

STATE OF GEORGIA

BEFORE THE GEORGIA PUBLIC SERVICE COMMISSION

**Georgia Power Company's 2019 Integrated
Resource Plan and Application for Certification
of Capacity from Plant Scherer Unit 3 and Plant
Goat Rock Units 9-12 and Application for
Decertification of Plant Hammond Units 1-4,
Plant McIntosh Unit 1, Plant Estatoah Unit 1,
Plant Langdale Units 5-6, and Plant Riverview
Units 1-2**

DOCKET NO. 42310

**DIRECT TESTIMONY OF THERESA PERRY
ON BEHALF OF
SOUTHERN ALLIANCE FOR CLEAN ENERGY**

April 25, 2019

1 **I. Introduction**

2 **Q. Please state your name, position and business address.**

3 A. My name is Theresa Perry. I am an independent consultant, and my business address is
4 2100 Historic Circle, Morrisville, NC 27560.

5 **Q. On whose behalf are you testifying in this proceeding?**

6 A. I am testifying on behalf of Southern Alliance for Clean Energy (SACE).

7 **Q. Please summarize your qualifications and work experience.**

8 A. I graduated from Virginia Polytechnic Institute and State University in 1987 with a
9 Bachelor of Science in biochemistry and in 1990 with a Master of Science in
10 neurochemistry. After working in medical research and academia, I attended James
11 Madison University, earning an MBA in 2007. Since 2007, I have worked in the private
12 sector in the corporate energy management and corporate sustainability arenas as well as a
13 management consultant focusing on energy and utilities. In my role as Global Energy and
14 Sustainability Manager at Cisco Systems, I was responsible for enrolling part of the North
15 Carolina load in Duke's Green Source Rider. As the first company to enroll in the program,
16 there were program considerations and processes that required development as part of the
17 enrollment process. In various roles, I have been responsible for purchasing renewable
18 energy, both behind the meter and in front, in both the US and abroad, as well as purchasing
19 Renewable Energy Certificates and similar instruments.

20 I currently work independently in a consulting capacity.

21 A copy of my resume is included as Exhibit SACE-TP-1.

1 **Q. Have you previously testified before the Georgia Public Service Commission**
2 **(“GPSC” or “the Commission”)?**

3 A. No.

4 **Q. What is the purpose of your testimony?**

5 A. The purpose of my testimony is to present to the Commission recommendations as to how
6 the Commission should modify and improve Georgia Power Company’s (“Georgia Power”
7 or “the Company”) proposed Customer Renewable Supply Procurement (“CRSP”)
8 program. As such, I am recommending some critical improvements as well as additional
9 enhancements.

10 **Q. Are you submitting exhibits along with your testimony?**

11 A. Yes, I am submitting 1 exhibit along with my testimony, as follows:

- 12 • SACE-TP-1: Resume of Theresa Perry.

13
14 **II. Summary of Findings and Conclusions**

15 **Q. Please summarize the results of your review of the Company’s proposed Customer**
16 **Renewable Supply Procurement (“CRSP”) program and the analysis you have**
17 **conducted.**

18 A. The Company has recognized the growing demand for renewable energy by commercial
19 and industrial customers.¹ The Company has presented a good start to creating a program
20 that delivers benefits for all customers; however, in order for the program to be a viable

¹ According to Rocky Mountain Institute, corporations have signed contracts for 2.8 GW of solar in the United States for 2018, a gigawatt more than the deals signed in all previous years combined. <https://www.pv-magazine.com/2018/12/19/us-corporate-solar-procurement-knocks-it-out-of-the-park-in-2018/>

1 opportunity for the largest number of corporate customers, the program must be clearly
2 laid out to the customer with specific qualities.

3 **Q What is your general experience with Green Source Rider and other programs like**
4 **CRSP?**

5 A. From my time at Cisco Systems, as well as other firms, it has been my experience that
6 corporate leadership is very enthusiastic about aligning corporate interests in
7 environmental sustainability and obtaining an electric power product that provides
8 increased financial certainty. My experience has been that even after receiving the general
9 direction from corporate management to pursue a product, many questions and concerns
10 would be raised by different staff within the corporation reflecting their respective interests
11 and responsibilities.

12 In short, even after the initial request was conveyed to the utility for a particular type of
13 product, the process of negotiating specific terms required deeper consideration and
14 understanding within the business. In my opinion, the CRSP program should be designed
15 to anticipate a diverse set of reactions from corporations, and my recommendations are
16 intended to inform Georgia Power and the Commission as to how to make the CRSP
17 program design attractive to corporate customers.

18 **Q. Do you think the design proposed by the Company will be sufficiently attractive to**
19 **corporate customers?**

1 A. No, I think that many corporate customers will find some of the terms difficult to accept as
2 proposed, despite initial enthusiasm.

3 To ensure strong participation, Georgia Power and the Commission should consider seven
4 critical improvements and one additional enhancement. The critical improvements are:

5 1. Provide some production guarantees to the production of the renewables being
6 subscribed;

7 2. Be clear about how the credit to subscribers is calculated;

8 3. Provide an alternative to credits based on actual hourly marginal energy cost of
9 incremental generation for those companies requiring less risk and greater price certainty;

10 4. Ensure that those customers enrolling with the minimum annual peak demand of 3
11 MW are not penalized for undertaking energy conservation measures that reduce their peak
12 demand to below the minimum 3 MW;

13 5. Allow for enrolling more than 100% of prior year consumption with demonstration
14 of proof of anticipated growth;

15 6. Allow for addition of accounts as added to customer profile for aggregated
16 accounts; and

17 7. Increase the total amount offered to customers from 950MW if interest is indicated
18 through receipt of NOIs.

1 **Q. What additional enhancement do you suggest?**

2 A. The Company should also consider providing access to all potential green attributes,
3 including RECs, of the renewables being subscribed.

4
5 **III. Customer Renewable Supply Procurement (“CRSP”) program**

6 **Q. Why do you believe production guarantees are necessary?**

7 A. I am using the term “production guarantee” to refer to that level that the solar project is
8 guaranteed to produce energy. These guarantees protect the customer from being charged
9 for enrollment into a program that is not producing due to circumstances such as lack of
10 general maintenance, damage from weather or other natural events, damage to the
11 transmission to the grid, or electrical fires. It is my experience that it is usual to have some
12 production guarantees in place, and it is necessary to allow the customer to project the level
13 of renewable energy that will be purchased.

14 I was unable to identify any references to production guarantees in the Company’s 2019
15 Integrated Resource Plan.

16 **Q. Describe the production guarantees that should be given to the customer.**

17 A. Any production guarantee that is part of the agreement that the Company has in the
18 procurement PPA should be passed through to the customer.

19 **Q. Why do you believe an alternative to the proposed method of bill credit is necessary?**

20 A. The proposed method of bill credit is described as being based on the actual hourly
21 marginal energy cost of incremental generation multiplied by the amount of energy

1 produced by the CRSP facilities. Because this is difficult to forecast especially for long-
2 term contracts, the uncertainty created for potential subscribers is difficult for some
3 customers to justify.

4 The program would be accessible to more customers if there were additional mechanisms
5 for assigning credits. Customers with a high risk tolerance may elect the method of credit
6 calculation based on the actual hourly marginal cost of incremental generation. If this
7 method is adopted, historical data for the actual hourly marginal energy cost of incremental
8 generation must be made available to enable potential customers to create financial models
9 for assessment of the program.

10 **Q. What alternative do you propose to the credits based on actual hourly marginal**
11 **energy cost of incremental generation?**

12 A. For customers that cannot tolerate the risk of hourly pricing, an alternative method for bill
13 credit should be provided. An example would be the bill credit method approved for Duke
14 Energy's Green Source Advantage program which has an option for a fixed rate bill credit
15 based on the Commission-determined avoided cost rate.² While this type of fixed rate may
16 have less savings for the customer, it would come with less risk and would provide greater
17 price certainty for those customers requiring such for their financial modeling and internal
18 decision-making practices.

² North Carolina Utilities Commission, Docket Nos. E-2, Sub 1170 and E-7, Sub 1169, February 1, 2019. See also: Jordan Jones, [North Carolina Utilities Commission Issues Order in Green Source Advantage Program Docket](#), NC Sustainable Energy Association (February 15, 2019).

1 **Q. Why should customers dipping below the 3 MW limit be allowed to remain in the**
2 **program?**

3 A. The proposed program has a requirement that existing customers have a minimum annual
4 peak demand of 3 MW at one account (or an aggregate of GPC accounts under common
5 control) in order to participate. However, a corporate customer is continually managing the
6 cost of energy through lowest cost procurement as well as investment in energy
7 conservation measures (ECMs) that will decrease the total amount of energy used.
8 Although there are corporate renewable programs without required load levels for
9 participation,³ the 3 MW load for the initial subscription qualification is reasonable given
10 the ability to aggregate load. However, once a customer has enrolled in the program, efforts
11 to reduce energy usage should not be discouraged by any requirement to maintain an annual
12 3 MW peak demand.

13 **Q. Why should a customer be allowed to enroll more than 100% of prior year**
14 **consumption with demonstration of proof of anticipated growth?**

15 A. Often, corporate customers have sustainability goals such as procuring a specific level of
16 energy from renewable resources. These goals would remain in place even with expansion
17 of the company. For example, if a customer has a goal of 100% renewable energy and adds

³ Austin Energy's GreenChoice program offers renewable energy with Green-e certificates at a flat rate with no load requirements.

1 a new production facility, they would require that the energy for the new facility come from
2 100% renewable generation.

3 **Q. How could a customer demonstrate anticipated growth?**

4 A. There are several circumstances whereby a customer has a planned growth and would like
5 to remain at the current percentage of renewable energy in the portfolio. In the most basic
6 instances, customers that are acquiring additional services from the Company should be
7 able to qualify for additional subscription beyond the 100% of prior year total consumption
8 based on the Company's estimated load growth. When the anticipated growth does not
9 involve changes to the services received, such as change in occupancy usage for a building
10 from a traditional workweek to a 24/7 call center, the customer should be able to
11 demonstrate the planned increase to enroll for the full amount of the projected year usage.

12 **Q. Why is it important for customers to add new accounts to the program?**

13 A. Similar to the above, when an aggregated customer adds accounts to their portfolio, the
14 opportunity should exist to add these new accounts to the subscription.

15 **Q. Do you think there is need for additional solar beyond the 950 MW available to**
16 **corporate customers?**

17 A. As stated at the beginning of this testimony, the demand from corporations for access to
18 renewable energy continues to grow. In fact, the Georgia Power witness panel
19 acknowledged that it has received at least 1,400 MW of requests for its CRSP program. If
20 I were representing a potential subscriber, I would be much more inclined to consider

1 participating in CRSP if there was less risk of failing to receive a subscription after working
2 through the internal business process to gain approval to apply.

3 SACE Witnesses Wilson and Jacob suggest that the cap of 950 MW should be modified to
4 at least 1,500 MW, reflecting the 1,400 MW minimum expressed demand plus an
5 additional amount to reflect additional demand that may develop between now and the time
6 that subscriptions are available. This seems to me to be a minimally acceptable starting
7 point.

8 **Q. Please describe the additional green attributes to which customers should have access.**

9 A. Green attributes include Renewable Energy Credits as well as avoided emissions of
10 pollutants and other greenhouse gasses and reporting rights such as Green Tag reporting.
11 Because the length of enrollment in the program may be long term and new environmental
12 requirements may be enacted during the tenure of the contract, it is important that the
13 customer have access to all green attributes that are produced at the time of enrollment.

14 **Q. Does this conclude your testimony?**

15 A. Yes.

THERESA PERRY

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SUMMARY

MBA, MS, and CEM credentials with experience in sustainability, procurement, energy management, reporting, finance and budgeting, and program development

RELEVANT EXPERIENCE

ScottMadden, Inc.

Consultant (Feb. 2017 – Nov. 2018)

Worked with clients to listen to their challenges and leverage my expertise in sustainability and energy management to affect positive change within the enterprise

Cisco Systems, Inc.

Global Energy and Sustainability Manager (2014 – 2017)

Owned global supply management program including all renewable energy agreements, reporting, strategy development, and the development and management of global accruals and budget

- **Sustainability Goal Development:** Led team in development of next corporate sustainability goals, including cost analyses, strategy and metric, cross functional engagement, and adoption
- **Solar Power Purchase Agreement (PPA):** Negotiated and executed long-term offsite 20MW solar contract for bundled green energy purchase
- **Global Supply Program:** Created single global energy supply program from multiple country programs, servicing over 500 sites in 95 countries, to create efficiencies and standard practices. Most recent annual global fiscal utility variance was 0.9% below budget. Program development included KPI standardization, process streamlining, and creation of reporting metrics
- **Procurement Strategy:** Developed strategy for global procurement of electricity, renewable energy certificates, gas, diesel fuel, and water
- **Supply Chain Sustainability:** Contributed to SCO sustainability workshops
- **JUMP Women's Leadership Program:** Participated in high-potential women's leadership development program targeted to top 10% of leadership-ready or existing female leader at Cisco

Advance Auto Parts

Energy Management and Sustainability Strategist (2010 – 2014)

Provided strategic direction for energy management initiatives for more than 5000 retail, distribution, warehouse, and office sites

- **Asset Integration:** Brought all newly acquired entities into strategy; increasing by 1200 stores plus creation of opportunities for additional 1000 independent stores
- **Deregulated supply negotiation:** Controlled of all energy procurement contracts for \$10M in deregulated commodity opportunity
- **Energy Outreach:** Created corporate sustainability team exploring cross-functional sustainability initiatives. Creation of messaging regarding sustainability and energy conservation
- **Demand Reductions:** Created and managed demand reduction strategies; reduced energy usage at stores by average of 35% over 3-year period
- **Solar:** Led initiative for 1.3 MW solar project on distribution center roof; estimated cost avoidance greater than 25% over lifetime of project

City of Charlottesville Citizens Committee on Environmental Sustainability (CCOES) Mitigation Survey (2007)

Performed an independent survey for the City of Charlottesville as part of MBA study. Principle report was used to direct efforts for environmental mitigation practices in the city. Developed survey instrument, created statistical model used for data evaluation and hypothesis testing, implemented web delivery of survey to citizens of Charlottesville, analyzed SPSS data file, and prepared principal report for City of Charlottesville

Greenlight Energy/BP Alternative Energy (2006 – 2007)

Greenlight Energy was a wind energy development firm with over 40 large-scale wind farm projects and 14 employees. The company was sold in 2006 to BP Alternative Energy for more than \$125 M. At a small startup, the position covered a wide range of responsibilities, including performance of due diligence

- **Due Diligence:** Created and implemented document flow process and document filing structure for projects including environmental reports, leasing contracts, and RFPs
- **Lease Procedures:** Created uniform lease procedures for all projects and streamlined old processes to improve efficiencies. Hired and supervised lease administrator
- Managed systems and procedural transition to BP Alternative Energy

A full record of employment history is available upon request.

EDUCATION

Master of Business Administration, James Madison University, Harrisonburg, VA

Master of Science, Neurochemistry, Functional Relationship Between Forebrain Cholinergic Projections and Somatostatin Neurons in the Rat, Virginia Tech, Blacksburg, VA

Bachelor of Science, Biochemistry, Virginia Tech, Blacksburg, VA