Georgia Power and its

1 affiliates more than its customers. Given the very large capacity need Georgia Power says
2 it is facing, all options for meeting this need should be on the table, including BYO clean
3 supply options that empower customers to be part of the solution.

4 **Q: Please describe the offsite BYO clean supply option that CEBA proposes.**

5 A: The offsite BYO clean supply option that CEBA envisions is a program in which large
6 C&I customers would have the ability to identify their own dedicated clean energy
7 resources to purchase to meet new load and work with a third-party developer to bring the
8 proposed projects to Georgia Power, which Georgia Power would then procure on behalf
9 of that customer. This structure is known as a sleeved PPA because the clean energy
10 resource is dedicated to a particular customer like a PPA but, because Georgia is a vertically
11 integrated state, the PPA is “sleeved” through the utility. The customer to which a
12 particular resource is dedicated would have a contract with Georgia Power through which
13 the customer would pay for the cost of the resource along with reasonable delivery and
14 administration costs. Through this agreement, the customer would receive all the
15 environmental and financial benefits of the dedicated resource based on the resource’s
16 actual production. Georgia Power would confer the financial benefits of the resource to the
17 customer in the form of a bill credit.

18 A sleeved PPA option should be modular in that it should allow customers to add
19 capacity based on their actual needs and growth, allowing them to move at the speed of
20 their business. Because customers pay the full cost of dedicated resources through sleeved
21 PPAs, empowering customers to meet their capacity needs as their load grows through

1 sleeved PPAs is an effective way to mitigate the risk to all customers of Georgia Power
2 overbuilding its capacity resources.

3 **Q: Have utilities in other states offered sleeved PPA arrangements?**

4 A: Yes. I have been involved in tracking and reporting utility green tariffs for several years,
5 and as shown in CEBA's reports¹⁰, sleeved PPAs are one of the three main types of green
6 tariff programs offered by utilities across the country. CEBA has tracked at least 22 utilities
7 in the U.S. that provide a sleeved PPA green tariff option to commercial and industrial
8 customers, out of 42 utilities with green tariff programs.¹¹ Seven of those utilities
9 specifically allow customers to work with third-party developers to identify a renewable
10 resource to purchase through the utility. Other utilities allow a customer to work closely
11 with the utility to select a new, dedicated renewable resource and enter into a long-term
12 contract to purchase energy from that resource. Under the sleeved PPA model, the customer
13 pays for all costs associated with the resource and receives bill credits for the energy and
14 capacity value of the resources, as well as the RECs. Individual customer contracts and
15 PPAs are approved by the state utility commission. Some examples include Duke Energy's
16 Green Source Advantage program in North Carolina and South Carolina, Dominion Energy
17 South Carolina's Voluntary Renewable Energy (VRE) Rider for RG Supply Agreements,
18 Indiana Michigan Power's Go Green Program – Customer Agreement Option, Public
19 Service Company of New Mexico's (PNM) Green Energy Rider, and NV Energy's Green
20 Energy Rider.

¹⁰ See <https://cebuyers.org/solutions/procure-clean-energy/green-tariffs/>.

¹¹ See <https://cebuyers.org/solutions/procure-clean-energy/green-tariffs/>.

1 **Q: Georgia Power already offers green tariffs such as the Clean and Renewable Energy**
2 **Subscription (CARES) Program and the CRSP and REDI programs, which provide**
3 **C&I customers with various options to subscribe to new clean energy resources**
4 **through specific tariff offerings. Why should the Commission direct Georgia Power**
5 **to also offer a sleeved PPA program such as you have described?**

6 A: There are several reasons. First, the CARES program and Georgia Power's other existing
7 green tariff programs are subscription-based programs that have a set amount of capacity
8 available for different types of customers to subscribe to. For example, CARES has 900
9 MW designated for existing customers and 500 MW for customers with new load additions
10 of at least 15 MW. A sleeved PPA program can be designed to not have a cap on the total
11 amount of capacity for the program or the number of customers that can participate. Any
12 program caps should be on a per-customer basis (rather than a program cap) and be based
13 on participating customers' current and forecasted load growth.

14 Second, the process of designing and conducting RFPs for the CARES Program
15 takes significant time. CEBA is a strong supporter of competitive bidding for resources
16 that Georgia Power procures on behalf of all customers (or on behalf of all customers that
17 sign up for a voluntary program). However, there is no reason to require that a resource
18 dedicated to a single customer through a sleeved PPA be procured through competitive
19 bidding. Some large energy customers may even be willing to pay a premium to ensure
20 their clean energy requirements are met in a timely manner. A sleeved PPA option would
21 allow customers to bring clean energy resources to Georgia Power on a faster timeline than
22 Georgia Power can procure resources for the CARES Program.

1 Finally, many C&I customers, including many of CEBA's members, are
2 sophisticated players in the market for clean energy supply and have extensive nationwide
3 experience and relationships with clean energy developers. Georgia Power's customers are
4 currently unable to leverage their expertise or their relationships through the CARES
5 Program because it is a subscription-based program and customers do not participate in
6 selection of resources for the program. By leveraging customers' expertise and
7 relationships, a sleeved PPA option would expand the pool of developers and development
8 opportunities in Georgia to serve customers' needs.

9 **Q: Please describe the onsite BYO supply option that CEBA proposes.**

10 A: The onsite BYO supply option that CEBA envisions is essentially an expansion of Georgia
11 Power's existing Customer-Connected Solar Program.¹² This existing program allows a
12 customer to install a solar facility on or adjacent to the customer's property. Georgia Power
13 purchases the electricity from the facility and retires the RECs on the customer's behalf.
14 However, the existing Customer-Connected Solar Program includes several limitations that
15 would prevent it from meaningfully contributing to Georgia Power's urgent capacity needs
16 in its current form. Specifically, the current program is limited to 25 MW of total program
17 capacity and limits the capacity of solar facilities to 3 MW or 125 percent of the customer's
18 peak demand, whichever is less. These limitations also prevent some C&I customers from
19 supplying all, or a meaningful portion, of their electricity consumption with onsite solar.

¹² <https://www.georgiapower.com/business/products-programs/business-solutions/commercial-solar-solutions/customer-connected-solar.html>.

1 **Q: What modifications do you recommend to the Customer-Connected Solar Program?**

2 A: I recommend that the Commission direct Georgia Power to remove each of the limitations
3 I have just described. Given Georgia Power's urgent capacity needs, the total program
4 capacity should be uncapped to allow as many customers that are willing to invest in onsite
5 solar capacity to do so.

6 Similarly, there should not be any caps on the system size that a customer installs.
7 Many large C&I customers will need to install systems larger than 3 MW to supply their
8 electricity needs. The current size cap of 125 percent of a customer's peak demand is also
9 needlessly restrictive because a solar facility's nameplate generating capacity is unrelated
10 to a customer's peak demand. In most cases, customers' available roof space and/or vacant
11 land will limit the size of the solar systems that customers install. If the Commission finds
12 that some type of system size cap is necessary, I recommend that customers be allowed to
13 install systems sized to supply no more than 125 percent of their average annual electricity
14 consumption. A size limitation based on expected system output and customer
15 consumption (rather than nameplate capacity and peak demand) will ensure that customers
16 only install systems needed to supply their own needs.

17 **Q: Are Georgia Power's other onsite solar programs viable options for customers?**

18 A: Georgia Power currently offers two other onsite solar options: the Renewable and
19 Nonrenewable Resources (RNR) Instantaneous Netting program and the Energy Offset
20 option. The RNR program may be a viable option for smaller commercial customers given
21 its system size cap of 250 kW but it is my understanding that the compensation rate for
22 exported solar energy is subject to change after three years, so customers might be reluctant

1 to participate given this lack of long-term certainty. The Energy Offset option provides no
2 compensation for exported power but may be a viable option for customers looking to
3 offset only a small portion of their load or looking to install onsite storage. Improvements
4 to both these programs could further support customers that are willing to invest their own
5 capital in meeting their capacity needs. I am not recommending any changes to these
6 programs in this proceeding but encourage Georgia Power and the Commission to explore
7 improving these programs in the 2025 IRP.

8 **Q: Georgia Power's proposals in this docket focus on Georgia Power's needs for firm**
9 **capacity. How would these two BYO supply options you've described contribute to**
10 **firm capacity?**

11 A: Every technology has an inherent capacity value, including clean energy resources. The
12 capacity value of all energy resources should be measured by the effective load carrying
13 capacity (ELCC) that applies to that resource type. Clean energy resources can contribute
14 to a utility's firm capacity needs based on their ELCC value just like fossil fuel resources.
15 However, CEBA would support incorporating battery energy storage systems (BESS) in
16 both BYO supply options we propose by providing additional value to customers for
17 pairing BESS with the applicable resource.

18 There are likely multiple ways to structure the BYO supply options to include
19 BESS. For the sleeved PPA option, participating resources can be paired with BESS
20 located at the same site as the dedicated resource. The customer should pay for and receive
21 the value of all energy produced by the clean energy resource, but Georgia Power could
22 retain contractual or operational rights to the BESS to contribute to serving peak loads,

1 which will offset the cost of the BESS for the customer. For the expanded Customer-
2 Connected Solar Program I described above in which Georgia Power purchases all
3 electricity output of the onsite facility, Georgia Power could either pay the customer a
4 capacity payment for pairing their solar system with BESS or pay time-varying rates that
5 incentivize the customer to dispatch its battery during peak hours. These structures are just
6 examples of how these programs could be structured to increase the capacity value of the
7 clean energy resources they would support.

8 CEBA supports allowing any carbon-free resources to participate in the sleeved
9 PPA option I have described, including baseload resources such as small modular reactors
10 and geothermal facilities. Clean energy resources paired with long-duration storage should
11 also be options that will contribute additional capacity value. CEBA recommends that only
12 carbon-free resources be permitted to participate in the sleeved PPA option I have
13 described, but the customer paying for a particular resource through a sleeved PPA should
14 be able to choose their preferred carbon-free technologies.

15 **Q: How would the two BYO supply options you've described impact customers that do**
16 **not participate in either of the options?**

17 A: Both the sleeved PPA option and the expanded Customer-Connected Solar Program option
18 can be designed so they would not have any impact on nonparticipating customers. In a
19 sleeved PPA, the cost structure can be designed so that the customer pays the full cost of
20 the dedicated resource in exchange for its financial and environmental benefits based on
21 the resource's actual energy production. The customer also pays reasonable costs to
22 Georgia Power for administering the sleeved PPA and delivering the energy to them.

1 Nonparticipating customers would not be responsible for any costs associated with this
2 option, but they would benefit because the dedicated resource represents avoided capacity
3 that Georgia Power does not need to procure.

4 Similarly, in the Customer-Connected Solar Program, each participating customer
5 pays for the full cost of the solar facility located on or adjacent to their property while
6 Georgia Power purchases the electricity at an avoided cost rate approved by the
7 Commission. The avoided cost purchase rate ensures that Georgia Power does not pay
8 more for the customer's solar production than it would pay for electricity from other
9 sources.

10 Similarly, if BESS were incorporated or required for either of the BYO supply
11 options, the programs could be designed to ensure that Georgia Power does not pay more
12 than it would otherwise pay for the capacity value of these resources. Because customers
13 pay for the cost of the BYO supply resources in both the offsite and onsite options I have
14 described, nonparticipating customers will benefit.

15 **Q: Please summarize your recommendations with respect to the BYO clean supply**
16 **options.**

17 A: The Commission should direct Georgia Power to empower customers to contribute to
18 meeting its urgent supply need through the two BYO clean supply options I have described.
19 Specifically, the Commission should direct Georgia Power to:

- 20 • Create a "sleeved PPA" option that allows customers to identify and contract
21 for a dedicated clean energy project through Georgia Power;

- 1 • Remove the program capacity and system size limitations in the Customer-
2 Connected Solar Program.

3 **V. CUSTOMER-SITED DER PROGRAMS**

4 **Q: What will you address in this section of your testimony?**

5 A: In this section of my testimony, I will address Georgia Power’s proposed DER Colocation
6 Program (DCL-1) and DER Customer-Owned Program (DCO-1).

7 **Q: What has Georgia Power proposed for the DER Colocation Program?**

8 A: Georgia Power has proposed to “own, operate, maintain, and control dispatchable DER
9 [distributed energy resources] at customer premises”¹³ Georgia Power defines eligible
10 DERs as natural gas generators, diesel generators, and “other technologies with firm fuel
11 supply.”¹⁴

12 **Q: What has Georgia Power proposed for the DER Customer-Owned Program?**

13 A: Georgia Power has proposed to “operate and control customer-owned, new dispatchable
14 DER at customer premises and economically dispatch the resources to provide energy and
15 capacity benefits to all customers.”¹⁵

16 **Q: Do you have any concerns with these proposals?**

17 A: I do not have any concerns with the basic structure of these programs, which will support
18 the deployment of onsite resources that can be used for both resiliency (backup) purposes
19 and contribute to meeting Georgia Power’s capacity needs. However, I am concerned that
20 Georgia Power’s proposal to limit these programs to fossil fuel resources will discourage

¹³ 2023 IRP Update Main Document at 22.

¹⁴ *Id.*

¹⁵ *Id.*

1 participation in the programs and increase the emission intensity of Georgia Power's
2 supply mix.

3 **Q: Please elaborate.**

4 A: I expect many C&I customers would be interested in participating in one of these DER
5 programs if they could do so with onsite clean energy resources like solar paired with
6 BESS. As I have explained, many large customers have clean energy requirements and are
7 looking for opportunities to invest in clean energy resources. Many of these same
8 customers also have reliability needs and are willing to invest in resources that can provide
9 backup power in the event of an outage. Programs that provide two value streams – backup
10 power and economic dispatch – can be a cost-effective way for customers to make progress
11 on both their clean energy requirements and their reliability needs. Simply put, if Georgia
12 Power allowed clean energy resources paired with BESS to participate in its two DER
13 programs, I expect more customers would want to participate.

14 **Q: Can clean energy resources paired with BESS provide comparable value in the DER
15 programs Georgia Power has proposed as fossil fuel resources?**

16 A: Yes. While batteries must be charged before they can serve as dispatchable resources,
17 batteries with four-hour duration can provide effective backup power for most outages and
18 can provide crucial dispatchable capacity value that contributes to Georgia Power's current
19 capacity needs.

1 **Q: What do you recommend?**

2 A: I recommend that the Commission direct Georgia Power to allow BESS paired with clean
3 energy resources to participate in both the DER Colocation Program and the DER
4 Customer-Owned Program.

5 **VI. Conclusion and Recommendations.**

6 **Q: Please summarize your recommendations to the Commission.**

7 A: I recommend that the Commission:

- 8 1. Keep commercial, industrial, and institutional customers' clean energy requirements in
9 mind as it evaluates Georgia Power's proposals in this proceeding.
- 10 2. Direct Georgia Power to create a "sleeved PPA" option that allows customers to
11 identify and contract for dedicated clean energy projects through Georgia Power.
- 12 3. Direct Georgia Power to remove the program capacity and system size limitations in
13 the Customer-Connected Solar Program.
- 14 4. Direct Georgia Power to allow clean energy resources paired with BESS to participate
15 in both the DER Colocation Program and the DER Customer-Owned Program.
- 16 5. Adopt the recommendations of CEBA witness Mr. Ronald Lehr.

17 **Q: Does this conclude your testimony at this time?**

18 A: Yes.