

May 2, 2025

Ms. Sallie Tanner Executive Secretary Georgia Public Service Commission 244 Washington Street S.W. Atlanta, Georgia 30334

Re: Georgia Solar Energy Association ("GA Solar") Expert Witness Testimony for 2025 Integrated Resource Plan Update Docket No. 56002

Dear. Ms. Tanner,

Enclosed for filing on behalf of the Georgia Solar Energy Association, please find the direct testimony of Olivia Amyette, Daniel Pertwee, and Adam Hoyt regarding the above referenced.

Sincerely,

Don Moreland

Georgia Solar Energy Association

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STATE OF GEORGIA

BEFORE THE GEORGIA PUBLIC SERVICE COMMISSION

In Re: Georgia Power)	
Company's 2025)	Docket No. 56002
Integrated Resource Plan)	

DIRECT TESTIMONY OF

OLIVIA AMYETTE, DANIEL PERTWEE, and ADAM HOYT

IN SUPPORT OF GEORGIA SOLAR ENERGY ASSOCIATION ("GA SOLAR")

MAY 2, 2025

DIRECT TESTIMONY OF

OLIVIA AMYETTE, DANIEL PERTWEE, and ADAM HOYT IN SUPPORT OF GEORGIA SOLAR ENERGY ASSOCIATION ("GA SOLAR") 2025 INTEGRATED RESOURCE PLAN DOCKET NO. 56002

1	I. <u>INTRODUCTION</u>
2	
3 Q.	PLEASE STATE YOUR NAMES, TITLES, AND BUSINESS ADDRESSES
4	
5 A:	My name is Olivia Amyette. I am the Founder and CEO of Infinite Energy Advisors and
6	the Solar Knowledge Institute. My business address is 82 Enterprise Lane, Cleveland,
7	GA 30528.
8	
9 A:	My name is Daniel Pertwee. I am a Senior Policy Manager at Palmetto Solar, LLC. My
10	business address is 1616 Camden Rd #300, Charlotte, NC 28203.
11	
12 A:	My name is Adam Hoyt. I am the Design & Consultation Manager for Alternative
13	Energy Southeast. My business address is 160 Collins Industrial Blvd, Athens GA 30601.
14	
15 Q:	MS. AMYETTE, PLEASE SUMMARIZE YOUR EDUCATION AND
16	PROFESSIONAL EXPERIENCE.
17 A.	I earned a Bachelor of Science degree in Computer Science from the Georgia Institute of
18	Technology in December 2020. Since completing my degree, I have pursued ongoing
19	professional development in the solar energy field, including coursework through
20	Georgia Tech's Professional Education Pilot, most notably the Advanced Photovoltaics
21	and Energy Storage Systems course, as well as a range of other industry-specific training
22	Pilots.

company, which operates under the name Infinite Energy Advisors. I began in solar sales and, over time, expanded my expertise to establish Infinite Energy Advisors as a full-service EPC (engineering, procurement, and construction) firm. Today, we provide comprehensive solar services, including system design, equipment procurement and distribution, solar and energy storage installations, and ongoing operations and maintenance for residential and commercial clients. Our early growth was driven largely by our success in resolving installation issues left by other contractors; an effort that

earned us a strong reputation for integrity and technical excellence.

Immediately following graduation, I entered the solar industry by founding my first

Because we position ourselves as ethical energy advisors rather than a traditional solar sales company, both my team and I have become recognized as leaders in Georgia's solar industry, particularly for our strong emphasis on consumer protection and ethical business practices. To date, Infinite Energy Advisors has been recognized as award winners in "Best of Gwinnett" and "Best of Georgia," among other accolades.

As founder and CEO of Infinite Energy Advisors, I am actively involved in every aspect of the company's operations, from strategic planning to workforce development, often wearing multiple hats, as many small business owners do. I was the main film subject in the "Clean Economy NOW" documentary film produced by Roger Sorkin which premiered at the DC Environmental Film Festival (2025), and sit on the board of the Georgia Solar Energy Association, the Southern Sustainability Institute, and the Solar Knowledge Institute of Educational Services. I also serve as the Southeastern Chapter Director of E2, and hold memberships in major industry organizations.

In response to the widespread knowledge gaps I observed in the industry, I also founded the Solar Knowledge Institute, a solar training school dedicated to equipping individuals

with practical, hands-on skills in areas such as ethical solar sales and solar installation. 1 Our flagship offering is a U.S. Department of Labor registered apprenticeship program 2 focused on solar construction. As CEO of the Solar Knowledge Institute, I oversee curriculum development, design educational pathways, evaluate learning technologies, and lead recruitment efforts for both students and solar professionals. 5 ON WHOSE BEHALF ARE YOU TESTIFYING? 0: I am submitting testimony on behalf of the Georgia Solar Energy Association ("GA A. 7 Solar"). 8 O. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY BEFORE THE GEORGIA PUBLIC SERVICE COMMISSION? 10 Α. No, I have not. 11 12 MR. PERTWEE, PLEASE SUMMARIZE YOUR EDUCATION AND 13 Q: PROFESSIONAL EXPERIENCE. 14 15 I graduated from Florida State University with a Bachelor of Science in Environmental 16 A: Science in 2017 and am currently pursuing a Master of Science in Energy Policy & 17 Climate through the Krieger School of Arts & Sciences at John Hopkins University in 18 Washington D.C. 19 I began my professional career in the rooftop solar industry in 2017 working on sales and 20 21 business development across the southeast, including Georgia, Florida and the Carolinas for a national, residential solar developer. In 2018, I joined Palmetto Solar, LLC, a 22 regional, residential solar installer based in Charleston, South Carolina, as a Policy 23 Analyst. I focused on policy efforts in State legislatures and regulatory proceedings at 24 25 Public Service Commissions in states throughout the east coast on issues related to net

26

energy metering, general rate cases and rate design, renewable portfolio standards and

1	REC compliance, incentives programs and interconnection. Throughout my time at
2	Palmetto, my core responsibilities have remained focused on state legislation and
3	regulation but have also included strategic market expansion efforts, evaluation and
4	integration of solar and energy storage programs and pilots and State compliance and
5	consumer protections. In 2019, I joined the Georgia Solar Association ("GA Solar")
6	Policy Committee and have supported their work related to monthly netting in the
7	Company's 2019 and 2022 Rate Cases and on efforts to develop a BYOD- style energy
8	storage program in the Company's 2023 IRP. In my current role, I lead Palmetto's state
9	policy and regulatory strategy across the U.S.

10 Q: ON WHOSE BEHALF ARE YOU TESTIFYING?

11 A. I am submitting testimony on behalf of the Georgia Solar Energy Association ("GA Solar").

13 Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY BEFORE THE GEORGIA PUBLIC SERVICE COMMISSION?

15 A. No, I have not.

16

17 Q: MR. HOYT, PLEASE SUMMARIZE YOUR EDUCATION AND PROFESSIONAL

- **EXPERIENCE.**
- 19 A: I graduated from the University of South Carolina with a Bachelor of Science in Marine
- Science in 1997, and a Masters of Divinity from McAfee School of Theology at Mercer
- University in Atlanta in 2006. In 2024, I earned the Photovoltaics Technical Sales
- certification from North American Board of Certified Energy Practitioners (NABCEP).
- After a career in humanitarian and religious work, I re-entered the sustainability field in
- 2014. I worked in sales and sales management at Tesla in Atlanta until 2017, educating
- customers about electric vehicles, charging rates, battery capacities, the difference
- between kilowatts and kilowatt-hours. In 2018, I joined Alternative Energy Southeast,

1	briefly on the install team to learn the basics of behind-the-meter solar installation before
2	joining the sales consulting team. I am responsible for overseeing our sales and
3	marketing activities for both our residential and commercial/industrial channels, as well
4	as working directly with my own cadre of clients to develop solar and energy storage
5	solutions.

6 Q: ON WHOSE BEHALF ARE YOU TESTIFYING?

7 A. I am submitting testimony on behalf of the Georgia Solar Energy Association ("GA
 8 Solar").

9 Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY BEFORE THE GEORGIA PUBLIC SERVICE COMMISSION?

11 A. No, I have not.

12

13

14

II. <u>DIRECT TESTIMONY OF OLIVIA AMYETTE</u>

15 Q. PLEASE SUMMARIZE THE PURPOSE OF YOUR TESTIMONY AND HOW IT 16 IS ORGANIZED.

- 17 A. The purpose of my testimony is to express concerns with, and offer recommendations 18 for, the Company-Directed and Customer-Directed pathways within Georgia Power's 19 proposed Solar Plus Storage Pilot ("Pilot") in the 2025 Integrated Resource Plan (IRP).
- These recommendations are informed by my direct field experience and the research I have conducted while serving in leadership and board roles within various solar industry organizations. My goal is to ensure that the Pilot is structured in a way that aligns with Georgia Power's stated commitment to customer satisfaction, while also fostering an environment where companies like mine can provide consumers with honest, ethical, and well-informed guidance regarding their participation in these Pilots. My goal is to

1	build upon the foundations of these Pilots, enabling companies like mine to educate
2	consumers effectively and offer these Pilots with confidence, knowing they strike the
3	right balance between providing the best solution for our clients and aligning with the
4	broader objectives of Georgia Power.
5	My testimony is organized as follows:
6	1. Introduction, Background, and Qualifications – A summary of my education,
7	professional experience, and my motivation behind providing this testimony.
8	2. Concerns with the Proposed Pilot Design – An overview of key issues
9	identified in the current structure of the Company-Directed and
10	Customer-Directed pathways.
11	3. Recommendations for Improvement – Specific recommendations to enhance
12	Pilot design, accessibility, and customer value.
13	4. Conclusion – Final remarks summarizing the importance of aligning the Pilot
14	with consumer needs and ethical industry standards.
15 Q.	PLEASE SUMMARIZE YOUR RECOMMENDATIONS TO THE
16	COMMISSION.
17	
18 A.	I recommend the Company incorporate or the Commission direct the Company to
19	incorporate the following into the Pilot as a condition of Pilot approval:
20	
21	1. Increase Pilot capacity to 100 MW, and dynamically allocate capacity between
22	Company-Directed and Customer-Directed pathways based on demand to ensure
23	broad participation, thereby replacing the split target participation per Pilot
24	channel.
25	2. Raise residential system size limits to 25kW to better accommodate the growing
26	energy needs of modern households, and separate the solar system size from
27	battery discharge eligibility to allow for greater flexibility.

1	3. Enhance transparency and reporting by implementing a real-time, publicly
2	accessible dashboard with monthly updates to track remaining Pilot capacity,
3	application statuses, and key participation metrics, enabling stakeholders to make
4	informed, data-driven decisions.
5	4. Establish a transparent and publicly available framework of consumer protection
6	measures to ensure participants clearly understand the risks, responsibilities, and
7	benefits of enrolling.
8	5. Establish a procedural mechanism to reassess Pilot capacity prior to the next IRP.
9	
10 Q.	WHAT IS THE PROPOSED PILOT PROGRAM?
11	
12 A.	The proposed Solar + Storage Pilot Program is a limited-scale initiative designed to
13	assess the value of customer-sited solar energy systems paired with battery storage in
14	enhancing grid reliability, resiliency, and customer participation. The Pilot allocates 25
15	MW of capacity (for a total Pilot participation target of 50 MW) across two participation
16	pathways: the Company Directed and Customer Directed models.
17	
18	In the Company Directed option, Georgia Power will manage the dispatch of the battery
19	system during grid events, and participants will receive a one-time upfront incentive of
20	\$750 per kilowatt of eligible battery capacity, or \$1,000 per kilowatt for low- to
21	moderate-income (LMI) or municipal, university, school, and hospital (MUSH)
22	customers.
23	
24	In the Customer Directed pathway, customers retain control of their storage systems and
25	voluntarily respond to utility-called events, earning an annual enrollment incentive of \$15
26	per kilowatt (\$45 for LMI/MUSH customers) and a performance-based incentive of \$1.50
27	per kilowatt-hour discharged.
28	

1	Both participation models are subject to prevailing interconnection standards and must
2	integrate with Georgia Power's Distributed Energy Resource Management System
3	(DERMS). The Pilot is intended to gather data on customer behavior, battery
4	performance, event responsiveness, and potential cost-shifting impacts, with the goal of
5	informing future Pilot design and broader DER integration across Georgia Power's
6	service territory.
7	
8 Q.	DO YOU ANTICIPATE RAPID ENROLLMENT IN THE SOLAR + STORAGE
9	PILOT PROGRAM?
10	
11 A.	Not exactly as it is proposed, though rapid enrollment is very likely if the
12	recommendations suggested in this testimonial come into fruition. Based on my direct
13	experience serving both residential and commercial solar customers, and after thoroughly
14	reviewing the structure of the proposed Pilot, I do not anticipate swift enrollment. The
15	Pilot introduces structural and economic barriers that can create uncertainty for
16	consumers, causing many to hesitate. Rather than rushing to enroll, most will likely adopt
17	a "wait and see" approach, holding off until others participate and prove that the Pilot
18	delivers real value, is financially beneficial, and is operationally clear. Without broader
19	consumer education, streamlined participation pathways, and stronger financial signals,
20	early adoption will be limited.
21	
22 Q.	LIST SUCH BARRIERS, AND INCLUDE EVIDENCE YOU HAVE FOR YOUR
23	CONJECTURE.
24	
25 A.	The proposed residential Pilot implements a system size cap that restricts participation
26	and consumer benefit. The 20 kW residential system size cap limits the ability for many
27	homeowners, especially those with existing solar systems or future electrification goals,
28	to fully benefit from storage integration. For example, modern homes with HVAC, EV

1	charging, and all-electric appliances often require systems between 15 – 25+ kW to meet
2	load demand and optimize battery performance. Many legacy solar customers with
3	AC-coupled systems (like Enphase) are immediately excluded from meaningful
4	participation due to sizing and configuration limitations. If a customer can only install 8.5
5	kW of solar to pair with a Powerwall 3 under the 20 kW cap, the customer's storage
6	system may be underutilized, limiting its value. New AC-coupled systems aren't exempt
7	from this issue either. Enphase, which holds a significant share of the residential solar
8	market, uses AC-coupled architecture by default. That means this limitation doesn't just
9	impact legacy solar customers. Instead, it also applies to new Enphase systems being
10	installed today. Under the current 20 kW cap, even a customer investing in a brand-new,
11	state-of-the-art solar and storage setup may be forced to install less solar than their
12	Powerwall 3 could support. This leads to underutilized storage capacity and reduced
13	value for both the customer and the grid.
14	
15	According to , the top drivers for residential battery adoption are:
16	A. Resilience and backup power ¹
17	B. Time-of-use rate arbitrage, and ²
18	C. Energy independence and bill control ³ .
19	
20	The current Pilot limits those benefits by placing customers in structures where they
21	either lose control of their battery (Company Directed) or receive modest financial
22	compensation for grid support (Customer Directed).
23	
24	Commercial systems are capped at 250 kW and must be no more than 125% of historical
25	peak load. However, commercial customers often invest in solar-plus-storage to

Aurora Solar, <u>Solar Storage and Home Batteries: What's Driving People to Buy?</u>
 Schneider Electric, <u>The Rise of BESS: Powering the Future of Data Centers</u>
 Panasonic, <u>Why are Home Batteries Becoming so Popular?</u>

Direct Testimony of Daniel Pertwee, Adam Hoyt, and Olivia Amyette on behalf of Georgia Solar Energy Association ("GA Solar") Docket No. 56002

2	such forward-thinking installations from qualifying.
3	
4	Commercial projects often involve multi-month planning, board approvals, and capital
5	budgeting. Without certainty around available capacity or incentive continuity, many
6	commercial clients may delay participation or avoid the Pilot entirely.
7	
8	A reported released by NREL4 indicates that the top motivations for commercial storage
9	adoption are:
10	A. Demand charge reduction
11	B. Resiliency for operations, and
12	C. Participation in wholesale or peak-shaving Pilots.
13	The current Pilot structure does not clearly offer demand charge offsets or dynamic
14	pricing participation, which reduces the perceived value proposition for commercial
15	customers.
16	
17 Q.	DO YOU HAVE ANY RECOMMENDATIONS THAT MAY IMPROVE THE
18	PILOT?
19	
20 A.	Yes, I do.
21	
22 Q.	WHAT ARE THOSE RECOMMENDATIONS?
23	
24 A.	For the residential Pilot, my recommendations to encourage broader and faster
25	participation are as follows:
26	1. Increase the residential system size limit to at least 25 kW,

anticipate future expansion, electrification, or fleet charging needs. This cap may prevent

1

⁴ NREL, <u>Utility Programs Supporting Customer-Sited Battery Storage: Program Design to Ensure Mutual Benefits</u>

1	2. Allow legacy and AC-coupled systems to participate with clear technical
2	guidance.
3	3. Allow energy curtailment, giving consumers the option to choose a
4	battery-agnostic inverter, thereby raising the efficacy and appeal of the existing
5	Pilot structure.
6	
7	For the commercial Pilot my recommendations to encourage broader and faster
8	participation are in line with the recommendation(s) within the testimony given by Daniel
9	Pertwee. Additionally, my recommendation is to raise the target participation from
10	50MW to 100MW.
11	
12	Without these adjustments, the Pilot risks underperforming, not due to lack of interest in
13	solar and storage, but because the structure does not reflect how real-world customers
14	make clean energy investment decisions.
15	
16 Q.	WHAT IS THE BENEFIT, TO BOTH PARTIES, OF RAISING THE TARGET
17	PARTICIPATION TO 100 MW?
18	
19 A.	Raising the target participation of Georgia Power's Solar Plus Storage Pilot Program
20	from 50 MW to 100 MW would provide significant benefits to both customers,
21	residential and commercial, and to Georgia Power itself.
22	
23	For customers, expanding the cap would open the door to greater access, especially for
24	those with existing solar systems, higher energy loads, or plans for future electrification.
25	The current 50 MW participation target, split between Company Directed and Customer
26	
20	Directed pathways, could be quickly consumed by a relatively small number of
27	Directed pathways, could be quickly consumed by a relatively small number of commercial installations, leaving limited room for residential participation. Increasing the

1	would allow more households and businesses to take advantage of the Pilot's incentives
2	and achieve greater energy independence through storage.
3	
4	From the residential customer's perspective, energy storage is increasingly valued for
5	resilience, backup power, and protection against outages. As previously mentioned, the
6	top drivers for residential battery adoption are resilience, self-sufficiency, and utility bill
7	savings. However, under the current system size and incentive structure, many customers,
8	especially those with AC-coupled systems or larger homes, may not be able to fully
9	utilize their battery systems within the Pilot's limitations. Expanding capacity not only
10	increases access but allows room to improve Pilot design so customers can realize the full
11	economic and functional benefits of solar-plus-storage.
12	
13	For commercial customers, energy storage is a strategic investment that supports demand
14	charge reduction, operational continuity, and load flexibility. Commercial battery
15	installations are driven by a need to control energy costs and enhance business resilience.
16	These customers typically engage in longer decision-making cycles and require
17	confidence in Pilot stability and availability before committing. A larger Pilot capacity
18	would send a clear signal to the market, encouraging greater commercial participation
19	and allowing businesses to align energy investments with long-term infrastructure
20	planning.
21	
22 Q:	ARE THERE ANY OTHER BENEFITS TO EXPANDING THE PILOT TO 100
23	MW OF TARGET CAPACITY?
24	
25 A:	Yes, Georgia Power also benefits from expanding the Pilot to 100 MW. Distributed
26	storage supports grid reliability, peak demand reduction, and enhances the integration of
27	renewable energy resources. The 2025 IRP explicitly calls for the addition of up to 1,000
28	MW of battery storage by 2027, acknowledging the role of BESS in managing seasonal

1	capacity needs and grid balancing. A larger Pilot would generate a more diverse and
2	valuable dataset, giving Georgia Power a more complete understanding of distributed
3	energy behavior across customer classes. This data is essential for optimizing future
4	Pilots, refining DERMS integration, and ensuring cost-effective grid planning.
5	
6 Q.	HOW COULD INCREASING THE RESIDENTIAL SYSTEM SIZE LIMIT TO AT
7	LEAST 25 KW ENSURE HOMEOWNERS CAN FULLY REALIZE THE
8	BENEFITS OF SOLAR-PLUS-STORAGE SYSTEMS AND MEET MODERN
9	ENERGY DEMANDS?
10	
11 A.	Increasing the residential system size limit from 20 kW to at least 25 kW would
12	significantly enhance homeowners' ability to fully realize the benefits of
13	solar-plus-storage systems, especially given the growing prevalence of AC-coupled
14	configurations in the market.
15	
16	In AC-coupled systems, the solar photovoltaic (PV) array and battery storage operate
17	through separate inverters, with energy conversions occurring between direct current
18	(DC) and alternating current (AC). This setup is particularly advantageous for retrofitting
19	existing solar installations with battery storage, as it allows for greater flexibility and
20	compatibility with various equipment brands. However, each component's capacity
21	contributes to the total system size, which is subject to regulatory limits.
22	
23	Consider a homeowner with a 10 kW AC Enphase solar system. Under a 20 kW system
24	size limit, they could add up to 10 kW of battery capacity. If they opt for Enphase IQ
25	Battery 5P units, each providing 3.84 kW of power, they could install two units, totaling
26	7.68 kW. This configuration would leave 2.32 kW of unused capacity under the limit,
27	potentially restricting the homeowner from achieving desired backup power levels or

1	maximizing self-consumption. By increasing the limit to 25 kW, the homeowner could
2	install additional battery capacity, enhancing energy resilience and potential cost savings
3	
4	Similarly, a homeowner with a 10 kW DC solar array considering the addition of a Tesla
5	Powerwall 3, which has a continuous power output of 11.5 kW, would face limitations
6	under a 20 kW cap. The combined system would total 21.5 kW, exceeding the limit.
7	Raising the cap to 25 kW would accommodate this configuration, allowing the
8	homeowner to benefit from increased storage capacity and enhanced energy
9	independence.
10	
11	The choice between AC and DC coupling often depends on specific project requirements
12	AC-coupled systems are generally favored for retrofitting existing solar installations due
13	to their flexibility and ease of integration, while DC-coupled systems are typically more
14	efficient for new installations . Given the substantial number of existing solar
15	installations, the demand for AC-coupled battery additions is significant. Therefore,
16	policies that accommodate the combined capacity of AC-coupled systems are essential to
17	meet homeowner needs and encourage broader adoption of energy storage solutions.
18	
19	Another critical improvement to the Pilot would be the allowance for energy curtailment
20	flexibility, particularly for customers seeking to enroll with hybrid solar-plus-storage
21	systems, whether they already have existing solar or are installing a system for the first
22	time. As a solar EPC headquartered in a rural Georgia town, a substantial portion of my
23	customer base chooses to install solar and battery storage together, rather than solar
24	alone. For these customers, our top recommendation for hybrid solar installations is the
25	Sol-Ark 15K hybrid inverter, which has become increasingly popular due to its power
26	capacity, built-in battery support, and whole-home backup capabilities.
27	

1	The Sol-Ark 15K inverter is capable of delivering up to 15 kW of continuous AC output
2	power and supports 200A grid passthrough, making it uniquely suited for homes with
3	high electrical loads. It includes three MPPTs, allowing for flexible solar array design,
4	and is battery agnostic, meaning customers can pair it with a wide variety of battery
5	chemistries, including lithium-ion, LFP, and AGM. This provides long-term flexibility
6	and affordability, especially for homeowners who may want to add batteries
7	incrementally over time.
8	
9	However, under Georgia Power's current 10 kW AC size limit (and even under the
10	proposed 20 kW limit), these systems face significant constraints. The Sol-Ark 15K
11	inverter alone already exceeds the existing 10kW AC limit under the RNR program(s),
12	even before batteries are considered. For example, a homeowner using the Sol-Ark 15K
13	with a modest 10 kW PV array and a \sim 10 kWh battery bank (e.g., 2 \times EG4 5.12kWh)
14	could easily exceed the combined capacity limit due to how the utility counts both solar
15	and storage in the total system size.
16	
17	This unnecessarily restricts homeowners from investing in higher-capacity hybrid
18	systems that are designed to serve whole-home backup needs and reduce grid reliance
19	during peak times. Worse still, if these limits are enforced rigidly, many rural or
20	resilience-driven consumers will be unable to justify battery investments that provide the
21	kind of payback or protection they need. A small battery bank sized to squeeze within the
22	current cap might not deliver adequate power duration or load coverage to make the
23	investment worthwhile.
24	
25	To address this, I propose that Georgia Power incorporate a provision for energy
26	curtailment within the residential size limitation policy. Specifically, homeowners should
27	be allowed to install higher-capacity hybrid inverters, such as the Sol-Ark 15K, but limit

1	the actual energy export or conversion output through inverter-level settings to stay
2	within their allowed export or grid-interactive capacity.
3	
4	This approach is already supported by inverter technology and is commonly used in
5	programs across California, Hawaii, and Vermont. It provides the flexibility needed to
6	accommodate real-world system configurations (especially AC-coupled solutions)
7	without sacrificing fairness or grid reliability. It also helps bridge the policy gap between
8	nameplate capacity and usable output, which are not the same in practice.
9	
10	Ultimately, offering an energy curtailment pathway allows Georgia Power to maintain
11	program oversight while enabling customers to install future-ready systems that support
12	grid resiliency, economic empowerment, and energy equity. It also reduces soft costs by
13	minimizing the need to redesign or downsize systems to fit within outdated limits that
14	don't reflect current market technology.
15	
16 Q.	CAN YOU PROVIDE AN EXAMPLE OF THE PROPOSED REAL-TIME
17	ACCESSIBLE DASHBOARD?
18	
19 A.	Yes, I can. Transparency and urgency are critical drivers of Pilot enrollment. Consider
20	Rhode Island Energy's Battery Storage Program, which publicly displays enrollment
21	data, including remaining capacity, incentive tiers, and deadlines, on its program landing
22	page (Rhode Island Energy, 2024) ⁵ shown below.

⁵ Rhode Island Energy "Battery Program" <u>Landing Page</u>

2024-2026 Residential and Small Business Battery Program enrollment cap

Total enrollment capacity (devices)	Enrollment spaces available (as of 12/31/2024)
1,062	145

The 2024-2026 ConnectedSolutions Residential and Small Business Battery Program will accept enrollments until December 31, 2026, or until capacity is reached. Applications submitted after capacity is reached will be placed on a waiting list.

1 It's worth noting that Rhode Island Energy's landing page is organized into the following 2 key sections: 3 A. How the program works, B. Clear schedule of battery power deployment schedule, C. Frequently updated enrollment data report, D. Incentive breakdown, including information about LMI incentives, 7 E. Application instructions, and 8 F. Frequently asked questions 10 Rhode Island's model establishes a gold standard for program transparency, one that 11 Georgia Power should emulate in its Solar + Storage program dashboard. The Georgia 12 Public Service Commission should require this level of disclosure as a minimum viable 13 transparency standard for all distributed energy programs. 14 15 WHY DO YOU THINK THIS IS CRUCIAL FOR THE PILOT'S SUCCESS? 16 O. 17 Transparency and urgency are critical to the success of distributed energy resource (DER) 18 A. programs, especially Pilots like the proposed Georgia Power Solar + Storage Virtual 19 Power Plant (VPP). Without real-time insight into Pilot availability and structure, both 20 residential and commercial customers, as well as solar professionals, are left uncertain 21

about how and when to participate. That uncertainty undermines enrollment momentum, 1 discourages investment, and makes Pilot benefits inaccessible to all but the most 2 determined early adopters. Rhode Island Energy offers a compelling example of how transparency drives 5 participation. Their Battery Storage Program dashboard sets a gold standard for public communication, with a landing page that includes: 7 1. How the Pilot works, 8 2. Clear schedule of battery power deployment schedule, 3. Frequently updated enrollment data report, 10 4. Incentive breakdown, including information about LMI incentives, 11 5. Application instructions, and 12 6. Frequently asked questions 13 This format empowers both installers and customers to make informed decisions quickly, 14 and it builds trust in the Pilot's fairness and accessibility. By displaying how much 15 capacity is still available and how incentives are structured, Rhode Island creates a sense 16 of clarity and urgency, both of which are essential to avoid last-minute application 17 bottlenecks or underutilization of Pilot resources. 18 19 This level of dashboard transparency would be particularly valuable to Georgia Power. It 20 would support Georgia Power's own DERMS integration goals; The 2025 IRP 21 emphasizes the need for DERMS integration to improve grid visibility and operational 22 coordination. A public-facing dashboard provides a natural extension of that commitment 23 by offering stakeholders a "window into the grid" thereby enabling customers, 24 developers, and regulators to understand how DERs are participating and how the Pilot is 25 functioning in real time. 26

1	The dashboard also enables customers to have equitable access to incentives. Without
2	visibility into remaining capacity or enrollment status, LMI and rural customers, who
3	often rely on community-based outreach or longer funding timelines, are likely to miss
4	out. Public dashboards reduce information asymmetry and ensure that incentive access is
5	not limited to insiders or large commercial actors with direct utility relationships.
6	This proposed dashboard clearly aligns with Georgia Power's 2025 IRP Planning
7	Assumptions. The IRP repeatedly emphasizes the importance of customer engagement,
8	operational learnings, and data-driven Pilot evaluation. This proposed dashboard provides
9	a transparent, low-cost mechanism to support all three.
10	Lastly, implementing this kind of dashboard improves market confidence and
11	participation velocity. By making application status and Pilot availability visible, a
12	dashboard encourages timely participation and reduces "wait and see" behavior. This is
13	essential for Pilots like the Solar + Storage VPP, which risk underenrollment if customers
14	lack clear, trustworthy information about how and when to act.
15	Therefore, I strongly urge the Commission to require Georgia Power to implement a
16	public-facing dashboard modeled on the Rhode Island Energy standard as a minimum
17	viable transparency benchmark. It should include:
18	Real-time capacity tracking,
19	 Public event history and dispatch calendar,
20	 Clear incentive tiers and LMI bonus information,
21	 Installer application resources, and
22	• Regularly updated FAQs and Pilot documents.
23	In an environment where distributed energy adoption depends heavily on trust, clarity,
24	and timeliness, Georgia Power stands to gain significantly by embracing best practices
25	already proven in other states. A strong dashboard will both drive enrollment and build a

1	foundation of transparency and stakeholder alignment that will be essential as Georgia
2	expands its DER Pilots in future IRP cycles.
3	
4 Q.	WHAT SHOULD CONSUMER PROTECTION, AS IT RELATES TO THE
5	PILOT, LOOK LIKE?
6	
7 A.	Consumer protection must be a central consideration in Georgia Power's Solar + Storage
8	Pilot Program, especially given the Pilot's structure of long-term participation,
9	incentive-based compensation, and partial utility control over battery assets.
10	
11	As customers engage in this Pilot, often making significant investments in storage
12	equipment or entering multi-year agreements, the absence of clearly defined protections
13	could undermine both trust and participation. To ensure that customers are not left
14	vulnerable to confusion or unexpected consequences, we recommend that a
15	comprehensive consumer protection framework be embedded into Pilot design,
16	enrollment, and ongoing administration.
17	
18	At a minimum, customers should be provided with clear, timely communication about
19	demand response events. This includes explicit guidance on how they will be notified of
20	an upcoming event, how much advance notice they will receive, and through what
21	channels (e.g., text, email, app notification). These logistics are particularly important for
22	Customer Directed participants, who retain control over their battery systems and need
23	adequate time to plan and respond. Additionally, customers should have access to a
24	real-time portal or dashboard that shows performance history, event logs, and incentive
25	earnings to ensure transparency and engagement.
26	
27	We also urge Georgia Power to provide clear definitions of performance expectations,
28	including what constitutes a breach of agreement, how non-performance will be

1	evaluated, and whether there are penalties or clawbacks. For example, if customers miss
2	events or under-discharge during a call, will they simply forgo the \$1.50/kWh incentive,
3	or will they face additional consequences? For the Company directed program, who
4	would bear the penalty - the company, installer, or third-party financier? These questions
5	as it relates to the Company directed program, are unanswered in the current Pilot outline
6	and deserve formal clarification. Furthermore, the Pilot agreement should further explain
7	in a more defined fashion, how homeownership transitions, system ownership transfers,
8	or participant death will be handled. These situations are inevitable and must be
9	addressed within the Pilot's administrative structure.
10	
11	To address these concerns, we strongly recommend that Georgia Power publish a pro
12	forma agreement for public visibility that outlines all key terms and expectations. This
13	agreement should be easily accessible before enrollment and used to educate both
14	homeowners and solar contractors. In addition, a consumer disclosure form should be
15	included as part of the Pilot application process, summarizing critical terms in plain
16	language (e.g., incentive calculation, event participation rules, data use, potential
17	penalties). This form should be reviewed and signed by the customer to ensure informed
18	consent and minimize future disputes.
19	
20	Finally, I recommend the establishment of a clear and fair dispute resolution process,
21	including defined timelines for responses, the ability to appeal performance calculations,
22	and access to third-party mediation if necessary. Given the pilot nature of this program,
23	customers should be treated as active stakeholders, not just ratepayers or system assets.
24	
25	Transparent policies and a customer-focused experience will be essential to ensuring
26	long-term success and meaningful participation, especially among LMI households who
27	may be more vulnerable to financial risk.
28	

1	Considering the above, Georgia Power must clarify the following key areas: how
2	customers will be notified of events, how soon that notice will occur, through what
3	means, how performance will be evaluated, what constitutes a breach, what penalties (if
4	any) will be applied, who is responsible for penalties, and how the Pilot will address
5	changes in homeownership or death.
6	
7	Proactively addressing these concerns will strengthen the Pilot, ensure equity, and foster
8	greater confidence in the utility's clean energy roadmap.
9	
10 Q.	WHEN DO YOU RECOMMEND THE COMPANY SHOULD RE-ASSESS
11	PROGRAM CAPACITY?
12	
13 A.	I recommend that Georgia Power reassess the capacity of the Pilot once enrollment
14	reaches 50% of the total allocated megawatt (MW) capacity for each customer segment:
15	residential and commercial. This mid-point evaluation would provide a timely
16	opportunity to analyze participation trends, identify potential barriers, and make
17	necessary adjustments to ensure the Pilot's continued success and alignment with
18	customer needs.
19	
20	To enhance transparency and facilitate this reassessment, Georgia Power should
21	implement a public-facing dashboard on the Pilot's landing page. This dashboard should
22	display:
23	
24	A. Program Start Date: Clearly indicate when the Pilot commenced,
25	B. Current Enrollment Figures: Show the number of participants enrolled to date,
26	C. Achieved Capacity: Present the enrolled capacity as a percentage of the total MW
27	target for each customer segment,
28	D. Deadlines: Outline any upcoming deadlines, and

1	E. Application Instructions and FAQs: Provide clear guidance on how to apply and
2	address common questions.
3	Such transparency not only builds trust but also empowers potential participants to make
4	informed decisions promptly.
5	
6	This approach aligns with practices observed in other successful Pilots. For instance,
7	Rhode Island Energy's ConnectedSolutions Program ⁶ maintains a dashboard that displays
8	enrollment data, remaining capacity, and incentive tiers. This transparency has been
9	instrumental in driving participation and ensuring equitable access to Pilot benefits.
10	
11	Similarly, Green Mountain Power (GMP) in Vermont has demonstrated the importance of
12	responsive program management. In 2023, GMP requested and received approval to lift
13	enrollment caps on its Powerwall and Bring Your Own Device (BYOD) ⁷ program in
14	response to growing customer demand and the increasing frequency of severe weather
15	events. This proactive adjustment allowed more customers to benefit from home battery
16	backup power, enhancing grid resilience and customer satisfaction.
17	
18	By adopting a similar strategy, Georgia Power can ensure that its VPP Pilot Program
19	remains responsive to customer needs and market dynamics. A mid-point reassessment at
20	50% capacity, coupled with transparent communication, would position the Pilot for
21	sustained success and scalability.
22 Q.	DO YOU HAVE ANY CLOSING REMARKS?
23 A.	Yes; In closing, I want to express my sincere appreciation to both Georgia Power and the
24	Georgia Public Service Commission for the thoughtful development of this Pilot
25	program. The effort, coordination, and foresight it takes to bring a program like this to
	de Island Energy "Battery Program" <u>Landing Page</u> DD Program Details <u>Landing Page</u>

Direct Testimony of Daniel Pertwee, Adam Hoyt, and Olivia Amyette on behalf of Georgia Solar Energy Association ("GA Solar")

Docket No. 56002

1	life should not go unrecognized.
2	This Pilot represents an important and promising step toward broadening access to
3	distributed energy resources in our state, one that holds the potential to deliver significant
4	benefits not just to participants, but to the grid, the Company, and Georgia's clean energy
5	future as a whole.
6	I respectfully emphasize the importance of implementing the aforementioned
7	recommendations, which include:
8	1. Increase Pilot capacity to 100 MW, and dynamically allocate capacity between
9	Company-Directed and Customer-Directed pathways based on demand to ensure
10	broad participation, thereby replacing the split target participation per Pilot
11	channel.
12	2. Raise residential system size limits to 25kW to better accommodate the growing
13	energy needs of modern households, and separate the solar system size from
14	battery discharge eligibility to allow for greater flexibility.
15	3. Enhance transparency and reporting by implementing a real-time, publicly
16	accessible dashboard with monthly updates to track remaining Pilot capacity,
17	application statuses, and key participation metrics, enabling stakeholders to make
18	informed, data-driven decisions.
19	4. Establish a transparent and publicly available framework of consumer protection
20	measures to ensure participants clearly understand the risks, responsibilities, and
21	benefits of enrolling.
22	5. Establish a procedural mechanism to reassess Pilot capacity prior to the next IRP.
23	and for the Customer Directed program in particular,
24	1. Increase the residential system size limit to at least 25 kW.
25	2. Allow legacy and AC-coupled systems to participate with clear technical
26	guidance.

1		3. Allow energy curtailment, giving consumers the option to choose a
2		battery-agnostic inverter, thereby raising the efficacy and appeal of the
3		existing Pilot structure.
4		The recommendations I've put forth today come from a place of deep respect for that
5		work and from a sincere desire to see this Pilot succeed. They are grounded in my
6		responsibility to advocate for Georgia's energy consumers, many of whom are eager to
7		participate in programs like this, but face real barriers without intentional design
8		considerations. I believe that by implementing these proposed changes, Georgia Power
9		and the Commission can build on the solid foundation already in place to create a
10		program that is inclusive, flexible, transparent, and ultimately impactful.
11		Most importantly, these improvements will help ensure that the time, resources, and
12		leadership invested into this Pilot yield a lasting return: a model that can scale equitably,
13		function effectively, and reflect the values we all share; innovation, reliability, and access
14		for all.
15		Thank you again for your leadership, for inviting stakeholder engagement in this process.
16		and for considering these recommendations as part of your commitment to a more
17		resilient and participatory energy landscape in Georgia.
18	Q.	DOES THIS CONCLUDE YOUR TESTIMONY?
19	A.	Yes, it does.
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III. DIRECT TESTIMONY OF DANIEL PERTWEE

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2 Q. PLEASE SUMMARIZE THE PURPOSE OF YOUR TESTIMONY AND HOW IT IS ORGANIZED.

4 A. The purpose of this testimony is to provide recommendations on the Company Directed pathway of the Customer- Sited Solar Plus Storage Pilot ("Pilot") proposed in the 5 Georgia Power Company's ("the Company") 2025 Integrated Resource Plan. These 6 recommendations are intended to better align the design of the proposed Pilot with the 7 stated goals of the Company and are based on my direct experience supporting the 8 development of similar energy storage programs in other states and designing financial 9 10 products that are used by residential customers to access these technologies and programs. These recommendations should be incorporated into the proposed Pilot in this 11 12 IRP. My testimony is organized into the following sections:

13 Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS TO THE 14 COMMISSION.

- I recommend the Company incorporate or the Commission direct the Company to incorporate the following into the Company Directed pathway as a condition of pilot approval:
 - 1. Limit direct Company control of the BESS to a maximum number of annual events or hours,
 - 2. Remove the Company Directed restriction on participant's ability to grid-charge entirely and replace with a Company commitment to call on a device to grid-charge ahead of storms or anticipated outages only,
 - 3. Permit Company Directed participants to take service on energy- only rates including, rate "R" (Residential) and "GS" (Commercial), and,
 - 4. Require the Company to form a Working Group with industry

Direct Testimony of Daniel Pertwee, Adam Hoyt, and Olivia Amyette on behalf of Georgia Solar Energy Association ("GA Solar") Docket No. 56002

participation during the development of the Customer Agreement and 1 other Program documents. 2

WHAT IS THE PROPOSED CUSTOMER-SITED SOLAR PLUS STORAGE 3 Q. **PILOT PROGRAM?**

5 A. The Customer-Sited Solar Plus Storage Pilot is a proposal included in the Company's 2025 IRP in response to the Commission's Order Adopting Stipulated Agreement[1] in the 2023 IRP docket. As proposed, the Pilot targets 50MW of enrolled residential and 7 small commercial solar and storage which the Company can dispatch to meet system needs in exchange for participant compensation. The Company has proposed two participation pathways in the pilot referred to as the "Customer Directed" and "Company 10 Directed" options. 11

PLEASE DESCRIBE THE PROPOSED PARTICIPATION PATHWAYS. 12 O.

- Under the Customer Directed pathway, participants would be notified of utility- called 13 A. events, of up to four hours, which participants can choose to respond to by dispatching 14 their BESS in exchange for compensation. As proposed, the Company would provide an 15 16 annual enrollment payment to participants of \$15/kW and an annual performance payment of \$1.50/kWh. This pathway would be open to new or existing solar plus storage 17 systems or standalone storage. 18
- Under the Company Directed pathway, participants would enter a 10- year contract with 19 the Company which would allow the Company to directly monitor and control the BESS 20 over the term in exchange for a one-time, upfront payment of \$750/kW. This pathway 21 would only be available for newly installed systems and would have to be paired with 22
- solar. Systems in either pathway could be customer or third-party owned. 23

WHAT DID THE COMPANY STATE THEIR INTENTIONS WERE IN 24 O. 25 **DESIGNING THE PROPOSED PILOT?**

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- 2 A. The Company states it filed the Pilot pursuant to the 2023 IRP Update Order and it was
 3 designed to encourage additional customer- generator pairing of BESS with BTM solar,
 4 ensure participants receive sufficient incentive to install systems and participate in the
 5 program, enhance the economics of solar plus energy storage systems, encourage market
- 7 Q. DO YOU ANTICIPATE THE PILOT, AS PROPOSED, WILL BE ABLE TO ACHIEVE THE OUTCOMES THE COMPANY ENVISIONS?
- 9 A. No, I do not.

10 O. WHAT ARE YOUR CONCERNS WITH THE COMPANY'S PROPOSAL?

growth and support customer goals for clean energy and resiliency[2].

11 A. While the Company's stated intentions appear to be completely aligned with that of GA
12 Solar and its member companies, there are several issues with the proposed pilot that if
13 not addressed, may sideline investments from OEM's, developers, financiers and
14 customers that otherwise may have pursued Pilot participation. If, as anticipated, the
15 proposed pilot is not able to generate significant interest from potential participants, the
16 system, market and economic benefits the Company envisioned for the Pilot to produce
17 will be limited.

18 Q. WHAT "ISSUES" SPECIFICALLY ARE YOU REFERRING TO?

- 19 A. For the Company Directed pathway:
- First, the Company has elected not to set any limitations on the total number of control events or hours that participants' BESS can be called upon. In fact, the Company states this pathway will not be event driven, but rather continual control of these systems throughout the contract term[3]. Uncapped utility control of customer-sited and customer-funded BESS is inconsistent with most residential and small commercial

Direct Testimony of Daniel Pertwee, Adam Hoyt, and Olivia Amyette on behalf of Georgia Solar Energy Association ("GA Solar") Docket No. 56002 energy storage pilots and programs currently operating or being developed in the U.S. While there are a small minority of programs that require uncapped utility control of customer-sited systems, I am not aware of any programs that currently require uncapped control over a 10-year contract term. Without an event cap or a significantly reduced contract term, Company Directed participants are put in a net negative financial position: paying for a BESS they have no control over and will be almost exclusively used to maximize system benefits over a significant portion of its useful life.

Second, the Company has proposed to restrict grid charging even in the lead up to anticipated storms or grid outages.[4] This restriction is unnecessary and severely limits the resiliency capabilities of the BESS, which all non- participants with a BESS and Customer Directed participants would be able to enjoy. While a Company Directed participant would be eligible to use their BESS during a grid outage, the Company's restriction on their ability to grid charge leaves participants unable to prepare for anticipated outage events or replenish their batteries in the hours following evening discharge events. Additionally, the Company does not appear to include a commitment to withhold dispatch of the BESS ahead of storms or anticipated grid outages. Minimizing the resiliency benefits a participant can realize would handicap one of the key drivers of BESS adoption and result in depressed pilot participation and therefore system benefits from the pilot.

Third, restricting participants from energy-only rate options limits customer choice, creates unnecessary opportunity costs and complicates the pilot. Given, as proposed, participants would be unable to control their BESS across all hours, customer-facing price signals to encourage economic dispatch of the BESS are unnecessary. Participants would be at the discretion of the Company and their BESS reserves during all peak hours. Any load that is not coincident with a dispatch event during peak hours would result in higher on-bill charges than had they been permitted to utilize the energy-only rates available to all other bill payers. Educating participants on this dynamic of being required

invested in increases Program complexity and will likely depress enrollment. 2 Fourth, the Company has left critical pilot details to the Company Directed contract and 3 other program documents to be developed and finalized in Q1 2026 with their implementation partner[5]. Given these details will be paramount to the success of the 5 pilot and either have not yet been developed or disclosed, a Working Group should be established to facilitate stakeholder engagement between the Company and the OEM's, developers, financiers and potential participants interested in ensuring this pilot is able to realize the system, market and economic benefits the Company envisions. Please refer to the testimony of Witnesses Hoyt and Amyette for our concerns related to 10 the Customer Directed pathway. 11 DO YOU HAVE ANY RECOMMENDATIONS THAT MAY IMPROVE THE 12 0. **COMPANY DIRECTED PATHWAY?** 13 14 A. Yes, I do. 15 Q. WHAT ARE THOSE RECOMMENDATIONS? For the Company Directed pathway, I recommend the following: 16 A. Limit direct Company control of the BESS to a maximum number of events or 17 hours. 18 2. Remove the Company Directed restriction on participant's ability to grid-charge 19 and replace with a Company commitment to call on a device to grid-charge ahead 20 of storms or anticipated outages only, 21

to switch to a TOU or demand-based rate, while not being able to control the BESS they

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(Commercial), and,

3. Allow participants to take service on rate "R" (Residential) or "GS"

4. Require the Company to form a Working Group with industry participation during

the development of the Customer Agreement and other Program documents.

PLEASE EXPAND ON YOUR FIRST RECOMMENDATION RELATED TO 2 O. SETTING A MAXIMUM NUMBER OF EVENTS. 3

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As currently proposed, a participant in the Company Directed pathway would be accepting an upfront payment that would only cover a fraction of the total installed cost paid for by the participant, but must forfeit control of the BESS to the Company across all hours for a 10-year term. Participants enrolling in this option would likely experience a net economic loss; paying for a device that can only be controlled by the Company to maximize system benefits. Said another way, the Company would be purchasing 10years of control rights to the BESS for only a fraction of the installed cost subsidized by the enrolled participant. Establishing a maximum number of events or hours per year that the Company could control the BESS helps alleviate this concern by allowing the Company to access dispatchable capacity during the hours that maximize grid benefits most throughout the year, while still allowing the participant to operate the device they paid for during non- event hours.

16 Q. IS SETTING A MAXIMUM NUMBER OF EVENTS A COMMON FEATURE OF OTHER PROGRAMS AROUND THE COUNTRY? 17

Yes, it is. Five of the six utilities the Company looked to for insights[6], namely Duke 18 A. Energy, Green Mountain Power, Arizona Public Service, National Grid and Xcel Energy, have pilots or programs with a cap on the number of call events or hours. The only utility the Company looked at with an uncapped battery program is Rocky Mountain Power ("RMP"). RMP's Wattsmart program allows for complete utility control similar to the proposed Company Directed pathway proposed by the Company. However, RMP's Wattsmart program only requires a 4-year contract and offers an ongoing performance incentive for participants. This leaves participants with 5-7 years or more, of expected useful life for the BESS to be leveraged at the discretion of the participant. In contrast,

- the Company Directed pathway, as proposed, would require a 10-year contract which
- spans much of the useful life for many residential energy storage products on the market
- 3 today.
- 4 Additional utilities with a maximum number of events in a current or proposed pilot or
- program include: Eversource, Unitil, Rhode Island Energy, United Illuminating, Public
- 6 Service Electric & Gas, Southern California Edison, Pacific Gas & Electric, San Diego
- 7 Gas & Electric, Sacramento Municipal Utility District, Tucson Electric Power and Holy
- 8 Cross Energy.

9 Q. CAN YOU LIST THESE PROGRAMS AND THEIR MAXIMUM EVENT 10 REQUIREMENTS?

11 A. Yes, I can. Please see the table below:

Company	Program	Event Limitation
Xcel Energy (CO)	Proposed AVPP program	Max 100 annual events[7]
Public Service Electric & Gas	Battery Storage Rewards	Max 10 events May - Sept[8]
Arizona Public Service	Bring Your Own Device Pilot	Max 60 events May- Oct[9]
Green Mountain Power	Bring Your Own Device Program	Max 8 events per month[10]
National Grid, Eversource, Unitil, RI Energy	Connected Solutions	Max 60 events June - Sept[11]
Southern California Edison, San Diego Gas & Electric, Pacific Gas & Electric	Demand Side Grid Support, Option 3	Max 35 events May- Oct[12]

Tucson Electric Power	Energy Storage Rewards	Max 100 events per year[13]
Eversource (CT), United Illuminating	Energy Storage Solutions	Max 60 events June – Sept (Active) or only non- holiday weekdays June – Aug (Passive)[14]
Sacramento Municipal Utility District	My Energy Optimizer Partner+	Max 240 events per year[15]
Duke Energy (NC)	PowerPair, Battery Control (ie. Cohort B)	Max 18 winter events, 9 summer and 9 other (36 total per year)[16]
Holy Cross Energy	Power+Flex	Max 100 events annually[17]

1 Q. WHY DO YOU THINK THIS IS SUCH A COMMON PROGRAM FEATURE?

It is likely recognized or otherwise communicated through stakeholder engagement 2 A. processes that a participant spending their own private capital to deploy a BESS prefers to have, at least, occasional control during the device's useful life. While program terms can vary widely, all of the Programs above prioritize use of the BESS by the customer paying to deploy it but also extend the opportunity to provide System benefits (in exchange for compensation). In contrast, the Company Directed pathway would require participants to deploy the capital necessary to install a qualifying solar plus storage system and then forfeit all control over much of the useful life of the BESS to maximize system benefits. The design elements the Company has chosen would likely require a much more significant percentage of the installation cost to be covered by the Company to attract participation which would result in higher overall program costs.

DID THE COMPANY PROPOSE A MAXIMUM NUMBER OF EVENTS IN THE 13 Q. CUSTOMER DIRECTED PATHWAY? 14

15 A. No, they did not.

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1 Q. DID THE COMPANY STATE WHY THEY DID NOT PROPOSE A MAXIMUM 2 NUMBER OF EVENTS IN THE CUSTOMER DIRECTED PATHWAY EITHER?

Yes, they did. When asked if the Company proposed including a maximum number of event hours per year the Company stated, "No, the Company does not propose having a maximum number of hours called during an annual period. Since customers have the option to opt out of events, there is no need to set caps on the number of hours called. This approach provides flexibility for customers and allows them to maximize potential value while also providing the Company the flexibility to effectively manage and respond to System needs as they arise[18]."

10 Q. BASED ON THIS LOGIC, WOULD YOU EXPECT THE COMPANY DIRECTED 11 PATHWAY TO INCLUDE A MAXIMUM NUMBER OF EVENTS?

Yes, I would. As proposed, Company Directed participants will have no ability to opt- out or override a Company call, therefore an upper bound on the total number of call events should be set for the same reasons the Company provided when asked about a maximum number of events in the Customer Directed pathway.

16 Q. WOULD YOU RECOMMEND CUSTOMERS ENROLL IN THE COMPANY 17 DIRECTED PATHWAY AS PROPOSED?

A. No, I would not. Unfortunately, as a provider of Third-Party Owner ("TPO") financing 18 through leases and PPA's, we would likely choose to restrict the enrolment of our systems 19 in the Company Directed option, as proposed. The BESS installation would increase our 20 customers' monthly payments without allowing them to have the opportunity to realize 21 commensurate benefits over much of the useful life of the BESS. Also, as discussed later 22 in my testimony, at this time we do not have critical details related to the eligibility, terms 23 and restrictions participants would need to comply with over the 10-year contract term. It 24 is currently unclear if stakeholders will have input on these critical program terms which 25

- may create currently unforeseen risks for OEM's, developers, financiers and participants,
- and steer additional investment away from this enrollment pathway.

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3 Q. PLEASE EXPAND ON YOUR SECOND RECOMMENDATION RELATED TO GRID CHARGING.

This recommendation is critical to ensure participants still have reasonable access to the resiliency benefits their BESS can provide in the lead up to and during dangerous heat, snow, storm and other weather- related events or times of grid outage. The Company did confirm that under both participation pathways, participants would have access to use of their BESS during times of grid outage[19]. However, as proposed, Company Directed participants would be restricted from grid charging even in the lead up to anticipated storms or other potential grid outage events. This leaves Company Directed participants with only the stored capacity available, if any, coincident with a grid outage event. In contrast, Customer Directed participants and non- participating BESS customers can realize the full resiliency benefits of their system by responding to and preparing for anticipated storms and potential outages by grid charging. Additionally, given the Company is best positioned to anticipate potential grid outage events, the Company should commit to grid-charging Company Directed systems in advance of expected storms or grid outages. Grid-charging calls from the Company should only be permitted ahead of these specified events to ensure participants have reasonable access to the resiliency benefits of the BESS. For these reasons, I recommend the Company remove the complete restriction on grid charging (allowing participants to grid-charge at their discretion) and commit to grid-charging Company Directed systems ahead of storms and expected grid outage events only.

24 Q. WHAT REASON DOES THE COMPANY PROVIDE FOR RESTRICTING GRID 25 CHARGING FOR COMPANY DIRECTED CUSTOMERS?

26 A. Company Witness Beppler stated that the Company elected to restrict grid charging for

- 1 Company Directed participants because they do not want to compel or force customers to
- use more electricity to charge the batteries. Witness Beppler went on to say this provides
- protections by ensuring customers are not required to purchase electricity to charge those
- 4 resources[20].

5 Q. DOES THE COMPANY ACKNOWLEDGE ANY DRAWBACKS OF THIS

- 6 PROGRAM REQUIREMENT?
- 7 A: Yes. Witness Beppler agreed when asked if requiring the BESS to be charged only by
- solar limits the amount of capacity devices could provide when called upon. Further,
- when asked if restricting grid charging, especially ahead of storms or expected grid
- outages, limits benefits for participants, Witness Beppler responded that charging only
- from solar possibly limits all the availability of the resource. Finally, Witness Beppler
- claimed that as the company learns more this is a program design element that they could
- look at[21].

14 Q. DO YOU AGREE WITH THE DRAWBACKS ACKNOWLEDGED BY THE

- 15 COMPANY?
- 16 A. Yes. I agree that restricting a Company Directed participants' ability to charge their
- device from the grid will likely limit the available capacity of the BESS to provide
- System benefits and resiliency to participants during grid outages.

19 Q. HOW DO YOU RESPOND TO THE COMPANY'S REASON FOR

- 20 RESTRICTING GRID CHARGING?
- 21 A. I generally agree with Witness Beppler that the Company should not be forcing
- customers to use more electricity to charge their devices. However, participants should
- 23 not be restricted from grid-charging at their discretion. This restriction severely limits one
- of the primary use cases for purchasing a BESS and would likely discourage enrollment
- in the Company Directed pathway. Further, given the Company is in the best position to

- anticipate potential grid outage events, the Company should commit to grid-charging participant systems ahead of anticipated outages. This will allow participants to maximize the resiliency benefits they receive from the BESS.
- 4 Q. DO YOU THINK PERMITTING GRID CHARGING, PARTICULARLY AHEAD
 5 OF STORMS OR POTENTIAL GRID OUTAGES, AT THE DISCRETION OF
 6 THE PARTICIPANT IS A PROGRAM DESIGN ELEMENT THAT THE
 7 COMPANY NEEDS TO LEARN MORE ABOUT BEFORE CONSIDERING A
 8 CHANGE TO THE PROPOSED PILOT?
- 9 A. No, I do not. The Company should agree to revise the Company Directed restriction on grid charging in this IRP before the launch of the pilot. The Company should remove the complete restriction on grid charging and replace it with a commitment that the Company will only call on the device to grid-charge ahead of storms or anticipated outages. This would provide participants with the protections cited by Witness Beppler without limiting a participant's ability to use their BESS to prepare for an expected grid outage or for other resiliency purposes.

16 Q. PLEASE EXPAND ON YOUR THIRD RECOMMENDATION RELATED TO 17 ELIGIBLE RATE SCHEDULES.

The recommendation to allow Company Directed participants to utilize rate "R" and 18 A. "GS" reduces opportunity costs for participants and simplifies this participation pathway. 19 20 The Company states that participants will be restricted from rate "R" and "GS" because "these energy-only rates do not provide an appropriate time-of-use ("TOU") or demand 21 signal to incentivize operation of the solar and battery resources to maximize System 22 benefit."[22] However, the Company also confirmed that Company Directed participants 23 cannot respond to TOU or demand price signals because the Company, not the 24 participant, would be in direct control of the BESS.[23] Given these participants are no 25 more able to respond to price signals than non-BESS customers, they should not be 26

restricted from the energy- only rates available to most other Company bill payers.

2 Q. HOW CAN THE CURRENT RATE RESTRICTION CREATE UNFAIR 3 OPPORTUNITY COSTS FOR COMPANY DIRECTED PARTICIPANTS?

A. Restricting Company Directed participants from energy- only rates is unfair because these participants would not have the ability to dispatch the BESS to mitigate peak rates or demand charges. These participants will be relying on continuous control decisions of the Company which may not always be in the best economic interest of a customer on a TOU or demand- based rate. Accordingly, these participants should have access to energy- only rates just as all non- participants do.

The opportunity cost arises for participants anytime the Company's operation of the BESS is not coincident with the optimal economic dispatch of the BESS for the participant. For example, a residential, Company Directed participant required to select a rate other than R could select TOU-OA-14 or TOU-REO-18. Both rate options currently have on peak rates roughly double that of rate R from 2-7pm during summer weekdays[24]. If the Company ever dispatches the BESS to meet System needs not exactly coincident with peak hours, or there is ever not enough stored capacity to meet their demand, participants will be subject to higher peak rates instead of lower, energy-only rates. In contrast, Customer Directed participants could economically dispatch their system during non- event hours and non- participating BESS customers can economically dispatch their system under energy- only, TOU or demand- based rate schedules.

However, should the Company adopt my first recommendation to limit Company control to a maximum number of events, restricting Company Directed participants from energy-only rates may be appropriate as these participants would then be able to directly respond to price signals during non- event hours.

25 O. HOW WOULD REMOVING THIS RESTRICTION SIMPLIFY THE COMPANY

DIRECTED OPTION?

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Allowing Company Directed customers to participate with a rate of their choosing, 2 A. including on their existing rate plan, removes the need for the Company to administer rate switches for hundreds or even a thousand or more participating customer accounts. Given these participants will be unable to respond to TOU or demand price signals with their BESS, the effort to rate switch these customer accounts is unnecessary. Further, this restriction adds unwarranted complexity to the pilot. Customers will already need to understand the RNR tariff and the terms of their installation, finance, interconnection and Company Directed agreements. This is already a significant amount of information and education that participants will be responsible for without having to also digest the concepts and implications of TOU or demand-based rates on their monthly bills. Lastly, developers will need to be able to easily communicate program terms, benefits and drawbacks and model potential impacts to customer bills to market the pilot to prospective participants. Requiring Company Directed customers to enroll in a TOU or demand-based rate while maintaining no control over the BESS significantly complicates program modeling and marketing. This added complexity increases the likelihood of creating poor customer experiences adding an additional element of risk for market participants.

PLEASE EXPAND ON YOUR FOURTH RECOMMENDATION RELATED TO 19 O. THE CUSTOMER AGREEMENT AND PROGRAM DOCUMENTS. 20

The recommendation to create a Working Group to provide stakeholder feedback on the 10- year Company Directed contract and other program documents before finalization will be important to maximizing the success of the Pilot. The contract and associated documents would include critical terms and conditions, including eligible technologies and configurations, minimum performance and communications requirements, claw back provisions and contract transferability or cancellation requirements among other things. The decisions the Company and its implementation partner make during this period

- would be consequential to the success of the Pilot and therefore should include the input of OEM's, developers, financiers, and potential Pilot participants.
- 3 Q. IS A WORKING GROUP NECESSARY?
- 4 A. I would recommend a Working Group with a minimum number of sessions be required to allow interested stakeholders the opportunity to provide input into pilot terms and requirements and comment on any draft materials prior to the Company Directed contract and associated documents being finalized. In the alternative, I would recommend the Commission set a date certain, no later than 90 days before the pilot launch date, by which the Company would be required to produce draft pilot documents for public comment.
- 11 Q. DO YOU HAVE ANY CLOSING REMARKS TO MAKE TO THE COMMISSION
 12 ON THE MATTERS THAT YOU HAVE ADDRESSED IN YOUR TESTIMONY?
- Yes. To summarize my testimony, in response to the Commission's Order Adopting
 Stipulated Agreement in the Company's 2023 IRP, the Company has filed a proposed
 Customer-Sited Solar Plus Storage Pilot in its 2025 IRP. The Company's stated
 intentions in developing the design of the pilot are aligned with that of GA Solar and its
 member companies, however I have identified issues that may limit participation and
 therefore the Company's ability to realize the system, participant and market benefits
 sought.
- I provided four recommendations to improve upon the proposed Company Directed pathway and request that these recommendations be implemented into a revised Company proposal or that the Commission direct the Company to include these recommendations in its final order in this proceeding.
- **Q4** O. DOES THIS CONCLUDE YOUR TESTIMONY?

1 A. Yes, it does.

2	
3	[1] https://psc.ga.gov/search/facts-document/?documentId=218484
4	[2] 2025 IRP Main Document, Docket No. 56002, p. 102-105 (January 2025).
5	[3] See STF-PIA-10-1.
6	[4] Georgia Power 2025 IRP, Georgia Public Service Commission, Docket No. 56002, March 27, 2025
7	Hearing at 05:11:00.
8	[5] See STF-PIA-12-18
9	[6] See STF-PIA-3-8
10	[7]
11	https://www.dora.state.co.us/pls/efi/efi.show document?p dms document id=1034925&p session id=
12	[8] https://www.psegliny.com/saveenergyandmoney/GreenEnergy/SolarEnergy/EnergyStorageRewards
13	[9] https://docket.images.azcc.gov/0000213209.pdf?i=1745885858577
14	[10] https://greenmountainpower.com/rebates-programs/home-energy-storage/bring-your-own-device/
15	[11] https://www.nationalgridus.com/MA-Home/Connected-Solutions/BatteryProgram
16	[12]
17	https://www.energy.ca.gov/publications/2024/demand-side-grid-support-dsgs-program-guidelines-fourth-e
18	dition
19	[13] https://www.tep.com/energy-storage-rewards/#program
20	[14]
21	https://energystoragect.com/wp-content/uploads/2025/01/ESS-Program-Manual-01172025-Clean-FINAL.
22	pdf
23	[15] https://www.smud.org/Going-Green/Battery-storage/Homeowner
24	[16] https://www.duke-energy.com/home/products/power-manager/battery-control
25	[17] https://www.holycross.com/member-programs/powerplus
26	[18] See STF-PIA-3-9.
27	[19] Direct Testimony of Dr. Ross Beppler, Carley Goff, A. Wilson Mallard, and Andy Phillips, Docket No
28	56002, at 40:7-8 (February 28, 2025).
29	[20] Georgia Power 2025 IRP, Georgia Public Service Commission, Docket No. 56002, March 27, 2025
30	Hearing at 05:11:00.
31	[21] Georgia Power 2025 IRP, Georgia Public Service Commission, Docket No. 56002, March 27, 2025
32	Hearing at 05:11:00.
33	[22] Direct Testimony of Dr. Ross Beppler, Carley Goff, A. Wilson Mallard, and Andy Phillips, Docket No
34	56002, at 40:14-16 (February 28, 2025).
35	[23] See STF-PIA-10-1.
36	[24] https://www.georgiapower.com/residential/billing-and-rate-plans/pricing-and-rate-plans.html
37	
38	IV. <u>DIRECT TESTIMONY OF ADAM HOYT</u>

Q. PLEASE SUMMARIZE THE PURPOSE OF YOUR TESTIMONY AND HOW IT IS ORGANIZED.

1 A.	The	purpose of this testimony is to provide recommendations on the Customer-Directed
2	path	way of the Customer- Sited Solar Plus Storage Pilot ("Pilot") proposed in the
3	Geo	rgia Power Company's ("the Company") 2025 Integrated Resource Plan. These
4	reco	mmendations are intended to better align the design of the proposed Pilot with the
5	state	ed goals of the Company and are based on my direct experience marketing, selling
6	and	designing solar plus storage products to residential and commercial customers
7	thro	ughout Georgia. These recommendations should be incorporated into the proposed
8	Pilot	t in this IRP.
9		
10 Q.	PLI	EASE SUMMARIZE YOUR RECOMMENDATIONS TO THE
11	CO	MMISSION.
12		
13 A.	I re	commend the Company incorporate or the Commission direct the Company to
14	inco	orporate the following into the Company Directed pathway as a condition of pilot
15	appı	roval:
16		
17	1.	Set a fixed term for the length of the program incentives, and fix in place the
18		credit valuation, except for an annual market-based adjustment for avoided cost;
19	2.	Remove the enrollment incentive and rely instead on the performance incentives.
20	3.	Communicate to participants a target maximum of calls; and
21	4.	Focus call efforts on 3-hour dispatches instead of 4-hour.
22		
23 Q.	DO Y	YOU ANTICIPATE THE PILOT, AS PROPOSED, WILL BE ABLE TO
24	ACH	IEVE THE COMPANY'S STATED INTENTIONS?

I have concerns. While I believe the Pilot as a whole and the Customer Directed 1 A. pathways is mostly well-designed, there are few elements that I am concerned are 2 missing or out of alignment and will need improvement or clarification if the Pilot is going to succeed and launch a larger initiative upon its completion. 5 WHAT "CONCERNS" SPECIFICALLY ARE YOU REFERRING TO? 6 Q. 7 8 A. First, I have concerns about uncertainty around the incentives being offered. In the IRP filing and testimony, the Company has not offered enough clear guidance on how the 9 details of the program would be carried out for customers. In my ministry background, 10 we used to say "mist in the pulpit means fog in the pews." As a sales professional and 11 project developer, helping Georgia homeowners and business owners understand the 12 value of these incentives will be a challenge, absent any guarantee that such incentives 13 will remain in place for a reasonable amount of time. Similar programs around the 14 country have offered 2-, 3-, 5-, even 10- year terms for which the performance-based 15 incentives are offered. As the Pilot program is currently described in the IRP, there is no 16 such term, which would seem to imply that the Company could terminate the program at 17 any time. 18 19 Since the Pilot is expected to begin in mid-2026, if the Company only offers the 20 incentives until the next IRP cycle, then the effective term is only 2 years. This is a short 21 time for a participant to realize the benefits the program offers, which may be 22 insufficient to incentivize participation. A fixed term for the program would dramatically 23 increase the effectiveness of the program's incentives and drive greater customer 24 participation. Comparatively, across a 5-year period, for example, the anticipated benefits 25 would be substantially more, driving more program adoption. (See estimated 26 performance incentive amounts in Table 1 below)

27

Cumulative Incentive (performance-based, \$1.50kWh)		
	Residential,	Commercial,
Term	13.5 kWh	110 kWh
2 yr	\$1,012	\$8,250
5 yr	\$2,530	\$20,625

6

7 Q: DO YOU HAVE ANY RECOMMENDATIONS AS TO HOW LONG THE INCENTIVES SHOULD BE AVAILABLE?

9

Yes. I recommend the incentives should be locked-in for a 5-year term, which is in keeping with the plurality of existing similar programs (see Table 2 for examples of performance incentive terms in other programs).

13

Company	Program	Payment Term
Xcel Energy (CO)	Proposed AVPP program	5 years ⁸
Arizona Public Service	Bring Your Own Device Pilot	3 years ⁹
National Grid (MA),	Connected Solutions	5 years ¹⁰
Eversource, Unitil, RI Energy		
Tucson Electric Power	Energy Storage Rewards	2 years ¹¹
Eversource (CT), United	Energy Storage Solutions	10 years ¹²
Illuminating	(Active dispatch)	
Duke Energy (NC)	PowerPair, Battery Control (ie.	10 years ¹³
	Cohort B)	

https://www.dora.state.co.us/pls/efi/efi.show document?p dms document id=1034925&p session id=

⁹ https://docket.images.azcc.gov/0000213209.pdf?i=1745855858577

¹⁰ https://www.nationalgridus.com/MA-Home/Connected-Solutions/BatteryProgram

¹¹ https://www.tep.com/energy-storage-rewards/#program

¹² https://energystoragect.com/wp-content/uploads/2025/01/ESS-Program-Manual-01172025-Clean-FINAL.pdf

¹³ https://www.duke-energy.com/home/products/power-manager/battery-control

1	There is no language in the IRP or testimony that fixes the price for customers
2	participating in the Customer-directed pathway, thus providing assurance that the value of
3	the DER will not be recalculated mid-program. With the exception of market-based
4	adjustments for the avoided capacity cost over time, I recommend that the Company
5	provide in its terms and conditions the assurance that the valuation formula may not be
6	changed during the term.
7	
8 Q:	DO YOU HAVE ANY OTHER CONCERNS ABOUT THE INCENTIVES AND
9	HOW THEY ARE STRUCTURED?
10	
11 A:	Yes. The enrollment/up-front incentive is too small in proportion to the overall cost of the
12	BESS system to motivate consumers in their buying decisions. For example, for a Tesla
13	Powerwall 3, which is currently the most popular residential battery system in Georgia,
14	and has an installed price of approximately \$15,000, the up-front incentive would yield
15	approximately \$50. For a commercial installation, it could be as small as \$1,000 on a
16	\$250,000 system. This represents less than 0.05% of the installed cost of the battery
17	system.
18	
19	As I stated previously, even though the Company proposes to make this an annual
20	incentive, it is difficult for me to provide assurances to the customer, and for the customer
21	to reasonably rely on this incentive, because the term of the incentive is uncertain.
22	Because the amount of the incentive is very small, and the term is uncertain, I therefore
23	recommend the Company remove the up-front incentive and shift that value to the
24	performance incentive.
25	
26 Q:	HOW WOULD THE UPFRONT INCENTIVE BE SHIFTED TO THE
27	PERFORMANCE INCENTIVE AND FOR HOW MUCH?
28	

1 A: The value of the upfront incentive as it relates to the performance incentive will
2 ultimately need to be determined by the Company, however, if you were to take the value
3 of the upfront incentive and spread it over the 50 minimum number of hours called in
4 each annual period, a value can be derived as indicated in the table below:

5

Customer Type	Upfront Incentive	Divided over 50 Hours	Amount of Performance	Total Amount of Proposed
			Incentive	Performance
				Incentive
Residential and Small Commercial	\$15/kW	\$0.30	\$1.50/kWh	\$1.80/kWh
MUSH	\$45/kW	\$0.90	\$1.50/kWh	\$2.40/kWh

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By shifting the upfront incentive to the performance incentive, it will be easier to convey the value proposition to the customer and further incentivize the customer to participate in called events. Moreover, if the performance incentive were available for a predetermined amount of time, for 5-years as proposed I before, it would increase participation in the program and help ensure its success.

12

13 Q: ARE THERE ANY OTHER BENEFITS OF ELIMINATING THE UPFRONT 14 INCENTIVE AND ADDING THAT VALUE TO THE PERFORMANCE 15 INCENTIVE?

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17 A:

Yes, removing the up-front incentive will further de-risk the program from the perceived cost-shift to non-participants. The Company has already proposed, reasonably, that "the capacity value reflected for the incentive payment is discounted to 75% to ensure value

1	for non-participating customers" (IRP, p 104). With the elimination of the up-front
2	incentive, the full value of the Customer-direct pathway is dependent on the customer's
3	participation and therefore eliminating any risk of a cost shift to non-participating
4	customers.
5	
6 Q:	DO YOU HAVE ANY OTHER RECOMMENDATIONS AS IT PERTAINS TO
7	THE CUSTOMER-DIRECTED INCENTIVES?
8	
9 A:	Yes, locking in the adjusted performance incentive for 5 years will give customers the
10	certainty needed to decide whether to participate in the program. However, the
11	performance incentive should be adjusted on an annual basis to reflect the market rate of
12	the value of the program.
13	
14	Since program incentives are based on the forecasted avoided generation capacity value,
15	and since eliminating the upfront incentive removes the risk of a cost shift to
16	non-participating customers, the performance incentive should be adjusted annually to
17	reflect the updated avoided generation capacity value. For example, if avoided generation
18	capacity value increases the next year, then the performance incentive should be
19	increased accordingly. On the other hand, if the avoided generation capacity value
20	decreases the next year, then the performance incentive should be decreased accordingly.
21	Therefore, the performance incentive should be adjusted annually to more accurately
22	reflect the market value of avoided generation capacity.
23	
24 Q :	DO YOU HAVE ANY OTHER CONCERNS ABOUT BEING ABLE TO
25	ACCURATELY CONVEY THE BENEFITS TO CUSTOMERS AND
26	INCENTIVIZE CUSTOMERS TO PARTICIPATE IN CALLED EVENTS?

2	period of 50 hours, the Company has not proposed a maximum number of hours called
3	hours during an annual period in order to maximize potential value to the participants.
4	Understanding this is a pilot program, if the Company were able to provide a target or
5	guideline as to the maximum number of hours called during an annual period, it would be
6	helpful for participants to make informed choices.
7	
8	With the publishing of an estimated number of annual call opportunities, prospective
9	participants can have a right-sized view of incentive up-side potential. Indeed, such a
10	published target could also serve as a deterrent to unscrupulous marketers over-promising
11	"unlimited gains from selling power to the grid!"
12	
13 Q:	WHAT OTHER CONCERNS DO YOU HAVE ABOUT THE
14	CUSTOMER-DIRECTED PATHWAY?
15	
16 A:	I am concerned about the potential duration of any given event call. More specifically, I
17	am concerned that if the majority of event-calls are for 4-hr duration, this may hamper
18	participation. Graham Turk, in his testimony regarding the 2023 IRP Update ¹⁴ , observed
19	that in his time administering Green Mountain Power's DER program, "the vast majority
20	of customers elected to enroll in 3-hour resources." This is in keeping with my
21	expectations from consulting with customers interested in BESS systems: they want to
22	minimize the amount of time that a battery is unavailable for their own uses, i.e.,
23	emergency backup, but also could be incentivized to participate in a program if the
24	incentives are strong enough.
25	
26	While I recognize that the Company may need to respond to demand events exceeding 4
27	
21	hours, this may need to be accomplished with a rolling call of overlapping 3-hour

Yes, while the Company has proposed a minimum number of hours called in each annual

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¹⁴ Direct Testimony of Graham Turk on Behalf of Georgia Solar Energy Association, Docket No. 55378, in Re: 2023
 28 Integrated Resource Plan Update, February 15, 2024

1	distributed resources. On the other hand, if all event calls are 4 hours in duration, the
2	Company may observe a less-enthusiastic participation than if the incentives were more
3	closely aligned to consumer behavior, i.e. that as call-durations lengthen, consumers'
4	desire for their own backup reserves may outweigh their attraction to the incentive. The
5	Pilot will be able to confirm or refute this assertion only if they offer multiple lengths of
6	calls to enough participants to have a large enough dataset.

8 Q

PLEASE SUMMARIZE YOUR SPECIFIC RECOMMENDATIONS TO THE **COMMISSION.**

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In conclusion, the Customer Directed program has great potential to be a true 11 A. collaboration among the Company, ratepayers and the solar-plus-storage industry. With a few strategic changes to the program and clarifications, some potential hazards can be easily avoided. My specific recommendations are as follows:

15

1. Set a fixed term for the length of the program incentives, and fix in place the credit valuation formula, except for an annual market-based adjustment for avoided cost. Based on similar programs and on the time needed to generate behavior-changing incentives, I recommend that term be 5 years;

2. Remove the enrollment incentive and allow the Pilot to run solely on the An adjustment of the performance incentive to performance incentives. compensate for the value of avoided capacity generation which was previously a component of the enrollment incentive would increase the performance incentive by \$0.30/kWh for residential and small commercial customers; and by \$0.90/kWh for MUSH customers.

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3. Communicate to participants a target maximum of calls, in order to right-size expectations regarding incentive and frequency of customer-system interaction, as

- well as to deter unscrupulous marketers; and
- 2 4. Focus call efforts on 3-hour dispatches instead of 4-hour, in order to maximize chances of matching maximum participation rates with and peak demand.

4 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

5 A. Yes, it does.

CERTIFICATE OF SERVICE

I certify that the foregoing **DIRECT TESTIMONY OF DANIEL PERTWEE, ADAM HOYT, AND OLIVIA AMYETTE IN SUPPORT OF GEORGIA SOLAR ENERGY ASSOCIATION ("GA SOLAR")** in Docket No. 56002 was filed with the Public Service Commission by electronic delivery on the 2nd day of May, 2025. An electronic copy of same was served upon all parties listed below by electronic mail as follows:

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