

1 BEFORE THE GEORGIA PUBLIC SERVICE COMMISSION

2

3 In re: Georgia Power Company's)
4 Application for Certification of) Docket No. 44880
5 Biomass Power Purchase Agreements)

6

7

8 Hearing Room 110
9 244 Washington Street
10 Atlanta, Georgia

11 Thursday, August 29, 2024

12 The hearing was called to order, pursuant to Notice at
13 10:18 a.m.

14

15 PRESENT WERE:

16 JASON SHAW, Chairman
17 TIM ECHOLS, Vice Chairman
18 TRICIA PRIDEMORE, Commissioner
19 LAUREN "BUBBA" MCDONALD, Commissioner
20 FITZ JOHNSON, Commissioner

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1	I N D E X			
2	WITNESSES:	DIRECT	CROSS	REDIRECT RECROSS
3	Jeffrey R. Grubb			
	Jeffrey B. Weathers			
4	Sherri T. Radney			
5	By Mr. Highsmith	5		
	By Ms. Chandra		20	
6				
7	Jamie Barber			
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1 CHAIRMAN SHAW: This is August the 29th,
2 2024. This is Docket No. 44880, Georgia Power
3 Company's Application for Certification of Biomass
4 Power Purchase Agreements.

5 We'll start with our appearance and witness
6 list, starting with Georgia Public Service
7 Commission.

8 MR. THOMAS: Good morning. Preston Thomas on
9 behalf of Public Interest Advocacy Staff.

10 CHAIRMAN SHAW: Good morning.
11 Georgia Power Company.

12 MR. HIGHSMITH: Good morning, Commissioners.
13 Robert Highsmith, Holland & Knight, on behalf of
14 Georgia Power Company. I'm joined by Keith Wiener
15 and Graham Coates of my firm, and Allison Pryor of
16 the Troutman Pepper firm.

17 CHAIRMAN SHAW: Thank you.
18 Georgia Interfaith Power & Light.

19 MS. CHANDRA: Good morning, Commissioners.
20 Can you hear me okay?

21 CHAIRMAN SHAW: Yes. Perfect.

22 MS. CHANDRA: Hi. I'm Aradhana Chandra. I'm
23 an attorney with Southern Environmental Law Center.
24 Jennifer Whitfield and I are counsel for Georgia
25 Interfaith Power & Light.

1 I also want to introduce Codi Norred,
2 executive director of Georgia Interfaith Power &
3 Light, and Marqus Cole, organizing director.

4 CHAIRMAN SHAW: Welcome.

5 MS. CHANDRA: Thank you.

6 CHAIRMAN SHAW: Thank you. Good morning.

7 All right. Are there any housekeeping
8 matters to take up before we call your witnesses?

9 (No response.)

10 CHAIRMAN SHAW: Okay. Hearing none, I'll let
11 Georgia Power Company go ahead and swear in your
12 panel.

13 MR. HIGHSMITH: Thank you, Mr. Chairman.

14 Georgia Power Company calls Mr. Jeffrey
15 Grubb, Ms. Sherri Radney, and Mr. Jeffrey Weathers
16 to the stand. They're already there with us, and
17 so if y'all would raise your right hands.

18 Thereupon,

19 JEFFREY R. GRUBB,
20 JEFFREY B. WEATHERS,
21 SHERRI T. RADNEY,

22 having been duly sworn, testified as follows:

23 DIRECT EXAMINATION

24 BY MR. HIGHSMITH:

25 Q. Mr. Grubb, would you please state your full
name, employer, and business position and responsibilities

1 for the record?

2 A. (Witness Grubb) Yes. Good morning,
3 Commissioners. My name is Jeffrey R. Grubb. I'm the
4 director of resource planning at Georgia Power Company,
5 where our group leads the company's efforts in integrated
6 resource planning, which includes implementation of the
7 orders from prior IRPs, which, in this case, is the 2023
8 biomass RFP.

9 Q. Ms. Radney, would you state your full name,
10 employer, business position and responsibilities for the
11 record?

12 A. (Witness Radney) Yes. My name is Sherri T.
13 Radney. I'm the capacity procurement manager for the
14 company, and our team is responsible for all the capacity
15 RFPs and procurement activities.

16 COMMISSIONER MCDONALD: She sure knows how to
17 use a microphone, doesn't she?

18 BY MR. HIGHSMITH:

19 Q. Mr. Weathers, would you state your full name,
20 your employer, business position and responsibilities for
21 the record?

22 A. (Witness Weathers) Yes. Good morning,
23 Commissioners. My name is Jeffrey B. Weathers. I'm the
24 director of resource planning for Southern Company
25 Services. My team supports the resource planning

1 activities of Georgia Power and our other retail operating
2 companies, including bid evaluations for RFPs.

3 Q. Now, Mr. Grubb, did the panel cause to be
4 prefiled in this proceeding ten pages of
5 question-and-answer testimony?

6 A. (Witness Grubb) Yes, we did.

7 Q. Any corrections to that testimony today?

8 A. (Witness Grubb) No, there are not.

9 Q. Were there any exhibits to that testimony?

10 A. (Witness Grubb) There were none.

11 Q. Is the testimony that you caused to be
12 prefiled true and correct, that is, if I were to ask you
13 the questions presented in your prefiled testimony here on
14 the stand today, would your answers be the same?

15 A. (Witness Grubb) Yes, they would.

16 MR. HIGHSMITH: Mr. Chairman, I move that the
17 prefiled testimony be copied into the record as if
18 given orally on the witness stand today.

19 CHAIRMAN SHAW: So marked.

20 (Whereupon, the prefiled direct testimonies
21 of Jeffrey R. Grubb, Jeffrey B. Weathers, and Sherri
22 T. Radney follows:)

23 //

24 //

25 //

DOCKET NO. 44880

I. BACKGROUND

Q. PLEASE STATE YOUR NAMES, TITLES, AND BUSINESS ADDRESSES.

A. My name is Jeffrey R. Grubb. I am the Director of Resource Planning for Georgia Power Company (“Georgia Power” or the “Company”). My business address is 241 Ralph McGill Boulevard, N.E., Atlanta, Georgia 30308.

My name is Jeffrey B. Weathers. I am the Director of Resource Planning for Southern Company Services, Inc. (“SCS”). My business address is 600 North 18th Street, Birmingham, Alabama 35203.

My name is Sherri T. Radney. I am the Capacity Procurement Manager for Georgia Power. My business address is 241 Ralph McGill Boulevard, N.E., Atlanta, Georgia 30308.

Q. MR. GRUBB, PLEASE SUMMARIZE YOUR EDUCATION AND PROFESSIONAL EXPERIENCE.

A. I began my career with Georgia Power in 1992 as a cooperative education student in Commercial and Industrial Marketing. I graduated from the Georgia Institute of Technology in 1996 with a Bachelor of Science degree in Mechanical Engineering. After joining the Company as a full-time employee in 1997, I worked in various roles within Marketing until 2001 at which time I participated in a Company developmental program where I gained experience in a wide range of functional areas. During this period, I earned a Master of Business Administration degree from Auburn University in 2000.

1 In 2003, I joined the Resource Policy and Planning organization at Georgia Power
2 where I served as a Project Manager through 2006. From 2007 through 2016, I worked
3 for SCS in various planning roles including SCS Forecasting Team Leader (2007), SCS
4 Fuels Planning Manager (2007-2011), and SCS Resource Planning Project Manager
5 (2011-2016) where I managed the team that supports the development of the Southern
6 Company System Integrated Resource Plan (“IRP”). In this role, I supported Georgia
7 Power’s 2013 IRP (Docket No. 36498) and 2016 IRP (Docket No. 40161). In 2016, I
8 returned to Georgia Power as Project Manager in Resource Policy and Planning where
9 I worked on the development of the 2016 IRP. Beginning in March 2018, I assumed
10 my current position of Director of Resource Planning for Georgia Power.

11 **Q. MR. GRUBB, HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE**
12 **GEORGIA PUBLIC SERVICE COMMISSION?**

13 **Q.** Yes. I previously testified in Docket No. 55378, Georgia Power’s 2023 IRP Update;
14 Docket No. 44160, Georgia Power’s 2022 IRP; Docket Nos. 4822, 16573, and 19279,
15 the Georgia Public Service Commission’s (“Commission”) Review of Georgia Power’s
16 PURPA Avoided Cost Methodology; Docket No. 42310, Georgia Power’s 2019 IRP;
17 Docket No. 42625, Georgia Power’s Application for the Certification of the 2020/2021
18 Renewable Energy Development Initiative (“REDI”) Utility Scale Power Purchase
19 Agreements (“PPAs”); Docket No. 41596, I Georgia Power’s Application for the
20 Certification of the 2018/2019 REDI Utility Scale PPAs; Docket No. 41734, Georgia
21 Power’s Application for the Certification of the 2018/2019 REDI Utility Scale PPAs
22 for the Commercial and Industrial (“C&I”) Program.

23 **Q. MR. WEATHERS, PLEASE SUMMARIZE YOUR EDUCATION AND**
24 **PROFESSIONAL EXPERIENCE.**

25 **A.** I graduated from Auburn University in 1996 with a Bachelor of Science in Mechanical
26 Engineering, and in 1998 with a Master in Business Administration degree. I began my
27 career at Southern Company in 1998 at Plant Farley and joined SCS in 1999. Over the
28 next seven years, I progressed through roles of increasing responsibility in System
29 Planning, Fleet Operations, Asset Management, and Southern Power Generation

1 Development. I became the Energy Analysis Manager in 2006 with responsibility for
2 analyzing wholesale contracts, trading, and pool transactions. In 2011, I became
3 Manager of Financial and Contract Services, with responsibility for the wholesale
4 billing, settlement, and analysis of the Intercompany Interchange Contract, the
5 wholesale contracts of the operating companies, and the Open Access Transmission
6 Tariff. In December 2015, I moved into the role of Strategic Generation Planning
7 Manager with responsibility over energy budgeting, scenario planning and forecasting,
8 and asset valuations. In September 2016, I became Resource Planning Manager and
9 assumed additional responsibilities related to the coordinated planning process. My
10 responsibilities now include integrated resource planning, energy budgeting, evaluation
11 of Requests for Proposals (“RFP”), reliability and reserve margin analysis, scenario
12 planning and forecasting, asset evaluations, and production cost modeling and analysis.

13 **Q. MR. WEATHERS, HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE**
14 **GEORGIA PUBLIC SERVICE COMMISSION?**

15 **A.** Yes. I have previously testified in Docket No. 44160, Georgia Power’s 2022 IRP;
16 Docket No. 43814, Certification of 2022-2023 Utility Scale PPAs; Docket Nos. 48220,
17 16573, and 19279, the Commission’s review of the Company’s avoided cost
18 methodology; Docket No. 42625, Georgia Power’s Application for the Certification of
19 the 2020/2021 REDI Utility Scale PPAs; Docket No. 42310, Georgia Power’s 2019
20 IRP; Docket No. 41596, Georgia Power’s Application for the Certification of the
21 2018/2019 REDI Utility Scale PPAs; Docket No. 41734, Georgia Power’s Application
22 for the Certification of the 2018/2019 REDI Utility Scale PPAs for the C&I; and
23 Docket No. 39638, FCR-24.

24 **Q. MS. RADNEY, PLEASE SUMMARIZE YOUR EDUCATION AND**
25 **PROFESSIONAL EXPERIENCE.**

26 **A.** I began my career with Georgia Power in 2002 as an engineering intern in Generation.
27 I graduated from Mercer University in 2004 with a Bachelor of Science degree in
28 Electrical Engineering. After joining the Company as a full-time employee in 2004, I
29 worked in various roles in engineering, operations, maintenance, and planning at

1 various power generating facilities within Generation until 2015. I earned a Master of
2 Business Administration degree from Columbus State University in 2012. In 2015, I
3 joined the Commercial Operations and Trading organization at Southern Power
4 Company where I implemented and managed Power Purchase Agreements for thermal
5 and renewable resources through 2017. From 2017 through 2023, I worked for
6 Alabama Power Company where I was the Project Manager for capacity RFPs and
7 procurement activities. Beginning in July 2023, I assumed my current position as
8 Capacity Procurement Manager for Georgia Power.

9
10 **Q. MS. RADNEY, HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE**
11 **GEORGIA PUBLIC SERVICE COMMISSION?**

12 **A.** No. I have not previously testified before the Commission.

13 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

14 **A.** We file our testimony in support of Georgia Power's Application for the Certification
15 of the 2023 Biomass Power Purchase Agreements (the "Application") submitted
16 pursuant to O.C.G.A. § 46-3A-4, as part of the Integrated Resource Planning Act. The
17 Company filed the Application, including the PPAs on July 29, 2024. We wish to
18 incorporate that filing by reference into this testimony.

19 **Q. PLEASE SUMMARIZE YOUR TESTIMONY.**

20 **A.** Our testimony supports the Company's Application for three PPAs ("2023 Biomass
21 PPAs") which the Company awarded pursuant to the 2023 Biomass Request for
22 Proposals ("Biomass RFP"). Georgia Power has procured, through a market-based
23 competitive solicitation and in compliance with the Commission's directive to procure
24 up to 140 megawatts ("MW") of new biomass capacity, these PPAs which will continue
25 the expansion of renewable resources for Georgia Power's customers. In addition, by
26 certifying these PPAs, the Company and the Commission will continue to advance, as
27 recognized by the Commission, the benefits of biomass as a renewable resource to
28 support Georgia's forest industry and rural and economic development growth.

1 **II. DESCRIPTION OF RESOURCES SELECTED**

2 **Q. HAVE YOU SUBMITTED COPIES OF THE PPAs TO THE COMMISSION?**

3 **A.** Yes. The Company has attached and filed with the Commission Trade Secret and
4 Public Disclosure copies of the 2023 Biomass PPAs to Georgia Power’s Application
5 as Appendix A and Appendix B.

6 **Q. PLEASE DESCRIBE THE RESOURCES GEORGIA POWER SEEKS TO**
7 **CERTIFY.**

8 **A.** The Commission’s Order Adopting Stipulation As Amended regarding Georgia
9 Power’s 2022 Integrated Resource Plan (“IRP”) in Docket No. 44160 (“2022 IRP Final
10 Order”), directed the Company to reissue the Biomass RFP to procure up to 140
11 megawatts (“MW”) of new biomass capacity and energy for Georgia Power customers.
12 Pursuant to the 2022 IRP Final Order, Georgia Power issued the Biomass RFP seeking
13 to procure up to 140 MW of new biomass generation with expected in-service dates in
14 between June 2025 and 2029. In its April 21, 2023 Order Approving the Final Request
15 for Proposals and Power Purchase Agreement Documents with Modifications in
16 Docket No. 44880 (the “Procurement Order”), the Commission ordered the Company
17 to procure biomass resources up to 80 MW in size, and as approved, bidders could elect
18 a contract term of 10, 15, 20, 25 or 30 years for projects located anywhere in the United
19 States so long as the facility could deliver their energy to Georgia Power. The
20 Procurement Order required the Company to select projects using biomass, and other
21 approved fuels, and secure the environmental attributes and electrical products
22 produced by or related to the energy production. The Procurement Order also permitted
23 the Company to accept both new greenfield projects and biomass addition projects. On
24 April 21, 2023, the Commission also issued an Order in Docket No. 44160 modifying
25 the 2022 IRP Final Order to amend the definition of approved allowable fuel for
26 biomass projects to include tire derived fuels (“TDF”). Following a challenge from
27 intervenors, on June 8, 2023, the Commission granted reconsideration and vacated its
28 previous Order modifying the 2022 IRP Final Order. As a result, the Company removed

1 TDF as permissible fuel in the RFP. The three 2023 Biomass PPAs received by the
2 Company include:

3 A ten (10) year Biomass Addition PPA with International Paper Company that
4 will provide energy, Environmental Attributes, and Electrical Products from the
5 3.6 MW Port Wentworth Mill facility located in Chatham County, Georgia;

6 A ten (10) year Biomass Addition PPA with International Paper Company that
7 will provide energy, Environmental Attributes, and Electrical Products from the
8 4.3 MW Flint River Mill facility located in Macon County, Georgia; and

9 A thirty (30) year New Greenfield PPA with Altamaha Green Energy, LLC,
10 that will provide energy, Environmental Attributes, and Electrical Products
11 from the 70 MW Altamaha Green Energy, LLC, facility located in Wayne
12 County, Georgia.

13 **Q. HOW WILL THE COMPANY RECOVER THE COST TO IMPLEMENT**
14 **AND ADMINISTER THESE PPAS?**

15 **A.** The costs of conducting and administering the Biomass RFP will be offset by Biomass
16 RFP Bid Fees and Winners' Fees. Georgia Power proposes that the Commission allow
17 the Company to recover any remaining costs and subsequent PPA costs through the
18 Fuel Cost Recovery mechanism.

19 **III. EVALUATION AND SELECTION OF WINNING BIDS**

20 **Q. PLEASE DESCRIBE HOW THE COMPANY SELECTED THESE THREE**
21 **PPAS AS RESOURCES TO BRING FORWARD FOR CERTIFICATION.**

22 **A.** As part of the 2022 IRP Final Order, the Commission directed Georgia Power to
23 procure 140 MW of new biomass generation, with a required commercial operation
24 date as early as June 1, 2025. The Biomass RFP accepted bids for a New Greenfield
25 Project and Biomass Addition Project. As defined in the Biomass RFP, a New
26 Greenfield Project is a project for the construction and operation of a new electric plant
27 for the generation of Renewable Energy fueled by Biomass; whereas a Biomass

1 Addition Project is a project to add and operate additional capacity for the generation
2 of Renewable Energy fueled by Biomass to an existing and operational electric
3 generating plant fueled by Biomass. In accordance with the Commission’s RFP Rule
4 governing RFPs, the Company drafted the 2023 RFP for Biomass Generation, a
5 Biomass Addition Project Pro Forma PPA, and a New Greenfield Project Pro Forma
6 PPA. On April 21, 2023, the Commission issued its Order Approving the Final Request
7 for Proposals and Power Purchase Agreement Documents with Modifications in
8 Docket No. 44880. Georgia Power issued the Biomass RFP on April 28, 2023. Georgia
9 Power accepted new biomass generation bids from qualified bidders through the
10 Independent Evaluator (“IE”) website from May 3, 2023, through July 14, 2023. The
11 Company received four offers for 107.9 MW from three unique bidders. The analysis
12 of these Biomass RFP PPAs resulted in a selected portfolio of 77.9 MWs and utilized
13 input data and assumptions consistent with the Budget 2023 planning assumptions.

14 **Q. IN EVALUATING BIDS, WHAT FACTORS DID THE COMPANY CONSIDER**
15 **IN DETERMINING WHICH PROPOSALS PROVIDED THE BEST VALUE?**

16 **A.** Although Georgia Power also considers certain non-price and qualitative factors,
17 including: (1) Reliability impacts associated with the facility location inside Southern
18 Company’s transmission territory; (2) Interconnection directly to the Georgia Power
19 Transmission System or Georgia Power Distribution System; (3) Bidder development
20 experience; and (4) Project scheduling risk, the primary evaluation criterion that
21 distinguished the bids providing the most value was the economic benefit to customers.
22 The Biomass RFP solicited bids for biomass resources across the United States. The
23 Company reviewed proposals submitted for consideration in the Biomass RFP and
24 evaluated each against each other, and the IE and the Commission Staff reviewed and
25 confirmed the results. The Company evaluated each Bid submitted into the Biomass
26 RFP and ranked each Bid based on the net present value benefits to Georgia Power’s
27 customers on a dollar per MW hour basis. From this ranking, Georgia Power selected
28 a Competitive Tier to conduct its transmission evaluation to determine the costs of
29 transmission grid improvements necessary to integrate the projects. These transmission
30 costs were then imputed to each bid, and the Competitive Tier was reranked to reflect
31 the transmission and distribution impacts in the total net benefit calculation. The

1 Commission Staff and IE confirmed Georgia Power's transmission analyses and the
2 resulting impact on the Competitive Tier rankings. Following this review and based on
3 the rankings, Georgia Power selected a Short List, which included three offers from
4 two unique bidders. The Company required each bidder selected from the Short List to
5 execute either a Biomass Addition or New Greenfield Pro Forma Biomass PPA for
6 Biomass Generation previously approved by the Commission on April 21, 2023.
7 Throughout the process, the Commission Staff and the IE independently verified the
8 process and steps taken by the Company during the Competitive Tier and Short List
9 selection.

10 **Q. WAS A COST BENEFIT ANALYSIS PERFORMED IN EVALUATING THE**
11 **BID PROPOSALS?**

12 **A.** Yes. The Company performed a Total Net Benefit Analysis of the biomass bids
13 consistent with the prior RFP evaluations and agreed upon with Commission Staff and
14 IE. The total net benefit is the difference between the cost of energy from the biomass
15 resources and the Company's projected avoided costs. The costs consist of the
16 payments made to the Generator plus any costs associated with system improvements
17 necessary to deliver the energy to the Company's customers. The payments made to
18 the Generators will be calculated by multiplying the bid price times the amount of
19 energy delivered. The transmission and any appropriate distribution costs were
20 provided by Georgia Power and Southern Company Services Transmission and
21 Distribution personnel based on the characteristics of each facility described within the
22 bids. The avoided costs for each bid were calculated by applying the hourly avoided
23 energy and capacity cost projections from the Budget 2023 planning data to the hourly
24 output from the Facility, as provided by the bidder. Each bid has a different and unique
25 avoided cost because the typical hourly outputs differ between bids due to diverse
26 design parameters such as capacity, cogeneration specifications, or steam requirements.
27 To appropriately compare projects of different MW sizes, the Total Net Benefit of each
28 bid was expressed in terms of a levelized dollar per megawatt hour. In this Biomass
29 RFP, the costs for each biomass bid are greater than the Company's projected avoided
30 costs for each bid, resulting in a negative Total Net Benefit for each bid.

1 **Q. WAS A QUALIFYING FACILITY PPAs AMENDMENT INCLUDED IN THE**
2 **PPAs?**

3 Georgia Power and International Paper Company have existing PURPA qualifying
4 facility contracts for the Flint River Mill and Port Wentworth Mill facilities. To
5 accommodate the new Biomass Addition PPAs sought for certification, Georgia Power
6 and International Paper Company sought to amend the existing “Contract for the
7 Purchase of Firm Capacity and Energy from a Renewable Qualifying Facility Utilizing
8 the Proxy Unit Methodology” for the Flint River Mill and Port Wentworth Mill
9 facilities. The amendment will align the sale of energy generated in excess of the
10 Committed Capacity under current QF PPAs to the requirements set forth in the
11 Biomass Addition PPAs and resolve inconsistent provisions between the QF and
12 Biomass Addition PPAs.

1 **IV. ADDITIONAL SUM**

2 **Q. WHAT ADDITIONAL SUM IS THE COMPANY PROPOSING IN THIS CASE?**

3 **A.** The 2022 IRP Final Order grants the Company an additional sum of \$3/kW per year.
4 The Company is requesting an additional sum for each of the three Biomass PPAs of
5 approximately \$3/kW per year of the applicable PPA term starting in 2026.

6 **V. CONCLUSION**

7 **Q. PLEASE SUMMARIZE THE SPECIFIC REQUESTS THE COMPANY IS**
8 **MAKING IN THIS CASE.**

9 **A.** The Company is requesting that the Commission:

10 (1) Grant a Certificate of Public Convenience and Necessity for each of the three
11 Biomass PPAs;

12 (2) Approve the Company's proposed Additional Sum as requested in the
13 Application.

14 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

15 **A.** Yes.

1 BY MR. HIGHSMITH:

2 Q. Mr. Grubb, have you prepared a summary of the
3 panel's testimony?

4 A. (Witness Grubb) Yes, I have.

5 Q. Would you summarize the panel's testimony for
6 the Commissioners, please?

7 A. (Witness Grubb) Will do. Thank you.

8 Good morning, Commissioners. We're here
9 today to testify on behalf of Georgia Power Company and
10 its application for the certification of the 2023 Biomass
11 Power Purchase Agreements, or PPAs, as part of the final
12 order of the 2022 Integrated Resource Plan, or IRP.

13 The company filed the application, including
14 the PPAs, on July 29, 2024. Our testimony supports the
15 company's certification application for the three PPAs
16 that the company awarded under the 2023 Biomass RFP, or
17 Request For Proposal.

18 Through a market-based competitive
19 solicitation, Georgia Power complied with the Commission's
20 directive to procure up to 140 megawatts of new biomass
21 capacity in accordance with the Commission-approved RFP
22 process. These PPAs will continue the expansion of
23 renewable resources for Georgia Power's customers.

24 In addition, by certifying these PPAs, the
25 Commission will continue to advance the benefits of

1 biomass as a renewable resource to support Georgia's
2 forestry industry and rural job and economic development.

3 The three PPAs received by the company are:

4 A ten-year biomass edition PPA with International Paper
5 Company that will provide energy, environmental
6 attributes, and electrical products from the 3.6 megawatt
7 Port Wentworth Mill facility located in Chatham County,
8 Georgia;

9 A ten-year biomass edition PPA with
10 International Paper that will provide energy,
11 environmental attributes and electrical products from the
12 4.3 megawatt Flint River Mill facility located in Macon
13 County, Georgia; and a 30-year New Greenfield PPA with
14 Altamaha Green Energy, LLC, that will provide energy,
15 environmental attributes, and electrical products from the
16 70 megawatt Altamaha Green Energy, LLC, facility located
17 in Wayne County, Georgia.

18 The company is also requesting an additional
19 sum for each of the three biomass PPAs of \$3 per KW a year
20 for the applicable PPA terms starting in 2026 as was
21 approved in the 2022 IRP final order.

22 The three new biomass generation PPAs are
23 contracted to deliver energy totaling 77.9 megawatts of
24 biomass capacity to Georgia's customers that were selected
25 in the 2023 biomass RFP. Additionally, as the

1 Commission's 2022 order prescribes, the PPAs represent the
2 benefits of biomass as a renewable resource supporting
3 Georgia's forestry industry and rural jobs and economic
4 development.

5 In closing, we would like to thank the
6 Commission for consideration of these PPAs. Thank you.

7 MR. HIGHSMITH: Mr. Chairman, the panel is
8 available for your questions and for
9 cross-examination.

10 CHAIRMAN SHAW: Any questions?

11 (No response.)

12 CHAIRMAN SHAW: All right. Georgia Public
13 Service Commission.

14 MR. THOMAS: No questions.

15 CHAIRMAN SHAW: Georgia Interfaith Power &
16 Light.

17 CROSS-EXAMINATION

18 BY MS. CHANDRA:

19 Q. Good morning, Panel.

20 A. (The Panel) Good morning.

21 Q. Okay. I understand that Georgia Power is
22 requesting approval of three PPAs, two with International
23 Paper, for a total of 7.9 megawatts, and one with Altamaha
24 Green Energy for 70 megawatts; right?

25 A. (Witness Grubb) That's correct.

1 Q. Great. Most of my questions today will be
2 focused on the Altamaha Green Energy PPA, but I'll be sure
3 to flag if my question applies to the other two or all
4 three.

5 A. (Witness Grubb) Okay.

6 Q. I want to start off by asking you a couple of
7 questions about the cost of the Altamaha Green Energy PPA,
8 and in order to do so, I want to hand out a couple of
9 documents for you-all to have in front of you as reference
10 while I ask a few questions.

11 These documents are trade secret, so I won't
12 be mentioning any specific numbers. Georgia Power did
13 consent to us using some approximations, and I'll be sure
14 to collect them from you-all at the end.

15 MS. CHANDRA: Commissioners, may I approach
16 with these documents?

17 CHAIRMAN SHAW: Go ahead.

18 BY MS. CHANDRA:

19 Q. Just for the record, and to orient all of us,
20 I'll give a brief description of what we're looking at.
21 The first document that I handed out, the one that says
22 "Confidential Appendix A" at the top, I'll refer to that
23 document as Appendix A. This is page 22 of the
24 independent evaluator's final report, which was filed in
25 this docket on August 16th. This document contains

1 information about the various bids' pricing.

2 Do you-all agree that that's what you're

3 looking at?

4 A. (The Panel) Yes.

5 Q. That second document, I'll refer to that as

6 Altamaha's economic value report. This was submitted by

7 Altamaha as a part of its bid application, and it lays out

8 the economic values that project is anticipated to have on

9 the local community.

10 Do you-all agree that that's what you're

11 looking at?

12 A. (Witness Grubb) That's correct.

13 Q. Great. I'll refer to that second document a

14 little bit later, but for now let's focus on Appendix A.

15 I want to ask you-all some questions about Table 5.

16 That first column, "Bid Number," shows the

17 bid number for all four bidders; correct?

18 A. (Witness Grubb) That's correct.

19 Q. And the last row that says "259-02," that's

20 Altamaha Green Energy; correct?

21 A. (Witness Grubb) That is correct.

22 Q. So all of the values in that last row are for

23 Altamaha Green Energy; right?

24 A. (Witness Grubb) That is correct.

25 Q. The second column, "Energy Price," that shows

1 the energy price that was initially bid by all of the
2 bidders; correct?

3 A. (Witness Grubb) That is correct.

4 Q. The third column, "First year contracted,"
5 that shows the energy price that was ultimately put in the
6 final PPA; correct?

7 A. (Witness Grubb) That is correct.

8 Q. The fourth column, "Escalated annual prices
9 averaged," shows the average price per year for each bid
10 under a levelized price model; correct?

11 A. (Witness Grubb) Just one second. So these
12 are calculated by Mr. Judd and Accion --

13 Q. Okay.

14 A. (Witness Grubb) -- which they're great. So
15 they're a really good independent evaluator, but we didn't
16 run the specific numbers. So every once in a while we may
17 want to check some detail.

18 Q. Sure. Sure.

19 A. (Witness Grubb) But just wanted to note
20 that, that they're definitely going to be accurate. I
21 just don't know if they did it exactly the same we did.

22 Q. Got it.

23 A. (Witness Grubb) But generally they're in
24 line with ours.

25 Q. Understood. Thank you.

1 A. (Witness Grubb) But I believe that is -- you
2 asked column four.

3 Q. Yes.

4 A. (Witness Grubb) In terms of levelized, I
5 believe that is correct.

6 A. (Witness Weathers) Yes. As Mr. Grubb said,
7 I think these are Mr. Judd's calculated numbers, but I
8 think ours are close.

9 Q. Got it. So the fifth column, "GPC Calculated
10 Avoided Costs," that shows the avoided costs that Georgia
11 Power calculated unique for each bid; correct?

12 A. (Witness Weathers) Well, so that column
13 is -- my understanding is this is Mr. Judd's calculation
14 for the avoided costs. We did -- in our bid evaluation,
15 we do compare the cost of the bids versus avoided costs.
16 We generally do that on a levelized basis, so we have it
17 in a dollar-per-megawatt-hour basis, not in an absolute
18 dollars basis as it is on this report.

19 Q. I see. Is the Georgia Power calculated
20 avoided costs the one that you all calculated? Is this
21 close to that, approximately, would you say?

22 A. (Witness Weathers) Well, we did it on a
23 dollar-per-megawatt-hour basis, levelized over the term of
24 the PPAs, so it's hard to compare that number versus
25 absolute dollars.

1 Q. The fifth column, I think that says dollars
2 per megawatt hour.

3 A. (Witness Weathers) I'm sorry. Yes, you are
4 correct. Hold on one second, let me look at that.

5 Q. Sure. Take your time.

6 A. (Witness Grubb) You're on the GPC calculated
7 avoided costs, not --

8 Q. That's right. Yeah.

9 A. (Witness Weathers) Yeah. So these numbers
10 do look -- I don't have the exact number, but they do look
11 reasonable -- look closer to what we would have, yes.

12 Q. Got it. Great.

13 Okay. So moving on, that sixth column,
14 "First year costs," that shows the dollar amount above the
15 avoided costs that customers will be paying just in the
16 first year of the facility's operation; correct?

17 A. (Witness Grubb) That is correct. Based on
18 the profiles that were bid in from those resources, that's
19 correct.

20 Q. Got it. And that last column, "Total Costs
21 Above," that shows the total dollar amount above the
22 avoided costs that customers will be paying over the
23 course of the entire PPA; correct?

24 A. (Witness Weathers) My understanding is that
25 that is how it's calculated based on one set of avoided

1 costs projections, which is our -- the ones we used for
2 this bid evaluation were, you know, moderate gas, zero
3 carbon pressure, using those prices over the 30 years.

4 Q. Understood. Okay. So now that we know what
5 we're looking at here, I want to focus on that fifth
6 column, "Georgia Power's Calculated Avoided Cost."

7 So understanding that this is the independent
8 evaluator's calculation specifically, I want to ask
9 whether -- you-all, I believe, in your applications,
10 stated that Georgia Power calculated a unique avoided cost
11 for each bid; correct?

12 A. (Witness Weathers) That is correct.

13 Q. And just to make sure we're on the same page,
14 the unique avoided cost for each bid is essentially, in
15 simple terms, what you-all have calculated as the economic
16 value of one unit -- of one megawatt hour of this energy;
17 correct?

18 A. (Witness Weathers) That is correct, yes.
19 It's the cost of the energy versus the cost that that
20 energy avoids. So it's net of those two. It's on a
21 net-present-value basis.

22 Q. Got it. In other words, the avoided cost
23 that's listed here, or the one that you-all calculated,
24 that's what a unit of this specific biomass energy from
25 this specific facility is worth; correct?

1 A. (Witness Weathers) That's correct. Based on
2 this bid's unique profile, what is the energy benefit of
3 it and what is the capacity benefit of it.

4 Q. Got it. So that dollar amount that's in the
5 last row of column five, that's what is -- that's the
6 economic value of one megawatt hour of energy from the
7 Altamaha PPA specifically; right?

8 A. (Witness Weathers) On average, on an NPV
9 basis over the term of the PPA.

10 Q. Got it. Now, I want to focus on the third
11 column of this table, "First Year Contracted Energy
12 Price." The last row of the third column shows the
13 contract price that customers will be paying per megawatt
14 hour of energy from the Altamaha PPA; correct?

15 A. (Witness Grubb) That's correct.

16 Q. Do I have this right? The price of one unit
17 of energy from the Altamaha PPA, it looks like it's well
18 over three times the avoided cost or the economic value of
19 a unit of this energy. Do I have that right?

20 A. (Witness Grubb) Yes. That's correct.

21 And, Commissioners, I think the important
22 thing to note here is biomass is a unique resource, and
23 all resources have their pros and cons and uniqueness to
24 them. So that is the price from that contract that's a
25 result of the competitive solicitation that we ran in

1 response to the 2022 IRP order.

2 And so that is the price through this RFP and
3 even the prior RFP. This RFP resulted in that price for
4 new biomass in Georgia. So that is the price for a new
5 greenfield biomass project in Georgia. So it is, it is
6 more expensive, but, again, that's -- you know, that is
7 known, and the order noted the other benefits that biomass
8 brings. It was in the Commission's motion and Commission
9 order that we don't capture here. This is truly avoided
10 cost.

11 Q. Got it. Just to make sure we're clear,
12 though, customers will be paying for more than three times
13 the value of the energy that they will be receiving;
14 correct?

15 A. (Witness Grubb) For that resource, yes.
16 Compared to more generic resources that are based purely
17 on avoided cost. But, again, the Commission will weigh
18 that against the other benefits that are brought to the
19 state from these resources.

20 Q. Understood. I want y'all to take a look at a
21 graph now, made by the U.S. Energy Information
22 Administration, EIA, from April 2023 that shows
23 estimations of the average levelized cost of energy for
24 new resources entering service in 2028.

25 MS. CHANDRA: Commissioners, may I approach

1 with this graph?

2 CHAIRMAN SHAW: Go ahead.

3 COMMISSIONER MCDONALD: Don't have you some
4 help to help you put that up?

5 MS. CHANDRA: I do. I do.

6 COMMISSIONER MCDONALD: From a time
7 standpoint?

8 MS. CHANDRA: Yes, my apologies.
9 May Jennifer approach?

10 CHAIRMAN SHAW: Go ahead, Jennifer.

11 MS. CHANDRA: Sure. I'll give y'all a second
12 to take a look.

13 CHAIRMAN SHAW: Thank you.

14 A. (Witness Grubb) Thank you. Just give us a
15 little more time. Thank you. We're trying to figure out
16 all the bars, and we didn't make it, so...

17 BY MS. CHANDRA:

18 Q. Sure. You can take a second.

19 A. (Witness Grubb) Thank you. Are you going
20 to -- I'm trying to think a little bit about this capacity
21 weighted average. I'm not sure if that's what you're
22 going to asking about. So I'm just trying to read the
23 footnotes to figure out --

24 Q. I'm not.

25 A. (Witness Grubb) Okay.

1 COMMISSIONER PRIDEMORE: While they're
2 looking at that, would you clarify that this is
3 also your exhibit?

4 MS. CHANDRA: It's not an exhibit. That was
5 actually part of Altamaha Green Energy's bid
6 application.

7 COMMISSIONER PRIDEMORE: Okay.

8 BY MS. CHANDRA:

9 Q. Okay. So this box graph shows estimations of
10 the average levelized cost of energy -- or electricity for
11 new resources that are entering service in 2028.

12 Do you agree that that's what you're looking
13 at?

14 A. (Witness Grubb) As stated here from EIA,
15 yes.

16 Q. Great. Do you see where biomass is located
17 on left-hand side of the graphs? It's the second one down
18 under "Dispatchable technologies."

19 A. (Witness Weathers) Yes.

20 A. (Witness Grubb) Yes.

21 Q. Do you see that this graph shows that the
22 average levelized cost of electricity for new biomass
23 generation entering service in 2028 is \$77.16?

24 A. (Witness Grubb) Yes.

25 Q. Without revealing the specific trade secret

1 price, you'd agree that the price-per-megawatt hour of the
2 Altamaha PPA is several times higher than that EIA
3 average; right?

4 A. (Witness Grubb) It is. I think one of the
5 things that's hard to know, whenever you're looking at
6 numbers like this, is specifically, you know, the size of
7 this biomass, where it's located, what the fuel is. We
8 had a very specific requirement for here. We don't know
9 what else is included in the assumptions here or where it
10 is.

11 So, yes, it is, but we can't speak to
12 exactly what underlies this versus what --

13 Q. Sure.

14 A. -- the developer needed to put in the -- in
15 case we ever pursued the project.

16 Q. Understood. I want to take our attention
17 back to Appendix A now. There are two more numbers in
18 that table that I want to bring your attention to.

19 The number in the bottom row of the
20 second-to-last column, that shows the premium, the amount
21 above the avoided cost or economic value of this energy
22 that customers will be paying in just the first year of
23 the Altamaha facilities operation; correct?

24 A. (Witness Grubb) Based on those calculations.
25 And, again, that is straight avoided costs, and it doesn't

1 take into account the other things the Commission will
2 consider in this hearing, which is the economic
3 development and the forestry support aspects. That's
4 correct, though.

5 Q. Of course. And that number in the bottom row
6 of the last column, so in that bottom right cell, that
7 shows the premium, the amount above the avoided cost or
8 economic value of this energy that customers will be
9 paying over the full 30-year term; correct?

10 A. (Witness Grubb) That is correct, based on
11 the numbers that Accion ran, and we expect they're
12 generally close to ours, if we were to look at them.

13 But, again, Commissioners, that biomass is
14 not the least expensive resource. I think everyone knows
15 that. And, again, that's why -- not to speak for the
16 Commission, but that is why the Commission wanted to
17 specifically have an RFP to let these resources compete
18 against themselves to bring biomass to the state.

19 A. (Witness Weathers) And I'll also add that,
20 you know, I don't think it's, you know, applicable to
21 directly compare versus what EIA says, you know, the
22 generic cost of biomass resources are. If we would have
23 had some resources at that cost, those would have been
24 evaluated. Those would have been brought before the
25 Commission, but the company received the bids that we

1 received, so we performed -- we went through the entire
2 evaluation process, all of the steps to evaluate all the
3 costs and benefits. It was less than the amount that we
4 were seeking, less than the 140 megawatts.

5 There was no price cap. There was no
6 screen-out based on economics, so the company -- we're
7 bringing the resources to the Commission that were bid in.
8 We didn't rank them economically, but we're bringing all
9 the resources that were bid in because they all -- because
10 these were the bids that we have. We didn't have these
11 other, you know, theoretical bids that the EIA report
12 suggests that could be there.

13 Q. Understood. And just to confirm that number
14 in that bottom right cell, those are -- the cost overruns
15 for the Altamaha PPA, that number is in the billions;
16 correct?

17 A. (Witness Grubb) Yeah, I wouldn't call them
18 cost overruns. That is the price we would pay for that.
19 But -- it is. But that's a 30-year contract and really
20 high capacity value, so that's -- that adds to that number
21 being high.

22 A. (Witness Weathers) As compared to a set of
23 avoided costs that don't assume any impact of carbon
24 pricing, anything like that. It's just our base avoided
25 cost stream.

1 Q. Understood. If I'm understanding correctly,
2 the costs that customers will pay don't end with this
3 table. You're asking the Commission to approve that your
4 customers pay per megawatt hour, not just that contracted
5 energy price in column three, but also transmission costs,
6 which were not included in Table 5; correct?

7 A. (Witness Grubb) I don't know that they're
8 included in Table 5. We do capture the transmission costs
9 for any RFP bid. So this RFP is not unique there, so when
10 Mr. Weathers and team ran the economic evaluations, we did
11 include the transmission costs that would be there. So,
12 yeah -- but as in any RFP, we're always looking at what
13 transmission costs have to be billed to supply -- to those
14 resources.

15 A. (Witness Weathers) That's right. And I
16 can't say whether or not Mr. Judd included those
17 transmission costs in his calculation. You would have to
18 ask him about that. But as Mr. Grubb said, we certainly
19 do include that in the economic analysis that we
20 performed.

21 Q. Understood. Just for the record, the
22 paragraph above this table just does say that the table
23 does not include transmission costs, but I'll keep going.

24 You're also asking the Commission to approve
25 that your customers pay, per megawatt, an additional sum

1 as well; right?

2 A. In this hearing, yes, we are.

3 Q. And you're also requesting approval for
4 customers to pay any costs of conducting the RFP that are
5 not offset by RFP bid fees and winner's fees through the
6 fuel cost recovery mechanism; is that right?

7 A. (Witness Grubb) That's correct. The
8 majority of those costs were covered by bid fees and
9 winner's fees like they're always done in RFPs.

10 And so, I guess, back to the transmission,
11 Commissioners, we aren't asking y'all for that now. As
12 you know, any transmission projects to support resources
13 in an RFP would go through our normal rate case and the
14 ASR process as part of the transmission plans to serve for
15 firm and -- from obligations and future firm obligations.
16 And so that number could change.

17 The developer still has to move forward with
18 making sure exactly what their interconnection costs are
19 going to be. But if that is a cost, it would come through
20 the rate case or the ASR. So we're not asking for it in
21 this proceeding. I just want to be clear on that.

22 Q. Thank you. Just to confirm, all of those
23 costs that we just talked about, and that
24 several-billion-dollar figure of cost above avoided cost,
25 this is all for 70 megawatts of capacity; correct?

1 A. (Witness Grubb) That is correct.

2 Q. I want to pivot a little bit to talking about
3 Georgia Power's net benefit analysis. You-all state
4 pretty plainly in your application that all of the biomass
5 PPAs, including the Altamaha PPA, resulted in a negative
6 total net benefit for customers; right?

7 A. (Witness Weathers) That is correct.

8 Q. And the total net benefit calculation in
9 simple terms is avoided cost minus costs; right?

10 A. (Witness Weathers) That's right.

11 Q. And essentially, because the costs were
12 higher than the avoided cost, that results in a negative
13 number?

14 A. (Witness Weathers) That is correct.

15 Q. The independent evaluator's report says that
16 the calculated net benefit for the Altamaha PPA
17 specifically is a cost to ratepayers of more than three
18 times the avoided cost.

19 Do you agree with that conclusion?

20 A. (Witness Weathers) Yes.

21 A. (Witness Grubb) Which is based on the table
22 that we just -- these steps there.

23 Q. Yes. Would it be fair, then, to say that a
24 negative total net benefit is essentially a net negative
25 for customers, given that they're basically paying more

1 than the economic value of what they're getting?

2 A. (Witness Weathers) So we evaluate in the
3 analysis the economic benefit alone, so the things that we
4 can quantify. So we're looking at the, as you said, the
5 cost of the resources versus the avoid- -- the cost that
6 they're avoiding to customers.

7 So the Commission can certainly consider any
8 other factors. And so they consider economic benefits,
9 economic development activities, those things for the
10 Commission to decide. So we simply evaluated the bids
11 that we had with the avoided costs that we had, and that
12 is negative, but the Commission can consider other things.

13 Q. Understood. Has this ever happened before
14 where Georgia Power has received bids, conducted an
15 analysis, determined that it would be a net negative for
16 customers, but then moved forward with requesting that the
17 Commission approve the bids regardless of that finding?

18 A. (Witness Weathers) Yes. Yes. I mean, it's
19 not unusual for new capacity to be above avoided costs.
20 In fact, the capacity that you're procuring is the avoided
21 cost. I mean, that becomes the cost of capacity.

22 So there's certain RFPs that we do, like, you
23 know, renewable RFPs where, in the past, we have brought
24 resources -- only resources that are below avoided cost.
25 But when we're adding capacity to the system, we want to

1 procure the least-cost resources for customers considering
2 all the other cost and benefits to customers. That's what
3 we've done here. So we have evaluated the bids as they
4 came in, so we economically evaluated -- we're bringing
5 those bids to the Commission.

6 Q. Understood. So the Altamaha project is
7 pretty expensive, and like we just talked about, the --
8 Georgia Power has made a finding that it's a net negative
9 for customers. I want to understand -- so as part of the
10 2022 IRP order that we've been talking about directing
11 Georgia Power to conduct this RFP for biomass energy, in
12 that order it states that the Commission reserves the
13 right to reject any or all of the biomass bids if it
14 determines that accepting the bid is not in the best
15 interest of customers.

16 Do you recall that?

17 A. (Witness Grubb) Yes. That's item number 6
18 in the motion.

19 Q. Uh-huh. Does Georgia --

20 A. (Witness Grubb) Sorry. As is always the
21 case, everything we bring to the Commission is a
22 recommendation to this Commission, so they always have the
23 ultimate decision.

24 Q. Of course.

25 Does Georgia Power believe that the

1 Commission approving the Altamaha PPA would be in the best
2 interest of customers?

3 A. (Witness Grubb) In order to meet the
4 requirements in that IRP, as we state in our testimony, we
5 are recommending certification. So that is ultimately up
6 to the Commission. What we were asked to do was to run an
7 RFP strictly for biomass in the state of Georgia for a new
8 biomass. That's what we've done. We've brought the most
9 competitive resources that were there. It was a limited
10 number of resources. That's just a reflection of the
11 biomass market.

12 We've brought those forward to the
13 Commission. We also were able to provide that economic
14 development information that the bidders provided per the
15 order. So we are recommending certification to meet the
16 directive from the Commission in the 2022 IRP order.

17 Q. Understood. So you-all have brought up
18 several times, not just today, but also in your
19 application and prefiled testimony, that the Altamaha
20 project will bring economic value to the forest industry
21 and rural communities.

22 I want to understand whether those economic
23 values offset the cost above avoided cost that we just
24 talked about. So the 2022 IRP order directed the RFP to
25 request that bidders provide the following information

1 about the economic value of the project as part of their
2 applications.

3 First, the number and nature of new jobs, if
4 any, that the project will provide; correct?

5 A. (Witness Grubb) Correct.

6 Q. Second, the amount of new capital investment
7 that will be put into the project; correct?

8 A. (Witness Grubb) Correct.

9 Q. And, finally, any other information relevant
10 to the economic development stemming from the project.

11 Do I have that right?

12 A. (Witness Grubb) That's correct.

13 Q. I want to bring your attention back to that
14 second document, the second trade secret document that I
15 handed y'all, which is Altamaha's economic value report.

16 A. (Witness Grubb) Yes.

17 Q. Again, this is trade secret, so I won't
18 mention any specifics, but, for the record, and so we know
19 what we're looking at, this page contains information
20 about the amount of economic value expected to be
21 generated by the Altamaha project; right?

22 A. (Witness Grubb) That's correct.

23 Q. And it details the regional job creation,
24 other labor benefits over the three-year construction
25 period, as well as some estimates of local tax revenue

1 that will be generated over 15 years; right?

2 A. (Witness Grubb) That's correct, as directed
3 by -- as contained in the RFP per the order. That's
4 correct.

5 Q. Yeah. So Altamaha was requested to submit
6 all of that economic value information that we just talked
7 about from the 2022 IRP order; right?

8 A. (Witness Grubb) And as contained in the RFP
9 documents themselves, that's correct.

10 Q. And this one page was their full submission
11 in response to that request?

12 A. (Witness Grubb) That is my understanding,
13 yes.

14 Q. The independent evaluator's report lists out
15 the cumulative economic value of all three of the
16 projects. That's on page 12 of the report. I don't know
17 if y'all have that in front of you, if you want to
18 reference it.

19 A. (Witness Grubb) You said in the IE report?

20 Q. Yes, that's right.

21 A. (Witness Grubb) We were familiar with it,
22 but we do not have it with us.

23 Q. I can read it out to you. So it states that
24 the cumulative economic value for all three projects
25 includes \$300 million in capital expenditure, \$17 million

1 in local construction contracts, 3.2 million in increased
2 annual pay for wood procurement crews, 3.5 million in
3 equipment for the additional crews, and 6.5 million over
4 15 years in tax revenue.

5 Understanding you don't have that in front of
6 you, does that sound correct? Does that sound about
7 right?

8 A. (Witness Grubb) Based on what the bidders
9 and developers provided, yes, that sounds right.

10 A. (Witness Weathers) And to be clear, we
11 didn't calculate those numbers; right?

12 Q. Okay.

13 A. (Witness Weathers) So those are the
14 independent evaluator's calculations, estimate of those
15 numbers, but we did not quantify all of these economic
16 benefits in our analysis.

17 Q. Understood.

18 CHAIRMAN SHAW: Is it -- is it not true that
19 these costs that were estimated months ago,
20 possibly a year or more ago, could have increased
21 exponentially based on inflationary pressures that
22 have affected most -- almost every construction
23 project that's taking place in this country?

24 MR. GRUBB: You're talking about as far as
25 how we compared avoided costs?

1 CHAIRMAN SHAW: Well, I'm talking about these
2 economic impact numbers that were presented.

3 MR. GRUBB: Right. I'm sure they could
4 have --

5 CHAIRMAN SHAW: Those rates that showed a
6 cost of construction for these projects, for three
7 these projects.

8 MR. GRUBB: That's right.

9 CHAIRMAN SHAW: Isn't it true that these
10 costs could have increased quite a bit based on
11 inflationary pressures that have affected almost
12 every construction project in this country?

13 MR. GRUBB: I believe they absolutely
14 could -- don't know for sure, but, yeah, it makes
15 sense.

16 And, Commissioners, as you all know, as
17 Mr. Weathers mentioned, we did not calculate these
18 numbers. We also don't include them in our
19 evaluation, as that is something for you-all to
20 consider.

21 We're obviously involved in economic
22 development, but when we do analysis, economic
23 analysis to do RFPs, we do not capture these types
24 of aspects. Those are -- those are for y'all to
25 consider. So we don't specifically put them in the

1 numbers that we're talking through.

2 BY MS. CHANDRA:

3 Q. So going back to that cumulative amount that
4 the IE report includes, how much of that cumulative
5 amount -- what percentage would you say, if you're aware,
6 is coming from the Altamaha PPA specifically?

7 A. (Witness Grubb) I'm not aware of how much it
8 is because we didn't do that math.

9 Q. Okay. Well, just to put it in some context,
10 the Altamaha PPA is 70 megawatts out of the total request
11 you-all are making for 77.9 megawatts. So the Altamaha
12 PPA makes up around 90 percent of the total capacity of
13 the request; correct?

14 A. (Witness Grubb) That's correct.

15 Q. Do the economic values from the Altamaha PPA
16 make up around 90 percent of the cumulative values listed
17 in the IE report?

18 A. (Witness Grubb) I don't have that math. And
19 also, if we did that, the trade secret nature would be
20 exposed. We've got the general number.

21 Q. Sure.

22 A. (Witness Grubb) But I do not know what the
23 percentage of AGE to that total is.

24 Q. Okay. So, Mr. Grubb, you said a couple
25 seconds ago that these economic values were not taken into

1 account when conducting Georgia Power's net benefit
2 analysis; right?

3 A. (Witness Grubb) Not Georgia Power's
4 evaluation. That's correct. That's what we -- we
5 provided that information through the RFP for the
6 Commission's consideration.

7 A. (Witness Weathers) And just to clarify
8 there, so we do a quantitative economic evaluation. So we
9 consider all of the avoided costs. There's also certain
10 nonprice factors that are enumerated in the RFP. We
11 consider nonprice factors. So this is additional
12 externality. As Mr. Grubb said, it's not part of our
13 evaluation, but it's there for the Commission's
14 consideration.

15 Q. If the economic values had been factored into
16 Georgia Power's total net benefit analysis, do you think
17 it would ultimately still result in a net negative for
18 customers?

19 A. (Witness Grubb) I mean, we can't speculate
20 to that. What we don't understand is what an impact of
21 that type of number means to that certain community that
22 it's in. So we can't speculate or make a statement on
23 that impact.

24 COMMISSIONER MCDONALD: Let me jump in here a
25 minute, if I may.

1 You relate everything to the avoided cost
2 pretty much in this whole thing. Would you explain
3 avoided cost to me.

4 MS. CHANDRA: Avoided costs, from my
5 understanding, is essentially the -- it's the
6 economic value of a unit -- of one megawatt hour of
7 energy from one of these PPAs. So it's essentially
8 the value of the energy that a customer is
9 receiving, from my understanding.

10 COMMISSIONER MCDONALD: And our avoided cost
11 is based on the cheapest kilowatt that's produced
12 by one of our generators; is that -- is that a fair
13 statement?

14 MS. CHANDRA: Sure. Sure.

15 COMMISSIONER MCDONALD: How many vessels of
16 uranium are produced in Georgia that go into our
17 nuclear plants?

18 MS. CHANDRA: I'm not sure, Commissioner.

19 COMMISSIONER MCDONALD: Would none be a good
20 answer?

21 MS. CHANDRA: I'm not sure, Commissioner.

22 COMMISSIONER MCDONALD: Do we have uranium in
23 Georgia?

24 MS. CHANDRA: I assume no.

25 CHAIRMAN SHAW: How many therms of natural

1 gas that are used in our generation are produced in
2 the state of Georgia?

3 MS. CHANDRA: I'm not sure, Commissioner.

4 COMMISSIONER MCDONALD: Do we have natural
5 gas wells in Georgia?

6 MS. CHANDRA: I'm not sure, Commissioner.

7 COMMISSIONER MCDONALD: How many units of
8 coal that go into our coal-generating plants is
9 produced in Georgia?

10 MS. CHANDRA: I'm sorry, Commissioner. I'm
11 not sure.

12 COMMISSIONER MCDONALD: Well, how -- if you
13 don't know these answers to this fuel source, isn't
14 fuel source a part of the avoided cost, a
15 significant part?

16 MS. CHANDRA: As I'm understanding it, the
17 avoided cost in this particular docket was
18 calculated unique for each of the biomass bids.

19 COMMISSIONER MCDONALD: But isn't the fuel
20 cost a part of an avoided cost?

21 MS. CHANDRA: Sure.

22 COMMISSIONER MCDONALD: So the gas that's
23 produced in Louisiana or Pennsylvania is a part of
24 the avoided cost to get to Georgia, and those
25 companies -- the cost of that is -- our consumers,

1 through the usage of those products, are paying for
2 ad valorem taxes in both of those places.

3 And the point I'm trying to get to is that
4 biomass is produced in Georgia from the tree to the
5 transportation to the generation process. So all
6 that, when you look at avoided cost, if you go
7 beyond just what the surface of what the fuel
8 costs, it's a benefit to Georgia all the way
9 through the process, because the trees are not
10 grown in Pennsylvania or they're not grown in
11 Louisiana. They're grown in Georgia. They're not
12 transported by some pipeline from Pennsylvania
13 to -- or New Orleans to Georgia. They're
14 transported by local trucks moving product from the
15 woods to the plants, et cetera.

16 So I believe in capitalism. Do you believe
17 in capitalism?

18 MS. CHANDRA: Sure.

19 COMMISSIONER MCDONALD: So I see that as a
20 part of the total picture is what I'm trying to
21 point out.

22 MS. CHANDRA: Understood. Thank you,
23 Commissioner.

24 BY MS. CHANDRA:

25 Q. There's one other main topic that I want to

1 discuss with you-all today, Panel, and that's the
2 reliability of biomass as an energy source. Winter Storm
3 Elliott is one of the most recent examples we have of
4 extreme winter peak, which is when -- a time when we
5 really need energy sources to perform; right?

6 A. (Witness Grubb) That's right.

7 A. (Witness Radney) Right.

8 Q. Biomass didn't perform very well during
9 Winter Storm Elliott, did it?

10 A. (Witness Grubb) Do you have the information
11 you're basing that on? I think it was a hearing request,
12 I think you're --

13 Q. Yes, that's right.

14 A. (Witness Grubb) Yes. So in that hearing
15 request, the majority of the biomass wasn't available in
16 that one period of an event. What we don't know is --
17 that was during the holidays. And so some of these
18 projects are industrial facilities. We don't know if they
19 were planning on being down in that period of time or not,
20 but, yeah, a majority of them were not available.

21 Q. Just to put some numbers to this for some
22 context, at the time of the storm, Georgia Power had 303
23 megawatts of biomass on the grid and 267 out of those 303
24 were out on the morning of Christmas Eve.

25 Does that sounds about right?

1 A. (Witness Grubb) Do you have the hearing
2 request that you're referencing?

3 Q. I do, if you want to take a look at it.

4 MS. CHANDRA: Commissioners, may I approach?

5 CHAIRMAN SHAW: Go ahead.

6 A. (Witness Weathers) Commissioners, can I add
7 while she's handing that out? As Mr. Grubb said, Winter
8 Storm Elliott -- so the peak happened on Christmas Eve,
9 and it was on a weekend. So the fact that biomass
10 generators were offline, we don't know the reason why all
11 of them were offline, the ones that were offline. So they
12 could have been offline -- something related to the cold
13 weather. They could have been offline for something
14 unrelated to the cold weather because it was a holiday
15 weekend.

16 COMMISSIONER PRIDEMORE: But, Mr. Weathers,
17 whether it's Christmas or a weekend, customers
18 don't care. They expect their power to be on. And
19 to get their power on, Georgia Power, through their
20 PPAs and partnerships and directly, they've got to
21 generate; right?

22 MR. WEATHERS: Yes, ma'am.

23 COMMISSIONER PRIDEMORE: Yeah.

24 MR. WEATHERS: Yes, ma'am. In fact, we did
25 have other resources on our system that were

1 offline as well, so some of our fossil generators
2 were offline.

3 MR. GRUBB: And we capture that, as you know,
4 Commissioner, in the reserve margin study that
5 we've filed in every IRP, and that's part of that
6 reserve margin is knowing that some of those
7 resources won't be available.

8 What we were just pointing to was if it's a
9 reliability question -- like, if it was a facility
10 failure, we're not sure if there was a facility
11 failure or if they were just not running anyway.
12 So that's what we -- we're saying we didn't have
13 those details.

14 You're absolutely right. Owned units, PPAs,
15 we need them available. We have incentives in PPAs
16 to encourage that behavior, and we capture that in
17 the reserve margin study as we come forward to the
18 Commission each year. Or each -- every three
19 years.

20 COMMISSIONER PRIDEMORE: Well, I'm going to
21 make a request to the company that we look at the
22 reserve margin study a little closer when it comes
23 to Winter Storm Elliott. I think that if we have
24 assets, especially Georgia Power assets, that we're
25 not operating at that time, then the Commission

1 needs to know why.

2 MR. WEATHERS: Yes, ma'am. In fact, we do
3 plan on filing a new reserve margin study with the
4 '25 IRP, so we will look closer at Winter Storm
5 Elliott.

6 COMMISSIONER PRIDEMORE: Thank you.

7 BY MS. CHANDRA:

8 Q. Okay. Bringing your attention back to the
9 hearing request. 267 megawatts -- and I'm looking at
10 page 2.

11 A. (Witness Grubb) Right.

12 Q. So 267 megawatts of capacity PPA resources
13 that were out during that time also received a payment
14 reduction. Were those the same 267 megawatts of
15 unavailable biomass energy, to the best of your knowledge?

16 A. (Witness Grubb) Let me -- you've added --
17 it's -- notes that the hearing request was updated by
18 you-all.

19 Q. Yes.

20 A. (Witness Grubb) I just want to take a chance
21 to look at that. Yeah. I can't remember. I know that
22 all the PPAs didn't have a payment reduction. The reason
23 that each biomass contract would have had a payment
24 reduction is they're basically -- they're paid just for
25 energy.

1 So if they're not available and they're not
2 running, they just don't get paid. So it's not a penalty
3 per se. They just don't get paid the energy.

4 On the capacity resources through other
5 contracts, we actually have availability requirements
6 where they can actually have a reduced capacity payment or
7 reduced reliability payment.

8 CHAIRMAN SHAW: Let me ask you this.

9 MR. GRUBB: But biomass are not set up for
10 that.

11 CHAIRMAN SHAW: Let me ask you this,
12 Mr. Grubb. These PPAs, these biomass PPAs that
13 we're -- a part of this hearing, are those
14 considered capacity resources and not energy only?

15 MR. GRUBB: They are. They're paid energy
16 only, but we do reflect them in our capacity plans
17 and capacity value, just like we do any other
18 resource. Solar is the same way. We pay solar a
19 dollar-per-megawatt hour, but we do give it summer
20 capacity recognition. So we do plan on that
21 capacity equivalence, so they're paid that way, but
22 they actually are valued both ways.

23 MR. WEATHERS: Yeah, correct. Mr. Chairman,
24 if I could add on to that, so we're not procuring
25 them primarily for capacity. So we do have

1 capacity RFPs, All-Source RFP's where the main
2 objective is to procure reliable capacity. So
3 these are renewable energy.

4 They do have -- we do assign capacity
5 benefits, as we do any other renewable energy
6 generator that we evaluate. So they do have
7 capacity, but they're not being procured primarily
8 for reliable capacity reasons.

9 COMMISSIONER PRIDEMORE: Is there a penalty
10 in the Altamaha Green Energy contract if they do
11 not produce when needed?

12 MS. RADNEY: Yes. They are expected to --
13 during the winter, summer seasons, to have
14 availability above 60 percent, as well as for
15 consecutive six months, they have to have
16 availability above 60 percent.

17 COMMISSIONER PRIDEMORE: So that's for --
18 that's to account for your winter reserve margin
19 and your summer reserve margin. Why 60 percent?
20 Why not higher? I mean, that's barely breaking
21 even.

22 MS. RADNEY: Again, that's based on the --
23 what Mr. Grubb talked about. It is -- they're paid
24 as they generate. So, again, we're expecting them
25 to be available 60 percent of the time during those

1 seasons I just mentioned, during the summer,
2 winter, and over a consecutive six-month period.

3 MR. GRUBB: And I believe that's similar to
4 the proxy PURPA QF contracts that we have or the
5 energy only -- or the firm capacity, not the proxy.
6 The proxies are a little higher than that. But,
7 again, Commissioner, we capture that in the reserve
8 margin study. The other impact here is if they're
9 not available, they obviously don't get the energy
10 payments.

11 COMMISSIONER PRIDEMORE: What's the penalty
12 to the company if they don't produce at 60 percent?

13 MR. GRUBB: It depends on the event. And so
14 it's part of that 26 percent reserve margin. So we
15 would be making up that energy from the other parts
16 of the system, and may have to have some purchases
17 there, depends on the event. If it's an April
18 afternoon, it wouldn't be that costly. Winter
19 morning, it could matter, but that's why we carry
20 that 26 percent reserve is to cover those types of
21 things.

22 COMMISSIONER PRIDEMORE: Let me ask my
23 question again, Mr. Grubb, so you'll answer it.
24 What's the penalty on Altamaha Green Energy if they
25 fail to produce at 60 percent?

1 MR. GRUBB: If they fail to produce at
2 60 percent for those time frames, I think it's
3 termination of the contract; correct, Ms. Radney?

4 MS. RADNEY: Yes, it goes into a -- then a
5 default, but we do have a chance to provide a cure
6 plan and have a cure period if that occurs.

7 COMMISSIONER PRIDEMORE: Has Georgia Power in
8 the last five years dissolved the contract --

9 MR. GRUBB: Most of ours have -- I'm sorry.

10 COMMISSIONER PRIDEMORE: -- dissolved a
11 contract for failing to produce at the reserve
12 margin studies -- or reserve margins?

13 MR. GRUBB: No, most of all of our contracts
14 have met their availability requirements. So there
15 had been no event of defaults.

16 COMMISSIONER PRIDEMORE: Can you think of --
17 in your tenure at Georgia Power -- how long have
18 you been there, Mr. Grubb? Because you've been
19 there a long time.

20 MR. GRUBB: I've been there a while, since I
21 was -- it's been 30 years, not in this role,
22 obviously, but, yes, been around a while.

23 COMMISSIONER PRIDEMORE: Can you recall a
24 time that a provider failed to meet the cure plan
25 and they -- their contract was dissolved?

1 MR. GRUBB: Not recently, or any that I was
2 involved with, which means a majority of the time
3 we had the proper incentives in the contract.
4 Well, we do have the proper incentives in the
5 contract, to incent them to be there and be
6 available.

7 COMMISSIONER PRIDEMORE: Or that the
8 incentives are too low, the threshold's too low.

9 MR. GRUBB: We have some pretty high
10 thresholds on a lot of contracts. And it does come
11 into our whole discussion on ownership and PPAs.
12 So we do have -- like, for example, the proxy
13 qualifying facility has to be available in
14 96 percent of the time. I think in our capacity
15 PPAs, the availability through a season is in the
16 90s.

17 COMMISSIONER PRIDEMORE: So if they're
18 available in the 90s, why is this one only
19 available at 60 percent?

20 MR. GRUBB: I think it's just noting it's a
21 little -- it's a little bit of a different type of
22 resource. Every resource has its pros and cons.
23 And so I think the nature of biomass and the other
24 benefits that come with it, it's a little lower bar
25 than a resource that maybe -- to Commissioner

1 McDonald's point, to have fuel from other areas.

2 So it's really just a reflection, a little bit, of
3 the uniqueness of biomass is what I would have to
4 say.

5 COMMISSIONER PRIDEMORE: Is it less reliable
6 than nuclear?

7 MR. GRUBB: We give it the same capacity
8 value, but I would say, yes, in terms of nuclear is
9 likely not going to have similar conditions on it
10 the winter. But, again, we capture that. We value
11 a dispatchable resource, and Mr. Weathers can help
12 me. We value a dispatchable resource or a resource
13 with a profile like this contract will have, that
14 they're available in almost every peak period.
15 They're not always going to be there, so we capture
16 the reserve margin study.

17 MR. WEATHERS: Yeah. I think -- I'll add,
18 Commissioners, so we look at these resources. Yes,
19 they've been less reliable in recent history. So I
20 think that the handout that we have showing the
21 performance during Winter Storm Elliott shows that;
22 however, they're not being procured primarily for a
23 liability like a capacity RFP.

24 And, you know, so the impact of we do give
25 it capacity value. So we have fossil units that

1 were offline as well. Their capacity value is not
2 reduced because they were offline during a recent
3 winter storm event. We don't know how any
4 resources will perform in future winter storm
5 events.

6 COMMISSIONER PRIDEMORE: Mr. Weathers, my
7 question was not directly related to Winter Storm
8 Elliott. It was whether or not biomass is less
9 reliable than nuclear, and the answer is yes. Is
10 it less reliable than coal?

11 MR. GRUBB: In general, I would say it is.

12 COMMISSIONER PRIDEMORE: Is it less reliable
13 than natural gas?

14 MR. GRUBB: In general, I would say it is.
15 Again, that's very facility specific. We'll see
16 what these new ones -- how they perform.

17 BY MS. CHANDRA:

18 Q. Mr. Grubb, you've mentioned a couple times
19 that re not certain whether the PPAs that received the
20 payment reduction, if that payment reduction was a result
21 of operational issues or if it was a result of just
22 choosing to be offline due to the holiday time. Do I have
23 that right?

24 A. (Witness Grubb) For the biomass. For the
25 others, they're obviously, either purchase power

1 agreements or our units that were dispatched and
2 committed. With some of the biomass, if it's tied to an
3 industrial process, are the only ones that we don't know.
4 If it's a greenfield one that's just generating, with wood
5 waste and generation, then you would not assume it was
6 a -- I just don't know whether it was running going into
7 that event. We've narrowed in on that one day for those
8 hearing requests. I just don't know or can't recall the
9 days leading up to it.

10 Q. Of course.

11 A. (Witness Weathers) Yeah, for our owned
12 units, we get very specific descriptions on outage events.
13 So we know was it related to freezing? Was it related to
14 any cold weather outage, or just anything else? We don't
15 have that same visibility for purchase power, especially
16 these biomass units.

17 Q. Understood.

18 Has Georgia Power received any assurances,
19 either from Altamaha Green Energy or from your own market
20 research, that biomass will be any more reliable -- will
21 be available for customers this time around than it was
22 during Winter Storm Elliott?

23 A. (Witness Grubb) Well, again, that is one
24 event, and it was an important one. I can't speak to the
25 other times when we had the peak demands, but I think the

1 assurances, we have not. But, I mean, there's -- the
2 incentives are in the contracts. They've got an
3 obligation to meet those requirements. They've got an
4 obligation to continue to allow the work force that they
5 have to generate, and se types of things.

6 So the incentive is there for them to
7 generate. We don't know what their performance will be.
8 We take their profile. We're going to, you know, plan for
9 them to deliver, the contract as though requirements in
10 it. And then if they don't, we'll capture that in future
11 reserve margin studies. But as of right now, there's
12 really no reason to not assume that they're going to
13 operate. These are other facilities' past practices.
14 Even these facilities, the next winter storm, may perform
15 well. We don't know. We capture a little bit of that in
16 the reserve margin study, but we don't, with an absolute,
17 say we don't plan on biomass.

18 Q. Understood.

19 Given the unreliability of biomass energy
20 during this particular winter storm event, does Georgia
21 Power believe that it is in the customers best interest to
22 pay a premium in the form of several billions of dollars
23 for this particular source of energy?

24 A. (Witness Grubb) So I wouldn't -- you know,
25 premium, you're stating there's a premium. I think what

1 we've said before is it's for the Commission to consider
2 the other benefits of biomass that we've talked about, the
3 economic development aspects, and the uniqueness of that
4 resource to the state of Georgia, as they look at those
5 different factors. That's for the Commission to rule on.

6 Again, we did a competitive solicitation. We
7 went forward and got the most resources that we could to
8 bring forward for the Commission's consideration.

9 A. (Witness Weathers) And as we've stated
10 before, this is primarily biomass energy. So this is
11 renewable energy that satisfied the biomass requirements,
12 so that's what we're bringing. It does have capacity
13 value, as any resource has capacity value.

14 And, really, if you think about -- should we
15 have ignored that capacity value in our evaluation, we
16 really had no basis for assuming that future biomass
17 facilities will not perform. So as we always do, we took
18 the bid profiles. We assigned the energy value and the
19 capacity value, as we would any resource. And as
20 Commissioner McDonald was talking about earlier, fuel is
21 the major part of avoided costs. The capacity benefit is
22 a smaller portion of the avoided cost benefits.

23 MS. CHANDRA: Thank you. That's all I have.

24 I'd like to move GIPL Exhibit 1 into the record.

25 CHAIRMAN SHAW: So marked.

1 (The document referred to was admitted into
2 evidence as GIPL Exhibit 1.)

3 MS. CHANDRA: And I'll go ahead and collect
4 those trade secret documents now as well.

5 We'll actually leave the trade secret
6 documents with you and collect them at the end.

7 MR. GRUBB: We will definitely protect the
8 trade secret nature.

9 MS. CHANDRA: Thank you, Commissioners.

10 COMMISSIONER PRIDEMORE: Mr. Chairman, I have
11 questions for the panel. I've waited until after
12 Ms. Chandra went to see if she got my questions
13 answered. So if the panel doesn't mind --

14 MR. GRUBB: Of course not.

15 COMMISSIONER PRIDEMORE: -- you submitted a
16 14-page trade secret submission on this docket that
17 was light on details and light on some of the
18 economic development information that the witnesses
19 have discussed this morning. And being that it is
20 a trade secret filing, I'm going to have to be
21 general about some of the numbers involved.

22 But can the panel speak to financially -- and
23 you can do it in percentages, based off of the
24 filing and including one of the demonstratives that
25 Ms. Chandra handed out. The economic impact and

1 economic value to Hazlehurst in that port of the
2 state versus the cost of this project in kilowatt
3 hours.

4 Can we talk through that a little bit?
5 Because your filing -- this says economic
6 development impact, but in none of the pages do you
7 walk through exactly what that is.

8 MR. GRUBB: Yes, Commissioner. I think part
9 of that is a lot of this was handled through the
10 RFP docket and the RFP process itself. So a lot of
11 the -- all of the economic evaluations and the
12 economic development information were provided
13 there. That's why the testimony may be a little
14 short because a lot of that was done in the RFP
15 docket itself.

16 As far as percentages of cost of economic
17 developments, I don't know that we have the
18 Altamaha specific economics. I guess we do, but I
19 don't know -- I'm not trying to dodge your
20 question. I just don't know if it's in exactly the
21 same -- it's dollars of economic development versus
22 the dollars per year for the energy.

23 I think Mr. Judd's report that Ms. Chandra
24 was questioning has most of that information there.
25 We just provided the pricing, but the RFP docket

1 and RFP itself has all the annual costs in it. So
2 I don't know if we have anything there.

3 COMMISSIONER PRIDEMORE: From Altamaha Green
4 Energy's bid application, they have a local tax
5 impact that is south of \$7 million. Does that
6 sound about right?

7 MR. GRUBB: Yeah. Looking at the information
8 we have, that looks correct, which is much lower
9 than the annual cost of that contract, if you're
10 asking that question.

11 COMMISSIONER PRIDEMORE: Yeah.

12 MR. GRUBB: It's single digit percentages
13 probably.

14 COMMISSIONER PRIDEMORE: Okay. I notice on
15 page 11 of your filing that the two PPAs at Flint
16 River in Port Wentworth, which are -- which
17 currently have PURPA QF contracts attached to them,
18 that they're significantly less in price than the
19 Altamaha Green Energy contract. But they are --
20 they have an adder in them.

21 Is there not an adder put in the Altamaha
22 Green Energy contract?

23 MR. GRUBB: When you say an "adder" --

24 COMMISSIONER PRIDEMORE: Meaning that the
25 price of the kilowatt hour increases year over

1 year?

2 MR. GRUBB: It's escalating versus levelized.
3 That's correct. So they were able to bid in either
4 of the two through the RFP.

5 COMMISSIONER PRIDEMORE: Yeah.

6 MR. GRUBB: So, yeah, they -- instead of
7 bidding in the same price that stays the same every
8 year, they bid in an escalating price. So, yeah,
9 it increases every year.

10 COMMISSIONER PRIDEMORE: So the Altamaha
11 Green Energy price that is detailed on page 11 of
12 your filing that shows that through -- from year
13 one to year 30, that shows that levelized. What
14 you're saying is that it is not levelized, that it
15 has an adder added to it?

16 MR. GRUBB: No, it is levelized. The
17 International Paper ones, those prices are the ones
18 that we will pay each year for any megawatt hour
19 they deliver in that calendar year.

20 COMMISSIONER PRIDEMORE: Okay.

21 MR. GRUBB: And so as -- if all else the
22 same, which it won't be, but all else the same,
23 each year the cost of the Illinois -- the
24 International Paper would go up. But, generally,
25 costs are always escalating. That's why we let

1 them offer in either one; whereas, for the
2 Altamaha, the payment would be exactly the same.

3 So the price doesn't change. So that price
4 in calendar year 30, relative to everything else,
5 is going to be lower than it would be in year one.

6 COMMISSIONER PRIDEMORE: Okay. That makes
7 sense.

8 MR. GRUBB: I don't know if I'm answering
9 your question.

10 CHAIRMAN SHAW: So what you're saying also --
11 excuse me -- so if it had been escalated with the
12 price that was bid in before the levelized pricing
13 option, then in years, say, 29, 30, it would have
14 been much higher than the levelized pricing?

15 MR. GRUBB: That's correct.

16 MR. WEATHERS: That's correct, yes.

17 MR. GRUBB: When we calculated this levelized
18 price through that process, we made sure that net
19 present value over that whole contract they were
20 the same. So you're right. So levelized, the
21 other would be -- start lower and then going higher
22 as --

23 CHAIRMAN SHAW: Excuse me.

24 COMMISSIONER PRIDEMORE: That's fine.

25 So based upon the demonstrative that

1 Ms. Chandra passed out, the EIA number on biomass,
2 this Altamaha Green Energy contract is 300 percent
3 that number.

4 MR. GRUBB: Based on these numbers. And I'm
5 not -- I'm absolutely not trying to dodge the
6 question, Commissioner. I promise. So these 2022
7 dollars. We don't know exactly what's behind that.
8 You're right, that is the factor. I can't speak to
9 exactly what makes up that difference in terms of
10 where this biomass is, what type of sourcing it
11 has, does it allow natural gas to be part of it? I
12 don't know what's behind it, but it is higher for
13 the contract they're bringing forth than what
14 they're showing here.

15 COMMISSIONER PRIDEMORE: But even calculating
16 on an average rate of inflation over the last 24
17 months, even on -- the high side is 6 percent, 300
18 percent versus 6 percent is quite a difference;
19 isn't it?

20 MR. WEATHERS: It is, Commissioner. I
21 think -- appears there's some tax credits that are
22 assumed in the EIA provision, so that may make up
23 -- but it's still small compared to the total.

24 COMMISSIONER PRIDEMORE: Is the Altamaha
25 Green Energy applying for those tax credits?

1 MS. RADNEY: Yes, we do have the qualifying
2 federal support that incentivized the generator to
3 go out and pursue those IRA tax credits.

4 COMMISSIONER PRIDEMORE: And they're doing
5 that? They're doing that now?

6 MS. RADNEY: The contract has in there
7 incentivizing them to go out and pursue that. Yes.
8 So, yes, it's the generator's responsibility to go
9 out and pursue those tax credits per the qualifying
10 federal support.

11 MR. WEATHERS: And those will lower the cost
12 of energy to our customers.

13 COMMISSIONER PRIDEMORE: So the pricing
14 that's detailed on page 11, if they apply for those
15 tax credits and receive those tax credits, give me
16 on a percentage how much that cost of energy is
17 going to go down, that's in the third column of
18 page 11.

19 MS. RADNEY: So, yes, Commissioner, in the
20 PPAs, they're incentivized to provide 50 percent of
21 the IRA tax credits and reduce the energy price by
22 that amount.

23 MR. GRUBB: We don't know the dollar
24 figure --

25 MS. RADNEY: Right.

1 MR. GRUBB: -- of the tax credit, because
2 it's for future tax credits so we can't answer that
3 question because we just don't know what the future
4 tax credit might be.

5 COMMISSIONER PRIDEMORE: So let me ask this
6 this way -- again, this is tricky, because all of
7 this is trade secret.

8 Those tax credits expire at the end of this
9 calendar year, so we could know whether or not they
10 receive the tax credits by January of 2025;
11 correct?

12 MR. GRUBB: So I'll let Ms. Radney give a
13 little more detail here. But there -- we do in the
14 contract differentiate between the existing tax
15 credit and future, so if you want to hit on that a
16 little bit.

17 MS. RADNEY: That's correct. And, again, the
18 generators are responsible for notifying us as soon
19 as they have received a reduction in -- or the
20 benefits of those IRA tax credits so that we can
21 take into account, to Mr. Grubb said, either
22 existing qualifying federal support benefits that
23 reduce the costs of these contracts for the benefit
24 of the customers.

25 COMMISSIONER PRIDEMORE: So we could see

1 the -- we could see the price go down a little bit?

2 To Mr. Weather's point earlier about, Georgia
3 Power wants to provide the least cost resource when
4 available. Just looking at some of the research,
5 and I want to talk about the contract in just a
6 minute, but the Altamaha Green Energy pricing as
7 detailed on page 11, is 700 percent more than the
8 average cost of natural gas, twenty-two times the
9 cost of nuclear, that includes Plant Vogtle, and
10 400 percent higher than the cost of coal.

11 It's currently about 500 percent above the
12 avoided costs that the Commission approves Georgia
13 Power to purchase solar PPAs on. Do the economic
14 development and incentives that are outlined in
15 this bid application, do they weigh well with those
16 costs differences?

17 MR. GRUBB: So two points. One, on your last
18 question, that is something for you-all to
19 consider, Commissioner. I don't -- we don't
20 capture that in our analysis.

21 And then I would go back to your energy
22 percentages. There are -- there are a few
23 differences in those costs. Those were the energy
24 costs from those resources. There are some
25 capacity costs and other things that make -- that's

1 the dispatchable cost of those resources, so it's
2 the energy cost. It doesn't capture capacity
3 payments or the cost that we pay in base rates for
4 those resources.

5 Biomass is still more expensive, so I'm not
6 saying that, but those percentages would be less if
7 you captured what we pay at combined cycle in a PPA
8 to it or the capital costs that we recover for
9 nuclear.

10 COMMISSIONER PRIDEMORE: But the capacity
11 costs include fuel, and the company receives by
12 order of the legislature 100 percent cost recovery
13 on fuel; right?

14 MR. GRUBB: We do. And the biomass, there is
15 no capacity payment for the biomass. That price
16 that we're talking about is all they get, just like
17 solar. I was just saying that if we had a combined
18 cycle purchase power agreement, we have the fuel
19 cost and the energy cost, but we also pay them a
20 capacity payment.

21 So there would still be a gap between those
22 other resources and biomass, Commissioner. It just
23 wouldn't be quite as large because you do have to
24 capture that, that capital aspect of it.

25 COMMISSIONER PRIDEMORE: Okay. Let's go to

1 the page 23 of the Altamaha Green Energy contract.

2 MR. GRUBB: The contract, yes, ma'am. So
3 page 23 of --

4 COMMISSIONER PRIDEMORE: The majority of the
5 filing is the contract itself.

6 MR. GRUBB: Yes, ma'am. So page 23 of the
7 actual PPA. We're there.

8 COMMISSIONER PRIDEMORE: All right. You got
9 it?

10 MR. GRUBB: Yes, ma'am.

11 COMMISSIONER PRIDEMORE: So Item 8.3:
12 Failure to achieve commercial operation by the
13 required commercial operation date. Talk me
14 through what is put in this contract as a penalty
15 if they fail to meet the commercial operation date
16 as outlined in the contract.

17 MS. RADNEY: So, yes, Commissioner, so the
18 required COD at this time for the Altamaha Green
19 Energy contract requires that they have to be
20 online, or commercial operation date by November 30
21 of 2029. And so at this time, they have to
22 either -- they have to go pursue their
23 interconnection, and which they have to have 30
24 days after they receive a potential commercial
25 operation date, or by June 6 -- June 3 of 2026, let

1 us know their -- our COD date per their
2 interconnection process.

3 And so if they fail to meet that required COD
4 date, it does go to an event of default which could
5 result in a termination of this contract. And,
6 again, they do have a cure period, or they can
7 provide a cure plan if they do meet that -- miss
8 that date.

9 MR. GRUBB: And, Commissioner, there are
10 liquidated damages that are on that next page,
11 trade secret again, that they would pay each day
12 that they're out. So to Ms. Radney's point, that
13 would happen once they missed our COD, and then
14 they would either cure or go into an event of
15 default. But during that time, they would be
16 paying that price per KW times that 70,000 KW
17 that's in the contract, every day until they either
18 cured or go into an event of default.

19 MS. RADNEY: Right. They do have nine months
20 after that specified our COD date too - as well, as
21 presented in the contract.

22 COMMISSIONER PRIDEMORE: On page 28 it's
23 outlined that natural gas can be used as a start-up
24 full only. What protection has the company put in
25 place in the contract to ensure that it's not

1 operating off of natural gas as a dedicated fuel
2 source continuously? That it's only used for
3 start-up purposes.

4 MR. RADNEY: Yes, Commissioner, the fuel
5 supply plan was a requirement as a part of the PPA,
6 and they do have to provide that as a part of their
7 technical requirements. So, again, they are
8 limited to just using natural gas during that
9 startup and start -- shutdown periods. They cannot
10 use it for balancing and operational reasons.

11 MR. GRUBB: And so we have the right -- if we
12 need to, so we have the right to go look at their
13 records to prove that, and then if they're not, I'm
14 assuming it would be an event of default.

15 COMMISSIONER PRIDEMORE: The startup fuel --
16 but it's not enumerated anywhere in the contract
17 that I could find, that the startup fuel is
18 eligible for fuel cost recovery, that it's just
19 covered by the Altamaha Green Energy Company.

20 MR. GRUBB: I think it would be the latter.

21 COMMISSIONER PRIDEMORE: Yes.

22 MR. GRUBB: We're paying them for that
23 delivery. If there's natural gas startup in there,
24 along with starting up the facility to be on
25 biomass, we pay them that same energy price

1 regardless. Which is why, again, we want to make
2 sure that it's only being used for startup and not
3 the other -- the opposite or you lose the benefit
4 of it actually being biomass.

5 COMMISSIONER PRIDEMORE: On page 52 of the
6 contract, I guess talking about the minimum
7 capacity limits, maximum ramp rates, what
8 protections are in this contract for the customer
9 if only a portion of this output comes to fruition?

10 MR. RADNEY: Again, those availability
11 performance requirements are in place, where during
12 the winter season and the summer season, and then
13 during six consecutive months they do have to be
14 available above 60 percent during those times. And
15 if not, their energy price will be reduced, and
16 they could go into an event of default.

17 COMMISSIONER PRIDEMORE: So they could
18 default at that point?

19 MR. RADNEY: Yes.

20 COMMISSIONER PRIDEMORE: Thank you. That's
21 all I have for now.

22 CHAIRMAN SHAW: Any other questions?

23 (No response.)

24 CHAIRMAN SHAW: Any redirect?

25 MR. HIGHSMITH: No redirect, Mr. Chairman,

1 and we would ask that the witnesses be excused if
2 the Commissioners have no further questions.

3 CHAIRMAN SHAW: Okay. Thank you, Panel. You
4 can be excused.

5 MR. GRUBB: Thank you.

6 MR. RADNEY: Thank you.

7 CHAIRMAN SHAW: We're going to take a -- just
8 a quick five-minute break while the other panel is
9 getting ready.

10 (Whereupon a break was taken.)

11 CHAIRMAN SHAW: We're going to go ahead and
12 move along, as everyone gets back in the room after
13 a much needed little break.

14 MR. THOMAS: Mr. Chairman, at this time I
15 would ask if we could combine the panel of Harry
16 Judd and -- with the panel of Jamie Barber and John
17 Kaduk.

18 CHAIRMAN SHAW: So you want to combine the
19 two staff panels at this time?

20 MR. THOMAS: That's correct.

21 CHAIRMAN SHAW: Is there any objection to
22 combining the panels?

23 MR. HIGHSMITH: Not from Georgia Power.

24 CHAIRMAN SHAW: Does Georgia Interfaith Power
25 & Light?

1 MS. WHITFIELD: No objection.

2 CHAIRMAN SHAW: Very well. I'll let you go
3 ahead and swear in your panels.

4 MR. THOMAS: Mr. Chairman, at this time I
5 call staff witness Harry Judd, Jamie Barber, and
6 John Kaduk to the stand. Could you please raise
7 your right hand.

8 Thereupon,

9 JAMIE BARBER,
10 HAROLD T. JUDD,
11 JOHN KADUK,

12 having been duly sworn, testified as follows:

13 DIRECT EXAMINATION

14 BY MR. THOMAS:

15 Q. And Ms. Barber, could you please state your
16 full name, by whom you are employed, and your
17 responsibilities for the record.

18 A. (Witness Barber) Yeah. Jamie Barber,
19 Georgia Public Service Commission, and I'm director of the
20 energy efficiency and renewable energy unit. We oversee
21 those matters that come before the Commission.

22 Q. Mr. Kaduk?

23 A. (Witness Kaduk) My name is John L. Kaduk.
24 I'm an engineer with the Georgia Public Service
25 Commission, in the energy efficiency and renewable energy
unit.

1 Q. Mr. Judd?

2 A. (Witness Judd) Yes, my name is Harold Judd.
3 You may call me Harry. My mom always called me Harold. I
4 am founder and president of Accion Group. We were
5 selected as the independent evaluator for this RFP, and
6 I'm here to support my prefiled testimony and the report
7 that accompanied it.

8 Q. Thank you. And, Ms. Barber, on August 13 of
9 this year, did you file or cause to be prefiled 16 pages
10 of testimony in question-and-answer format, along with two
11 attachments marked as Exhibits BK-1 and BK-2?

12 A. (Witness Barber) Yes.

13 Q. Do you have any corrections you need to make
14 to your testimony at this time?

15 A. (Witness Kaduk) We do. Just on page 12 of
16 our direct testimony, we jumbled some of the PPA
17 references.

18 So Line 9, change the words "Flint River" to
19 "Port Wentworth."

20 Line 11, change the date to April 1, 2027.

21 Line 12, "Port Wentworth" should be "Flint
22 River."

23 Line 14, that date should be October 8, 2026.

24 And the last change is Line 16, change the
25 word "Chatham" to "Wayne," and that is all.

1 Q. And with those corrections, if I were to ask
2 you the same questions today under oath, would your
3 answers be the same as set forth in your prefiled direct
4 testimony?

5 A. (Witness Kaduk) They would.

6 Q. And Mr. Judd, on August 16 of this year, did
7 you file or cause to be prefiled three pages of testimony
8 in question-and-answer format along with a 20-page report
9 and one trade secret exhibit marked as Attachment A?

10 A. (Witness Judd) I did.

11 Q. And if I were to ask you the same questions
12 today under oath, would your answers be the same as set
13 forth in your prefiled testimony?

14 A. (Witness Judd) Yes, sir.

15 MR. THOMAS: Mr. Chairman, at this time the
16 court reporter has been provided with a copy of the
17 prefiled direct testimony, the report, and
18 exhibits. I would ask that the direct testimony be
19 copied into the record as if given here today.

20 CHAIRMAN SHAW: So marked.

21 (The documents referred to were marked for
22 identification as GPSC Exhibit BK-1 and BK-2.)

23 (Whereupon, the prefiled direct testimonies
24 (and errata) of Jamie Barber, Harold T. Judd and John
25 Kaduk follows:)

**BEFORE THE
GEORGIA PUBLIC SERVICE COMMISSION**

In Re:

GEORGIA POWER COMPANY’S APPLICATION	)	
FOR CERTIFICATION OF THE 2023 BIOMASS	)	DOCKET NO. 44880
REQUEST FOR PROPOSALS POWER	)	
PURCHASE AGREEMENTS	)	

DIRECT TESTIMONY

OF

JAMIE BARBER

AND

JOHN L. KADUK

PUBLIC DISCLOSURE

**On Behalf of the
Georgia Public Service Commission
Public Interest Advocacy Staff**

August 13, 2024

**DIRECT TESTIMONY OF
JAMIE BARBER AND JOHN L. KADUK**

**IN THE MATTER OF GEORGIA POWER COMPANY'S APPLICATION FOR THE
CERTIFICATION OF THE 2023 BIOMASS REQUEST FOR PROPOSALS POWER
PURCHASE AGREEMENTS**

DOCKET NO. 44880

I. INTRODUCTION

Q. PLEASE STATE YOUR NAMES AND BUSINESS ADDRESS.

A. Our names are Jamie Barber and John L. Kaduk. Our business address is 244 Washington,
Street, SW, Atlanta, Georgia 30334.

**Q. MS. BARBER, PLEASE STATE YOUR TITLE, EMPLOYER, EDUCATIONAL
BACKGROUND AND WORK EXPERIENCE.**

A. I am the Director of the Energy Efficiency and Renewable Energy Unit with the Georgia
Public Service Commission ("Commission"). My educational background and work
experience are provided in my resume, which is attached as Public Interest Advocacy Staff
("Staff") Exhibit_ (BK-1).

**Q. MR. KADUK, PLEASE STATE YOUR TITLE, EMPLOYER, EDUCATIONAL
BACKGROUND AND WORK EXPERIENCE.**

A. I am a Senior Public Utilities Engineer in the Energy Efficiency and Renewable Energy
Unit with the Commission. My educational background and work experience are provided
in my resume, which is attached as Staff Exhibit_ (BK-2).

1 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

2 A. The purpose of our testimony is to address Georgia Power Company's ("Georgia Power"
3 or "Company") Application for the Certification of the 2023 Biomass Request for
4 Proposals Power Purchase Agreements ("Application") that was submitted pursuant to
5 O.C.G.A § 46-3A-4 on July 29, 2024.

6 **Q. MS. BARBER, HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS**
7 **COMMISSION?**

8 A. Yes. I testified in each of the 1998 through 2009 United Cities Gas Company (now known
9 as Atmos Energy Corporation) Gas Supply Plan Proceedings. I have also testified in
10 Docket No. 10270, GPSC Determination of Lack of Market Constraints on Atlanta Gas
11 Light Company's Commodity Sales; Docket No. 11114, Rule Nisi Against United Gas
12 Management of Georgia, Inc.; Docket No. 14311, Earnings Review to Establish Just and
13 Reasonable Rates for Atlanta Gas Light Company; Docket No. 15296 Service Quality
14 Standards for Certified Marketers and Regulated Provider; Docket No. 18638-Atlanta Gas
15 Light Company's 2004/2005 Rate Case; Docket No. 20298 Atmos Energy Corporation's
16 2005 Rate Case; Docket No. 27163 Atmos Energy Corporation's 2008 Rate Case; Docket
17 No. 30442 Atmos Energy's 2010 Rate Case; Docket No. 36498 Georgia Power Company's
18 2013 IRP Filing; Docket No. 36499 Georgia Power Company's 2013 Demand Side
19 Program Certification; Docket No. 37854, Georgia Power Company's Application for the
20 Certification of the Power Purchase Agreements for Wind Resources from the Blue
21 Canyon II and Blue Canyon VI Wind Farms; Docket No. 38877, Georgia Power
22 Company's Application for the Certification of the 2015 and 2016 Advanced Solar

1 Initiative Prime Power Purchase Agreements and Request for Approval of the 2015
2 Advanced Solar Initiative Power Purchase Agreements, Docket No. 36989 Georgia Power
3 Company's 2013 Rate Case, Docket No. 40161 Georgia Power Company's 2016 IRP
4 Filing, 40162 Georgia Power Company's 2016 Demand Side Program Certification,
5 Docket No. 41596, Georgia Power Company's Application for the Certification of the
6 2018/2019 Renewable Energy Development Initiative Utility Scale Power Purchase
7 Agreements, Docket No. 41734, Georgia Power Company's Application for the
8 Certification of the 2018/2019 Renewable Energy Development Initiative Utility Scale
9 Power Purchase Agreements for the Commercial and Industrial Program, Docket No.
10 42310 Georgia Power Company's 2019 IRP Filing, Docket No. 42311 Georgia Power
11 Company's Application for the Certification, Decertification, and Amended Demand Side
12 Plan, Docket No. 42516 Georgia Power Company's 2019 Rate Case, Docket No. 44160
13 Georgia Power Company's 2022 Integrated Resource Plan, Docket No. 44161 Georgia
14 Power Company's Application for the Certification, Decertification and Amended Demand
15 Side Plan, and Docket No. 44280 Georgia Power Company's 2022 Rate Case.

16 **Q. MR. KADUK, HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS**
17 **COMMISSION?**

18 A. Yes. I have testified in Docket No. 31081, Georgia Power Company's 2010 Integrated
19 Resource Plan; Docket No. 36498, Georgia Power Company's 2013 Integrated Resource
20 Plan; Docket No. 38877, Georgia Power Company's Application for the Certification of
21 the 2015 and 2016 Advanced Solar Initiative Prime Power Purchase Agreements and
22 Request for Approval of the 2015 Advanced Solar Initiative Power Purchase Agreements;

1 Docket No. 40161, Georgia Power Company's 2016 Integrated Resource Plan; Docket No.
2 41596, Georgia Power Company's Application for the Certification of the 2018/2019
3 Renewable Energy Development Initiative Utility Scale Power Purchase Agreements;
4 Docket No. 41734, Georgia Power Company's Application for the Certification of the
5 2018/2019 Renewable Energy Development Initiative Utility Scale Power Purchase
6 Agreements for the Commercial and Industrial Program; Docket No. 42310; Georgia
7 Power Company's 2019 Integrated Resource Plan; Docket No. 42625, Georgia Power
8 Company's Application for the Certification of the 2020/2021 Renewable Energy
9 Development Initiative Utility Scale Power Purchase Agreements; Docket Nos. 4822,
10 16573 and 19279 Georgia Power Company's Avoided Cost Dockets; Docket No. 43814,
11 Georgia Power Company's Application for the Certification of the 2022/2023 Utility Scale
12 Renewable Power Purchase Agreements; and Docket No. 55378, Georgia Power
13 Company's 2023 Integrated Resource Plan Update.

14 **Q. PLEASE SUMMARIZE YOUR FINDINGS WITH RESPECT TO THE ISSUES**
15 **BEFORE THE COMMISSION IN THIS PROCEEDING.**

16 A. In our review, we find that:

- 17 1. Georgia Power followed the Request for Proposals ("RFP") process as approved by the
18 Commission on July 29, 2022, in its Order Adopting Stipulation in Docket No. 44160
19 ("2022 Integrated Resource Plan ("IRP") Final Order") that set out to procure up to 140
20 megawatts ("MW") of new biomass capacity and energy for Georgia Power customers.
- 21 2. The three new 2023 Biomass RFP Power Purchase Agreements ("PPAs") support
22 economic development growth in Georgia.

3. Georgia Power appropriately amended the existing Contracts for the Purchase of Firm Capacity and Energy From a Renewable Qualifying Facility Utilizing the Proxy Unit Methodology (“Proxy Price PPA”) between Georgia Power and International Paper Company (“International Paper”) for the Flint River Mill and Port Wentworth Mill facilities. Such amendments were necessary to accommodate the new Biomass Addition PPAs sought for certification as the additional biomass capacity is at facilities with existing Proxy Price contracts. The amendments align the sale of energy generated in excess of the Committed Capacity under the Proxy Price PPAs to the requirements set forth in the Biomass Addition PPAs and resolve inconsistencies between the Proxy Price and Biomass Addition PPAs.

4. The 2022 IRP Final Order approved an additional sum of \$3 per kilowatt-year (“kW-year”) for the resources procured through the 2023 Biomass RFP for the term of the PPA for such resources.

Q. PLEASE SUMMARIZE YOUR CONCLUSIONS AND RECOMMENDATIONS.

A. Based on our review of the Company’s Application and our independent analysis, we have the following recommendations:

1. The Commission should certify the three new PPAs from the 2023 Biomass RFP portfolio that total 77.9 MW and provide energy, electrical products, and environmental attributes.
2. The Commission should approve the Proxy Price PPA amendments for International Paper’s Flint River Mill and Port Wentworth Mill facilities.
3. Consistent with prior Georgia Power RFPs, the Commission should approve Georgia Power’s request to include any remaining 2023 Biomass RFP costs and subsequent

1 Biomass PPA costs not offset by bid fees and winner's fees in its fuel clause and recover
2 such costs through Georgia Power's Fuel Cost Recovery ("FCR") mechanism.

3 **II. 2023 BIOMASS RFP PROCESS**

4 **Q. PLEASE DISCUSS THE PURPOSE OF THE 2023 BIOMASS RFP.**

5 A. The Commission's 2022 IRP Final Order required Georgia Power to procure up to 140
6 MW of new biomass capacity and energy for its customers. This Order also approved the
7 procurement of biomass resources up to 80 MW in size with expected commercial
8 operation dates of June 2025 through November 2029. As ordered by the Commission, the
9 2023 Biomass RFP required that bidders provide the following economic development
10 information with their bid: the number and nature of new jobs, if any, the project will
11 provide; the amount of new capital investment that will be put into the project; and other
12 information relevant to economic development stemming from the project. The fuel
13 required to be used by a biomass facility selected for contracting was "biomass material"
14 as defined in Georgia Code (O.C.G.A 48-8-3(83)(B)). The 2023 Biomass RFP allowed for
15 the limited use of natural gas for startup and shutdown of proposed facilities, in accordance
16 with Prudent Industry Practices.

17 **Q. PLEASE DESCRIBE THE RFP PROCESS THAT WAS USED FOR THE**
18 **BIOMASS PROCUREMENT.**

19 A. Georgia Power drafted the 2023 Biomass RFP documents with input from Staff and the
20 Independent Evaluator ("IE"), Accion Group, LLC. All parties met several times to discuss

1 the draft documents prior to the posting of the documents on the IE website. Drafts of the
2 RFP and PPA documents were posted to the IE website on February 1, 2023, to allow for
3 comments on the documents from potential bidders until March 2, 2023. All of the
4 comments uploaded to the IE website were reviewed by Georgia Power, Staff, and the IE.
5 A Bidder's Conference webinar for potential Bidders and interested parties was held on
6 February 16, 2023, which allowed the parties to discuss the 2023 Biomass RFP process
7 and the draft RFP documents.

8 **Q. PLEASE DISCUSS WHAT OCCURRED AFTER THE REVIEW OF THE**
9 **COMMENTS THAT WERE UPLOADED TO THE IE WEBSITE.**

10 A. After the review of these comments, the Company drafted responses to the proposed edits.
11 Both Staff and the IE reviewed the responses prior to the responses being sent to the
12 respective parties by the IE. The Company then filed revised RFP and PPA documents on
13 March 10, 2023, for Commission approval.

14 **Q. WERE ADDITIONAL DISCUSSIONS HELD ON THE DRAFT RFP**
15 **DOCUMENTS AFTER THEY WERE FILED WITH THE COMMISSION?**

16 A. Yes. On March 22, 2023, the IE facilitated a meeting between Staff, Georgia Power and
17 International Paper to further discuss the responses to the comments regarding the Draft
18 RFP and PPA that were posted by International Paper. On March 29, 2023, Georgia Power
19 posted on the IE website additional responses to the comments discussed during the March
20 22, 2023 meeting.

1 **Q. WHEN WERE THE FINAL RFP AND PPA DOCUMENTS CONSIDERED AND**
2 **APPROVED BY THE COMMISSION?**

3 A. In a memo to Commissioners dated March 27, 2023, Staff recommended approval of the
4 2023 Biomass RFP document and Pro Forma PPAs (Biomass Addition and Greenfield) as
5 filed with an updated Solicitation Schedule to be determined later. At its April 4, 2023
6 Administrative Session, the Commission approved Staff's recommendation as amended by
7 a motion by Commissioner Shaw to lower the Bid Security cap for the 2023 Biomass RFP
8 from \$3 million to \$1.5 million.

9 **Q. PLEASE DESCRIBE THE PROJECT REQUIREMENTS OF THE 2023 BIOMASS**
10 **RFP.**

11 A. As discussed earlier, the 2023 Biomass RFP was designed to procure biomass resources up
12 to 80 MW in size with an expected commercial operation date between June 2025 and
13 November 2029. The Biomass project could be located anywhere in the United States but
14 must be able to deliver their energy to Georgia Power, and the project must be fueled by
15 biomass and bundled with the environmental attributes and all electrical products produced
16 by or related to the production of such energy. Both new Greenfield projects and Biomass
17 Addition projects were allowed to participate in the RFP. Bidders could choose a term of
18 10, 15, 20, 25, or 30 years. For the evaluation of projects with unequal contract term
19 lengths, the Company utilized its projected avoided costs to be able to evaluate bids on an
20 equivalent basis. This methodology is consistent with what has been done in prior RFPs.
21 Section 2.2.3 of the approved 2023 Biomass RFP document prohibited bids for turnkey
22 facilities, sale of assets, and/or other form of sale of ownership in any facility. Georgia

1 Power's evaluation primarily focused on a bid's economic net benefits, but other
2 qualitative and non-price attributes, such as locating a facility in Georgia, were to be
3 considered, especially when one or more bids offer a substantially similar economic
4 benefit.

5 **Q. WHEN DID THE RFP PROCESS BEGIN AND HOW MANY BIDDERS BID INTO**
6 **THE PROCESS?**

7 A. The RFP was issued on May 3, 2023, and closed on July 14, 2023. There were 3 unique
8 bidders that proposed a total of approximately 108 MW, which included 4 proposals.

9 **Q. WAS GEORGIA POWER AND ITS AFFILIATES ALSO ALLOWED TO BID**
10 **INTO THE RFP?**

11 A. No. Section 1.3.2 of the approved 2023 Biomass RP document prohibited bids from any
12 affiliates of Georgia Power. Section 2.2.4 of the approved 2023 Biomass RFP document
13 prohibited self-build or Company-owned proposals from being submitted.

14 **Q. DID STAFF PARTICIPATE DURING THE BIOMASS BID EVALUATION**
15 **PROCESS?**

16 A. Yes. Staff participated throughout the bid evaluation process and independently analyzed
17 the bids received using Georgia Power's evaluation model. This model had been "locked
18 down" prior to the evaluation process. Staff agreed with the Company's initial competitive
19 tier for the 2023 Biomass RFP portfolio which did not include system improvement costs.

1 **Q. PLEASE DESCRIBE THE PROCESS THAT WAS USED AFTER THE INITIAL**
2 **COMPETITIVE TIER WAS DETERMINED.**

3 A. After the initial competitive tier was determined, the Company then began the process to
4 determine the system impacts for each respective project. This evaluation was necessary
5 since bidders were only required to include in its bid price interconnection costs up to the
6 point of interconnection. System improvements and other interconnection costs beyond the
7 point of interconnection were calculated by Southern Company's Transmission Planning
8 Group and reviewed by the IE and Staff. These costs were then imputed into the economic
9 value of the bids.

10 **Q. WHAT WAS THE NEXT STEP ONCE THE UPDATED COMPETITIVE TIER**
11 **WAS FINALIZED?**

12 A. After the determination of the competitive tier that included system improvement costs, the
13 Company identified the portfolio of projects that could satisfactorily meet the procurement
14 target. This portfolio was selected as the Short List for the 2023 Biomass RFP.

15 **Q. WAS STAFF IN AGREEMENT WITH THE SHORT LIST?**

16 A. Yes. Staff agreed with the Company's Short List determination.

17 **Q. ONCE THE SHORT LIST WAS FINALIZED, WHAT HAPPENED NEXT?**

18 A. After the Short List was finalized, parties were notified through the IE website as to the
19 current status of their bid(s). The Company then scheduled calls and virtual meetings with
20 all parties on the Short List.

1 **Q. DID STAFF PARTICIPATE IN THE VIRTUAL MEETINGS WITH THE**
2 **WINNING BIDDERS?**

3 A. Yes. Staff, along with the Company and IE, participated in all virtual meetings with the
4 winning bidders.

5 **Q. WHAT ISSUES WERE DISCUSSED IN THE VIRTUAL MEETINGS WITH THE**
6 **WINNING BIDDERS?**

7 A. The Company, IE, and Staff discussed the pro forma terms of the PPAs with the winning
8 bidders. Georgia Power provided International Paper amended Proxy Price PPAs between
9 Georgia Power and International Paper for the Flint River Mill and Port Wentworth Mill
10 facilities to accommodate the new Biomass Addition capacity. The amendments aligned
11 the sale of energy generated in excess of the Committed Capacity under the Proxy Price
12 PPAs to the requirements set forth in the Biomass Addition PPAs and resolved
13 inconsistencies between the Proxy Price and Biomass Addition PPAs. In the virtual
14 meetings, the Company, IE, and Staff also discussed adding site-specific redlines in the
15 PPAs obligating the PPA counterparties to share the benefit of any Qualifying Federal
16 Support received for their respective projects through a reduction in the Monthly Energy
17 Price paid by Georgia Power. After review by the IE and Staff, Georgia Power provided
18 revised PPAs to the winning bidders for final review and execution.

19 **III. CERTIFICATION AND APPROVAL OF PPAS**

1 **Q. PLEASE DESCRIBE THE BIOMASS RESOURCES FOR WHICH THE**
2 **COMPANY REQUESTED CERTIFICATION IN ITS JULY 29, 2024 FILING.**

3 A. In its July 29, 2024 Application, Georgia Power requested that the Commission certify 3
4 projects that total 77.9 MW.

5 **Q. PLEASE DESCRIBE THE PROJECTS THAT MAKE UP THE BIOMASS**
6 **PORTFOLIO.**

7 A. The projects that make up the 2023 Biomass portfolio include: International Paper – Flint
8 River Mill, International Paper – Port Wentworth Mill, and Altamaha Green Energy, LLC.

9 1. International Paper – Flint River Mill is a 3.6 MW biomass addition facility located
10 in Chatham County, Georgia. The PPA with International Paper is for a ten-year term and
11 is expected to begin commercial operation by October 8, 2026.

12 2. International Paper – Port Wentworth Mill is a 4.3 MW biomass addition facility
13 located in Macon County, Georgia. The PPA with International Paper is for a ten-year term
14 and is expected to begin commercial operation by April 1, 2027.

15 3. Altamaha Green Energy, LLC is a 70 MW new greenfield biomass facility located
16 in Chatham County, Georgia. The PPA with Altamaha Green Energy, LLC is for a thirty-
17 year term and is expected to begin commercial operation by November 30, 2029.

18 **Q. WHAT IS THE PPA PRICING FOR THE THREE BIOMASS PROJECTS?**

19 A. The kWh pricing for each biomass project is provided below:

(\$/MWh)			
Annual Period	International Paper - Flint River	International Paper - Port Wentworth	Altamaha Green Energy, LLC
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
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30			

1 **Q. WHAT ECONOMIC DEVELOPMENT VALUE WILL THE THREE BIOMASS**
2 **PROJECTS BRING TO THE STATE OF GEORGIA?**

1 A. Both International Paper and Altamaha Green Energy, LLC provided the required
2 supplemental project information that described the potential economic impact of their
3 proposed facilities to the state of Georgia. Examples of such supplemental information
4 provided include: the number of proposed employees for the facilities, the economic
5 impacts to biomass fuel suppliers, construction contractors and subcontractors, and local
6 tax revenues.

7 **Q. WHAT IS STAFF'S RECOMMENDATION REGARDING THE COMPANY'S**
8 **REQUEST FOR CERTIFICATION OF THREE 2023 BIOMASS RFP PPAS AND**
9 **APPROVAL OF THE PROXY PRICE PPA AMENDMENTS FOR**
10 **INTERNATIONAL PAPER'S FLINT RIVER MILL AND PORT WENTWORTH**
11 **MILL FACILITIES?**

12 A. Staff recommends that the Commission certify the three PPAs from the Biomass portfolio
13 that total 77.9 MW. These projects provide energy, environmental attributes, and electrical
14 products and support Georgia's forest industry and rural and economic development
15 growth. Staff further recommends that the Commission approve the Proxy Price PPA
16 amendments for International Paper's Flint River Mill and Port Wentworth Mill facilities.

17 **IV. ADDITIONAL SUM AND COST RECOVERY OF RFP EXPENSES**

18 **Q. HOW DOES THE COMPANY PROPOSE TO RECOVER THE COSTS RELATED**
19 **TO THE PROCUREMENT OF THE 2023 BIOMASS RFP PPAS?**

1 A. As approved by the Commission in its 2022 IRP Final Order, Georgia Power is allowed to
2 recover all of its program costs to implement and administer the 2023 Biomass RFP. The
3 costs of conducting and administering the 2023 Biomass RFP were partially offset by bid
4 fees and winner's fees. In its Application, Georgia Power requested to include any
5 remaining 2023 Biomass RFP costs and subsequent Biomass PPA costs in its fuel clause
6 and recover such costs through the FCR mechanism.

7 **Q. DID THE COMPANY REQUEST AN ADDITIONAL SUM IN THIS**
8 **PROCEEDING?**

9 A. Yes. The Company requested an additional sum of \$3 per kW-year for the 2023 Biomass
10 RFP PPAs for the term of the PPAs.

11 **Q. HAS THE ADDITIONAL SUM AMOUNT FOR THE 2023 BIOMASS PROJECTS**
12 **ALREADY BEEN APPROVED BY THE COMMISSION?**

13 A. Yes. In the 2022 IRP Final Order, the Commission approved an additional sum of \$3 per
14 kW-year for the 2023 Biomass PPAs for the term of the PPAs.

15 **Q. WHAT IS STAFF'S RECOMMENDATION PERTAINING TO THE COMPANY'S**
16 **REQUEST TO INCLUDE ANY REMAINING 2023 BIOMASS RFP COSTS AND**
17 **SUBSEQUENT BIOMASS PPA COSTS IN ITS FUEL CLAUSE AND RECOVER**
18 **SUCH COSTS THROUGH THE FCR MECHANISM?**

19 A. Staff recommends that the Commission approve Georgia Power's request to include any
20 remaining 2023 Biomass RFP costs and subsequent Biomass PPA costs in its fuel clause

1 and recover such costs through the FCR mechanism, which is similar to treatment of such
2 costs in previous RFPs.

3 **Q. DOES THIS COMPLETE YOUR TESTIMONY?**

4 **A. Yes.**

1 **DIRECT TESTIMONY OF ACCION GROUP, LLC., INDEPENDENT**
2 **EVALUATORS FOR THE GEORGIA POWER COMPANY**
3 **ON BEHALF OF THE GEORGIA PUBLIC SERVICE COMMISSION**

4 **In Re: 2023 BIOMASS RFP**
5
6 **REQUEST FOR PROPOSALS**

7 **DOCKET NO. 44880**

8 **Q. Please state your name and business address.**

9 **A.** My name is Harold T. Judd. I am the President of Accion Group, LLC
10 (Accion Group). Accion Group served as the Independent Evaluator for the
11 2023 Biomass Request For Proposals (Biomass RFP). Accion Group's
12 business address is 244 North Main Street, Concord, NH 03301.

13 **Q. Please discuss your educational background.**

14 **A. Mr. Judd:** I graduated from the University of Wisconsin at Madison in 1974
15 with a B.A. Degree. In 1978, I received a law degree from the University of
16 New Hampshire School of Law, formerly the Franklin Pierce Law Center.
17 Since then I have continued my education through professional education
18 courses.

19 **Please discuss your professional experience.**

20 **A. Mr. Judd:** I began my career in 1978 in New Hampshire as the Deputy
21 Consumer Advocate for the Legislative Utilities Consumer Counsel. I left
22 that office as Acting Consumer Advocate in 1979 to become the Deputy
23 General Counsel and Energy Advisor to the Special Assistant to President
24 Carter in the White House Office of Consumer Affairs. In 1981, I was
25 appointed an Assistant Solicitor for the Department of Energy. From 1985
26 through 1987, I served as the Economic Development Advisor to the

1 Congress of the Federated States of Micronesia (FSM), and as Special
2 Counsel to the President of the FSM. From September 1989 until January
3 1994, I served in the Office of the Attorney General for the State of New
4 Hampshire, first as an Assistant Attorney General and later as a Senior
5 Assistant Attorney General. Since then, I have represented regulators, and
6 utilities in the electric, telephone, and water utility industries, with issues
7 including utility deregulation, siting and decommissioning nuclear power
8 plants, utility bankruptcies. Since 2002 I have served as an Independent
9 Evaluator or Independent Monitor in over 135 competitive solicitations in
10 Alabama, Arizona, California, Colorado, Florida, Georgia, Hawaii, New
11 Mexico, North Carolina, Mississippi, Louisiana, Montana, Oregon, Puerto
12 Rico, South Carolina, Texas, and the U.S. Virgin islands. I co-founded
13 Accion Group, LLC in 2001.

14 **Q. Have you ever testified before any regulatory agencies?**

15 **A. Mr. Judd:** Yes. I have testified before this Commission, the Arizona
16 Corporation Commission, the New Hampshire Public Utilities Commission,
17 the Vermont Public Service Board, the Oregon Public Utilities Commission,
18 The North Carolina Utilities Commission, the Public Service Commission of
19 South Carolina, the Public Service Commission of Montana and legislative
20 bodies or regulatory bodies in Maine, Massachusetts, New Hampshire, New
21 York, North Carolina, Pennsylvania, and South Carolina. I have also
22 presented reports to regulatory bodies in most of the states identified above,
23 including California, Hawaii, Colorado, and Florida for dockets where
24 testimony was not required.

25 **Q. Would you please describe your role in this proceeding?**

26 **A. Mr. Judd:** Accion Group was selected by the Commission to be the
27 Independent Evaluator for the Biomass RFP. Working closely with the

1 Commission Staff, we were involved in all major activities in the RFP,
2 including the development of the RFP process, the drafting of RFP related
3 documents, the receipt of bids, the evaluation of bids and post-selection
4 discussions with the successful Bidders. I participated in the Bidders
5 Conference and participated in all meetings between Georgia Power and
6 any Bidder, as required by the Rules of the Commission. In addition, Accion
7 Group created and maintained the website through which the RFP was
8 conducted. I directed the evaluation and analysis performed by Accion
9 consultants, which is documented in the report prepared for the
10 Commission.

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

12 **A. Mr. Judd:** The Final Report of the Independent Evaluator regarding the
13 Biomass RFP was prepared by me or under my direction. The Report was
14 prepared in two versions, the public version and the non-public, Trade
15 Secret version. The Trade Secret version was prepared for the Commission
16 and contains commercially sensitive or proprietary and confidential
17 information, as determined by Georgia Power. The public version is
18 Attachment 1 to this testimony. We appear to sponsor the report.

19 **Q. Does your report detail the activities and findings of the Independent**
20 **Evaluator?**

21 **A. Mr. Judd:** Yes it does.

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

23 **A. Mr. Judd:** Yes it does.



ACCION GROUP

FINAL REPORT OF THE INDEPENDENT EVALUATOR

GEORGIA POWER COMPANY (“GPC”)

2023 BIOMASS RFP



August 13, 2024

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I. EXECUTIVE SUMMARY

Accion Group, LLC, served as the Independent Evaluator (“Accion” or “IE”), for Georgia Power Company's (“GPC,” “Georgia Power,” or “the Company”) 2023 Request for Proposal (“RFP”) seeking up to 140 MW of new Biomass generation, as defined in the RFP, that can be in service between June 2025 and no later than 2029. The RFP was conducted pursuant to the rules of the Georgia Public Service Commission (“Commission” or “GPSC”). This RFP followed an earlier unsuccessful attempt to procure Biomass generation as part of the 2022-2028 Capacity RFP.

The RFP was open to new Biomass generation. To qualify as “new” Biomass a facility could be either entirely new construction (“greenfield”) or an addition to existing Biomass Facilities. The RFP was limited to proposals for Power Purchase Agreements (“PPA”). Stated differently, proposals for asset transfers to GPC and proposals for company-owned bids were not accepted.

Consistent with the standards used for other solicitations, before the RFP and PPA were finalized, prospective bidders were invited to provide comments and identify terms and conditions they would need to provide conforming bids. In the RFP and during the bidders’ conference potential bidders were advised that, once approved by the Commission, the PPA would be a pro forma, non-negotiable contract. Notwithstanding adherence to the GPSC competitive process requirements, only four (4) bids from (3) bidders were received. The IE believes this reflects the limited number of Biomass developers willing to supply GPC from compliant facilities.

Of the 4 submitted bids, 3 bids from 2 bidders advanced to the short list. To fulfill the Commission’s policy goals articulated in the 2022 Integrated Resource Plan Order, (“2022 IRP Order”)¹ GPC executed contracts for each of those three bids. Two bids for small additions to existing Biomass plants totaling 7.9 MW were contracted for 10 years, and one 70 MW greenfield plant was contracted for 30 years.

The prices of the contracted Biomass are exceptionally high when compared to the Company’s avoided cost. The calculation of the cost to ratepayers above avoided

¹ Final 2022 IRP Order, Document 191010 in Dockets 44160 and 44161, Order Adopting Stipulation, dated July 29, 2022.



cost in the first year and over the full term of the PPAs is provided in Confidential Appendix A.

In order to meet the Commission's goal of including Biomass generation in the GPC portfolio, Georgia Power deviated from established practice in two ways. The first was permitting a bidder that had withdrawn from the RFP to rejuvenate a bid. The second was to engage in lengthy negotiations over contract terms with that bidder, beyond the established GPC practice of only clarifying PPA terms.

Working closely with the Staff of the GPSC ("Staff") the IE coordinated all aspects of the RFP with GPC to ensure conformity to the requirements of the Commission. The RFP documents were thorough, unambiguous, and comprehensive. The IE believes that the RFP was conducted fairly and is unaware of any bias for or against any participant. The IE is unaware of any violations of the standards of conduct by any GPC personnel. While one bidder repeatedly violated the standards, GPC personnel declined to engage the individual, referred each incident to the IE, and the IE confirmed that the bidder's actions did not warrant disqualification of bids. Accordingly, the IE believes the only issue about the RFP that is before the Commission will be the benefit of the contracts.

II. BACKGROUND

The RFP was designed to procure up to 140 MW of new Biomass generation. The solicitation was conducted through the IE Website. The IE Website was opened for registration on December 15, 2022. Participants in the prior Biomass RFP were advised of this RFP and as a courtesy their prior registrations and submitted bids were carried over to the website for this RFP. Release of the RFP was also sent to registrants on the IE's proprietary distribution list. After approval by the GPSC, the initial RFP was released on the IE Website on April 28, 2023. The RFP was revised to exclude tire-derived fuel and posted on the IE Website on June 16, 2023. The bid period opened on May 3, 2023, and closed on July 14, 2023; approximately one month after the revised RFP was available to bidders.

Acceptable PPA terms of 10, 15, 20, 25, and 30 Annual Periods were available to bidders. Individual Biomass projects up to 80 MW were acceptable.

To be eligible, energy produced by a Facility had to be fueled by Biomass and include all Environmental Attributes and all Electrical Products as part of a bid. The RFP provided that natural gas could only be used for the limited purpose of startup and



shutdown of a Facility. For purposes of the RFP, Biomass was defined as “Biomass material” as contemplated by Georgia law, O.C.G.A. § 48-8-3(83)(B) ² or “woody Biomass.”

III. STANDARDS OF CONDUCT

To avoid any conflict of interest, perceived or otherwise, GPC published the names of individuals designated to evaluate the RFP on December 14, 2022. Each Evaluation Team member, in compliance with the Commission’s Rules (Commission Rule 515-3-4-.04(3)), acknowledged in writing the member’s adherence to the Standards of Conduct governing the implementation of the RFP. The Evaluation Team list was updated periodically as necessary.

One bidder was reminded on several occasions not to contact GPC personnel directly about its bids. For example, on March 6, 2024, the IE cautioned that bidder:

It has come to my attention that you have once again ignored the rules of the Georgia Public Service Commission, and the explicit standards set forth in the RFP by contacting Georgia Power Company personnel about your project. As you have been reminded in the past, ALL communications are to occur through the RFP website message board. The Commission requires a thorough and accurate record of all exchanges between GPC and bidders until the RFP is completed. As you have been advised in the past, repeated violation of the Commission’s rules can result in a bid being removed from further consideration.

² As per the statute, “the term ‘Biomass material’ means organic matter, excluding fossil fuels, including agricultural crops, plants, trees, wood, wood wastes and residues, sawmill waste, sawdust, wood chips, bark chips, and forest thinning, harvesting, or clearing residues; wood waste from pallets or other wood demolition debris; peanut shells; pecan shells; cotton plants; corn stalks; and plant matter, including aquatic plants, grasses, stalks, vegetation, and residues, including hulls, shells, or cellulose containing fibers.”

IV. PROCUREMENT WEBSITE

A. Website Launch

On December 15, 2022, the solicitation website for the 2023 Biomass RFP was launched and made accessible to the public. On December 19, 2022, the following message was delivered to 5,681 potential market participants encouraging them to register on the website and partake in the upcoming RFP:

12/19/2022 11:33:20 AM

Georgia Power Company is pleased to present the 2023 Biomass Request for Proposals. This RFP seeks to procure up to 140 MW of new Biomass generation from projects as reflected in the 2022 Integrated Resource Plan approved by the Georgia Public Service Commission in July 2022. Interested parties are encouraged to become familiar with the IE Website found at <https://gpcBiomass.accionpower.com>. Registration is required through the website as it will be the means of communication between Georgia Power and interested participants.

B. List of Potential Bidders – Rule 515-3-4-.04 (3) (e) i

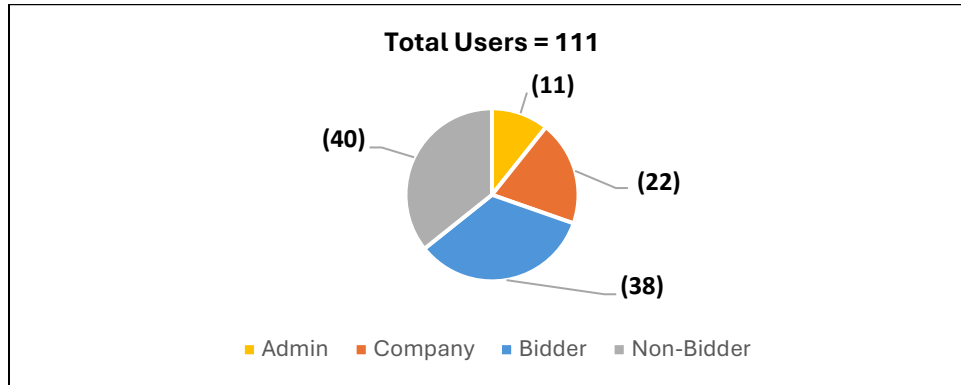
Information about this RFP was widely disseminated. When the IE Website was released, an announcement was sent to all individuals who previously registered with GPC as desiring to receive notice of RFPs; individuals previously registered for other GPC competitive solicitations including the 2022-2028 Capacity RFP, and Biomass developers who submitted bids in that RFP, and to an RFP “contact list” of individuals who registered on the Accion Power Website for notification of procurement RFPs. As a courtesy to developers who participated in the earlier Biomass RFP, their bids were carried over to the new IE Website and available to them for revision and submission.



C. Website Registration

Since the 2023 Biomass RFP website was launched, 111 individuals registered on the site. Of those, as reflected in Figure 1, 38 are bidders, 40 are non-bidders, 11 are Accion personnel and 22 are Company and Staff Personnel.

Figure 1
Website Registrants



The registrants are comprised of domestic entities and their locations are provided in the table below:

Table 1

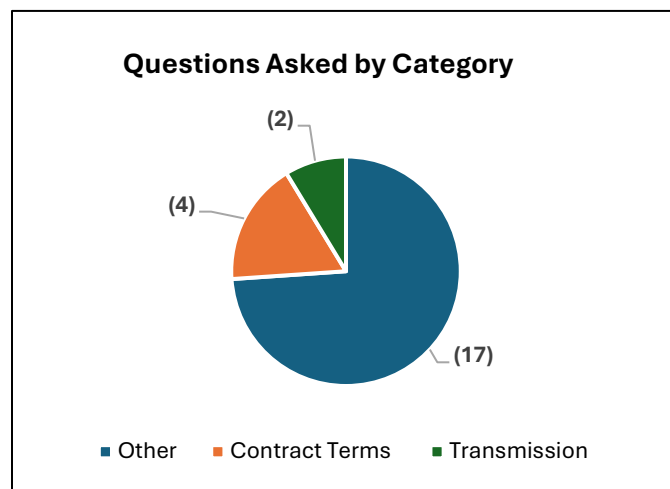
State or Territory	Number of Registrants
Alabama	15
Arizona	1
California	4
Colorado	3
Florida	5
Georgia	45
Idaho	1
Illinois	1
Louisiana	1
Massachusetts	4
Mississippi	1
New Hampshire	11
New Jersey	1
New York	3
North Carolina	4
Ohio	1
Oregon	1
Pennsylvania	1
Tennessee	3
Texas	4
Vermont	1

D. Questions and Answers

Prior to and during the bid period, one of the primary means of communication was through the Question-and-Answer (“Q&A”) page on the website. Registrants were able to submit a question to the IE and receive a response. To preserve the anonymity of bidders before the bid submission date, the IE “blinded” questions and shared them with the GPC Evaluation Team to answer. Once an answer was provided the question and answer were posted on the IE Website and became viewable to all registered users of the site. The Q&A was meant to provide non-project specific information and to ensure all market participants were given the same information at the same time. The compendium of information created by the Q&A served as a resource for market participants prior to contacting the IE.

Figure 2

The Q&A feature for the Biomass RFP was opened on December 15, 2022. A total of twenty-three (23) questions from 6 unique registrants were answered. The questions covered several topics including clarifications of requirements in the RFP and terms in the PPA, transmission, and use of the IE website. Upon completion of the bidding period on July 14, 2023, the Q&A feature was disabled so that new questions could not be submitted. Previously posted Q&A, however, remained available for reference.



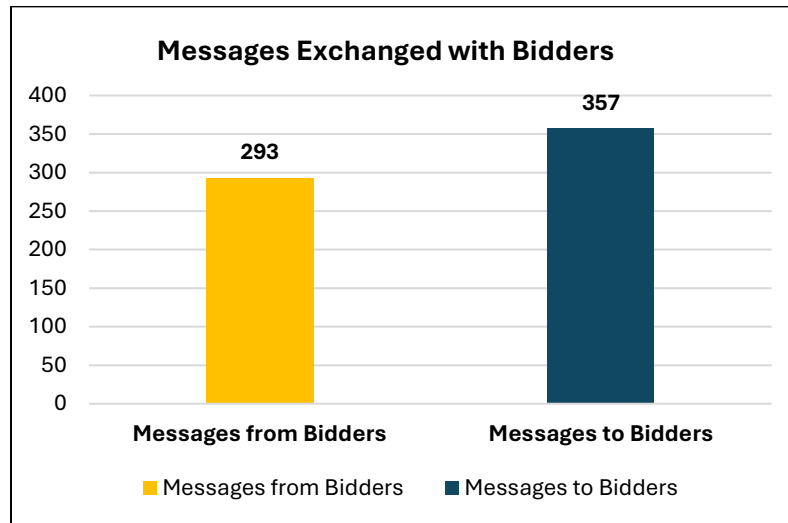
E. Message Boards

The confidential message board (“Message Board”) on the IE website provided a messaging platform for exchanges between bidders and the IE or GPC. The Message Board was accessible throughout the bidding, confirmation, and evaluation processes. The message board allowed bidders to communicate directly with the IE prior to the bid submission date regarding project-specific questions, and with GPC during the evaluation phase. Due to the confidential nature of those communications, each bidder was allowed to see only their own exchanges. Prior to the evaluation phase, the IE

shared each project-specific Message Board inquiry with the GPC Evaluation Team, blinded as to the source, and relayed responses via the Message Board. Participants used the message board to inquire about the specific needs or limitations of their projects, to ask clarifying questions about how the RFP and supporting documents may relate to their project, and to answer questions from the Evaluation Team or IE during the evaluation phase. Questions asked on the message board before bids were submitted that were not project specific and confidential in nature, were transferred to the Q&A by the IE to allow the answer to benefit all potential participants.

The message board became available for bidders on February 16, 2023. As of July 31, 2024, 293 messages from 3 bidders were received and the IE and GPC sent 357 messages to bidders asking for information or answering messages.

Figure 3



In addition to the bidder message boards, the website also provided two additional message boards that were used by the IE, GPC, and the Evaluation Team. Those separate message boards were dedicated to RFP process management. One Message Board was used by GPC and the IE to manage answers to questions and messages prior to the bid submission date. The other was used to exchange and record evaluation information. Both of these Message Boards were available to authorized Staff members.

Both the bidder message board and the alternative message boards remained open throughout the confirmation, review, and evaluation process so that communications could continue among relevant parties. All communications on the solicitation website are time and date stamped and maintained for accurate record keeping.

V. BIDDERS' CONFERENCE

The draft RFP was issued on February 1, 2023, and posted on the IE Website. An announcement to all registered users followed on February 3, 2023, notifying bidders the documents were available and that a bidders' conference was scheduled to review the documents.

A bidders' conference was conducted on February 16, 2023. The conference was open to in-person and remote participation. Thirty-seven individuals registered for the conference. One bidder attended in person and others participated remotely. The IE was present and ensured the bidder who attended in person and members of the Evaluation Team adhered to the Standards of Conduct.

During the bidders' conference GPC presented an overview of the Company and its Integrated Resource Plan ("IRP"). GPSC Staff were introduced, and the IE presented information about its responsibilities, the Standards of Conduct, and the IE Website. GPC reviewed details about the Biomass solicitation, comment period, bid fees and the evaluation process. Southern Company presented transmission and interconnection information. Questions were submitted by bidders, answered in writing, and posted on the IE Website along with the presentation materials. Information about the RFP was therefore widely available to any potential bidder registered on the IE Website, even if they were unable to participate in the bidders' conference.

VI. RFP DOCUMENTS AND COMMENTS

As noted above the draft RFP was released on February 1, 2023. Draft pro forma Power Purchase Agreements ("PPA") for New Greenfield Projects and Biomass Addition Projects were also posted to the IE Website with the draft RFP ("RFP Documents").

The IE conducted a Comment Period on those documents from February 1, 2023, through March 2, 2023, during which interested persons were encouraged to review the draft RFP Documents, identify any point of confusion, and to offer suggestions for



improving those documents. The comment process was conducted using a unique application on the IE Website, where an interested individual could select each provision of each RFP document, provide “red-lined” suggestions, and provide guidance to GPC, Staff, and the IE concerning the intent of the suggested change. With this application each red-lined suggestion and comment was captured on the IE Website as a record, and the data was exported to GPC and Staff in excel format for easy reference and review.

Using the comment feature on the IE Website, Participants and interested parties were invited to assist in drafting the RFP Documents to clarify the documents, improve bid submissions, and solicit a robust response. Two (2) registered bidders, the same two bidders who were offered contracts, provided all 22 comments received on the documents. This attention to the draft RFP Documents confirms that the bidders were very familiar with the RFP requirements before bidding.

The table below shows the number of comments on each type of PPA and the RFP by bidder.

Table 2
Comments Received on Draft RFP and PPAs

Comments by User		
Document	User A	User B
RFP		9
Greenfield PPA		2
Biomass Addition PPA	11	
TOTAL	11	11

The IE provided copies of all comments, including suggested red-line changes and explanations for the requested changes to GPC and the Staff. The identity of those offering comments was blinded before being shared with GPC and Staff to avoid any inference of bias during the comment review process. GPC provided a proposed

response to each comment and reviewed those responses with Staff and the IE before filing the final RFP Documents with the Commission.

VII. SUBMITTED BIDS

The online bid form was released on May 3, 2023, and the bid period closed on July 14, 2023, at 12:00 PM Eastern Standard Time. During that period, ten bids were begun. As shown in Figure 4, four bids were ultimately submitted by three bidders. Two bidders submitted one bid, and one other bidder submitted two bids.

Figure 1

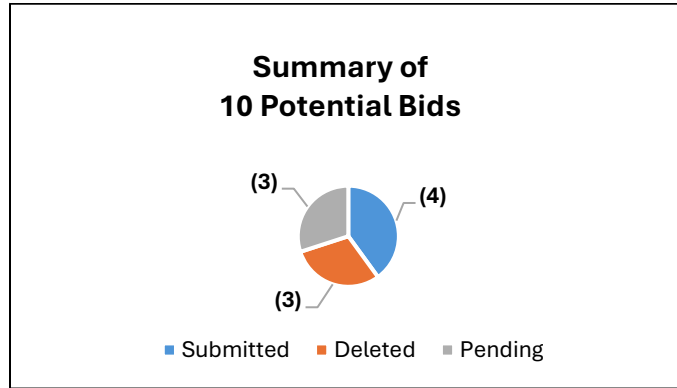


Table 3 below summarizes details of the bids that were submitted.

Table 3
Bid Summary

Bid No.	Contract Type	Contract Term (Years)	Energy Price Selection	Nominal Capacity at POI (MW)	Facility City	Proposed COD ³
208-01	Biomass Addition PPA	10	Escalating	4.3	Oglethorpe	4/8/2026
208-02	Biomass Addition PPA	10	Escalating	3.6	Port Wentworth	10/1/2026
253-01	Greenfield Biomass PPA	30	Escalating	30	Warm Springs	7/16/2027
259-02	Greenfield Biomass PPA	30	Escalating ⁴	70	Jesup	6/1/2027

³ "COD" refers to the project commercial operation date.

⁴ As discussed below, during negotiations, the price of this bid was converted to an equivalent levelized price.

VIII. EVALUATION

The IE and Staff worked closely with the GPC Evaluation Team. A lengthy process to cure information initially received with bids continued through September 2023. Bidders were notified on September 11, 2023, of selection to the Competitive Tier at which time Bid Security was required.

Bid Security Documents were updated and provided to bidders on October 5, 2023. In response to a request from a bidder the Bid Security due date was extended to October 20, 2023. One bidder did not provide adequate site control documents and was unable to secure a Letter of Credit (“LOC”) from a bank with an acceptable credit rating.⁵ GPC worked with that bidder to produce an acceptable LOC, extending the deadline to November 20, 2023. The bidder was ultimately unable to produce an acceptable LOC and firm Site Control documentation. Therefore, bid 253-01 was released on December 20, 2023.

Three bids were included in the full evaluation process. Two of the bids were less than 5 MW additions to existing Biomass facilities, proposed for 10-year terms. One 70 MW greenfield Biomass project, that proposed a 30-year term, was also evaluated.

A. Bid Ranking by Price

GPC evaluated the net value to customers on each of the three remaining bids. Each of the bids proposed escalating pricing. The value of avoided capacity and avoided energy was computed, the cost of transmission was evaluated, and the net benefit (cost) to ratepayers of each project was determined.

GPC calculated a “levelized” bid price when determining the net benefit to compare pricing among the three bids. The two Biomass addition projects were proposed for 10-year terms. For comparison with pricing for the 30-year term bid, GPC assumed the capacity and energy of the 10-year term bids would be replaced in years 11 through 30 with the project’s generation at GPC’s avoided cost to “fill in” those remaining years, to calculate a levelized price over 30 years.

The Competitive Tier ranking of bids was based on the proposed price, including escalation, levelized over 30 years, transmission and distribution costs, and the benefit

⁵ Acceptable forms of security were cash, a Surety Bond, and LOC.

from avoided costs. At that point the net value (cost) to customers was calculated and GPC ranked the projects from lowest cost to highest cost in the following order:

Table 4

Biomass Price Ranking	
Rank	Project
1	208-01
2	208-02
3	259-02

The RFP did not establish a price cap or a price benchmark because of the goal to include Biomass in GPC’s generation portfolio expressed in the 2022 IRP Order. As a result, the bid prices included in the PPAs far exceeded the Company’s avoided cost starting in the first year. All pricing received for Biomass was higher than the avoided cost. The IE’s review of pricing is presented in Confidential Appendix A.

B. Economic Development Information

In the 2022 IRP Order the Commission “recognized the benefits of Biomass as a renewable resource to support Georgia’s forest industry and rural job and economic development.”⁶ That policy goal was the most relevant non-price factor and none of the three bids in the competitive tier was removed from consideration because of price.

Information provided with the three bids indicated Biomass projects would result in a cumulative total of approximately \$300 million in capital expenditure, \$17 million in local construction contracts, \$3.2 million in increased annual pay for new wood procurement crews and \$3.5 million in equipment for the additional crews. County tax and school tax revenue were projected to increase by \$6.5 million over 15 years.

IX. SHORT LIST AND PPA DISCUSSIONS

The remaining two bidders were notified on April 2, 2024, that their bids were selected for the short list. While contracts were being reviewed and completed for execution, several issues arose, extending the anticipated contract finalization and

⁶ 2022 IRP Order P43.

execution date from May 31, 2024, to June 24, 2024, for Bid Nos. 208-01 and 208-02 and to August 6, 2024, for Bid No. 259-02.

In keeping with established protocols, GPC, the IE, and Commission Staff met with each of the bidders selected for the competitive tier to establish understanding of the pro forma PPA. The purpose of the discussions was to confirm that the bidder would execute the PPA, and to minimize the possibility of future misunderstandings that would lead to disputes. With each bidder GPC began the discussions with the reminder that material terms of the PPA were not subject to negotiation. This standard was clearly presented in the RFP, the bidder conference, and during the discussions. Notwithstanding individual professions of agreement, each bidder attempted to alter material terms of the PPA.

A. Qualifying Federal Support - GPC Revision

At the urging of Staff, GPC moved to revise the approved pro forma PPAs to include terms that would require generators to use commercially reasonable efforts to pursue and maximize existing federal support. Under the terms, GPC could terminate the PPA if the generator did not satisfy GPC that the generator appropriately sought such support.

On May 24, 2024, GPC proposed changing the pro forma PPA to require generators to seek future federal support during the life of the contract and to permit GPC to reduce the Monthly Energy Payment by an amount, calculated by GPC, that the generator could have received through federal support, if the generator did not seek such support. Both remaining bidders claimed the revisions were material and unreasonable and GPC entertained negotiation of acceptable terms with both bidders.

One bidder continued to insist on negotiation regarding inclusion of requirements surrounding federal support and other terms. Notwithstanding reminders from the IE and the Staff that the PPA's were to be non-negotiable, GPC entertained the negotiation of terms and extended the contract execution date. After several revisions, GPC and that bidder reached agreement with a commitment that future benefits received pursuant to the Qualifying Federal Support opportunities would be evenly shared between ratepayers and the bidder.



B. Additional Negotiated Terms to Biomass Addition PPA

The Biomass addition projects proposed to add capacity to existing Biomass generating plants with existing Qualifying Facility (“QF”) PPAs. In order for that to occur, the existing QF PPAs needed to be aligned with the Biomass Addition PPA in several sections. The QF PPAs were amended to define the Biomass Addition PPA, contracted capacity, and excess energy, and terms in the QF PPAs were amended to align with the Biomass Addition PPA.

In addition to the QF PPA amendments and negotiations on GPC’s proposed Qualifying Federal Support terms, bidder 208 requested revisions to the pro forma PPA on dispute resolution, new Green House Gas law/Change of law provisions and fuel supply.

Ultimately, in addition to the agreement reached on Qualifying Federal Support applicable to both bidders and discussed in subsection A above, GPC agreed to revise the dispute resolution section of the Biomass Addition PPAs. The bidder expressed a desire to retain the AAA dispute resolution provisions in its QF PPA based on its experience that “...AAA provides a more effective and efficient arbitration mechanism. We strongly prefer to include a AAA dispute resolution (instead of JAMS) in both the Biomass and QF PPAs.” The PPAs for Bid Nos. 208-01 and 208-02 were revised to satisfy that preference and keep the QF and Biomass Addition PPAs consistent. Staff and the IE agreed the change was acceptable because it was not a material change to the pro forma PPA.

Regarding fuel supply, the bidder advocated it should be allowed to use natural gas in accordance with prudent industry practices for startup, shutdown, and flame stabilization. GPC responded that the purpose of fuel restrictions in the PPA was to ensure Georgia Power is purchasing renewable energy fueled from Biomass except in the most limited and necessary situations (i.e. for startup and shutdown). The bidder ultimately agreed to the terms in the PPA that Biomass be used during all operations except as expressly allowed; including that natural gas in no circumstance is allowed in economical fuel switching or fuel blending for generation. The PPA allows for “natural gas to be used with limitations in the startup and shutdown of the Facility in accordance with Prudent Industry Practices so long as its limited and necessary use is clearly demonstrated by Generator to the satisfaction of GPC in each operating report to GPC.”

The IE urged GPC to include reporting requirements for each fuel that was used to mitigate the risk that a non-Biomass fuel, such as natural gas, would be used beyond what was needed for startup and shutdown, preventing ratepayers from subsidizing the use of non-Biomass fuel. GPC agreed with the IE and accepted responsibility to monitor fuel usage for 30 years.

The other proposed revisions regarding change of law were also rejected by GPC, Staff, and the IE. The Biomass Addition PPAs for Bid Nos 208-01 and 208-02 were executed on June 24, 2024. The agreed upon required commercial operation date for Bid No. 208-01 is October 8, 2026, and April 1, 2027, for Bid No. 208-02.

C. Additional Negotiated Terms to the Pro forma Greenfield PPA

On May 31, 2024, bidder 259 expressed it had determined it must withdraw its bid because of the new Qualifying Federal Support terms, and scheduling risks associated with interconnection created by FERC Order 2023. On June 11, 2024, the IE asked the bidder to confirm the bid was withdrawn. On June 13, 2024, the bidder provided conditions that it asserted were necessary to proceed with negotiations.

The bidder proposed that 1) the requirement to pursue future federal support be eliminated; 2) the bid price be converted to a levelized price; 3) the COD be established after the interconnection timeline was confirmed and financing was approved; 4) the performance bond be fully refundable at any time prior to COD if interconnection or financing options were not acceptable to the bidder; and 5) no penalties would accrue if the PPA was terminated.

GPC offered the same terms on which it had reached agreement with the other bidder on Qualifying Federal Support, and the bidder accepted those terms.

To effectuate the policies enumerated by the Commission in the 2022 IRP Order, GPC agreed to entertain the idea of accepting a levelized price. To ensure the bidder was not permitted to refresh and raise its original bid price, GPC calculated a price equivalent to the originally proposed escalating price and accounted for the time value of money. The bidder ultimately agreed to that levelized price.

After agreeing on the levelized price, on July 9, 2024, the bidder informed GPC it had withdrawn from the Transitional Cluster Study, further delaying the process and requiring negotiations about flexibility on the Required COD (“RCOD”). The parties agreed to add a provision for an “RCOD Decision Date” being the earlier of 30 days after

the bidder receives a proposed COD from the Interconnection Provider or June 30, 2026. The RCOD is defined as the date on or before November 30, 2029, as mutually agreed by the parties. If the parties cannot reach agreement on the RCOD by the RCOD Decision Date, the PPA is terminated and performance security released. The bidder continued to press for additional concessions, but GPC, Staff, and the IE declined to agree. The PPA was executed by the bidder on July 24, 2024, and by GPC on August 6, 2024, after acceptable Closing Documents were provided by the bidder.

D. Comments on PPA Negotiations

GPC's modifications to the pro forma PPA regarding Qualifying Federal Support came very late in the process. One of the remaining bidders chose to work with GPC to reach acceptable terms. Those same terms were offered to and accepted by the other bidder. The late revisions to the contract terms were designed to ensure that federal support benefits ratepayers rather than the developer. The IE does not believe bias against either bidder was introduced as a result of the addition of Qualifying Federal Support terms and that the change was appropriate.

Despite knowledge by the bidders that the PPAs were pro forma and non-negotiable, both bidders repeatedly requested material changes. Because of the GPSC Biomass policy preference and the limited number of bids, after consultation with Staff and the IE, GPC agreed to consider some requested changes to the pro forma PPA in order to meet the GPSC goal of including Biomass generation in the Company's portfolio. This decision resulted in protracted discussions over three months as GPC repeatedly extended the deadline for decisions to accommodate a bidder and resulted in the negotiation of terms; something the Company has not done during the 22 years Accion has served as IE. Staff and the IE declined to support some changes and acquiesced to others in the interest of completing what became a multi-year effort to add Biomass to GPC's generation portfolio. Throughout the process, however, the IE and Staff expressed disappointment that GPC repeatedly waived deadlines and entertained new demands, long after receiving representations that all desired changes were "on the table." This "if you give a mouse a cookie" approach was costly and resulted in long delays. Both the Staff and the IE repeatedly expressed concern that wavering from the Commission approved non-negotiable PPA, beyond capturing for ratepayers the value of Qualifying Federal Support, will likely result in similar demands on other on-going RFPs and beyond.



As a result of the prolonged discussions, two material differences between the PPAs executed with bidder 208 and the PPA for bidder 259 emerged. The dispute resolution revisions demanded by bidder 208 were not offered as revisions to bidder 259. Staff and the IE agreed that the revision was non-material and done to align with existing QF contracts. Similarly, a levelized price, equivalent to the proposed escalated price, negotiated and accepted for bidder 259's PPA was not offered to bidder 208. The IE notes that the PPAs with bidder 208 had already been executed before GPC agreed to change the PPA for bidder 259.

GPC agreed to significant flexibility regarding the RCOD for bidder 259. The IE believes the changes necessary to accommodate the transition resulting from FERC Order 2023 are reasonable and would have no impact on bidder 208's project. However, effectively GPC provided bidder 259 with a free option for a lucrative 30-year contract by agreeing the bidder could withdraw without penalty if interconnection could not be achieved in time to ensure a COD by November 30, 2029. See: PPA Section 8.1.4. That allowance was not available to other potential bidders before the bid submission date. While it would be beneficial to GPC ratepayers if the developer chose to terminate the PPA, it remains unknown whether other bidders would have participated had the provision been available. The IE views the terms embedded in the RCOD revision to be material.

X. INDEPENDENT EVALUATOR

A. About the Independent Evaluator

With more than 40 years of in-depth experience in electric, gas, water, and renewable utilities, Accion Group's diverse consortium of consultants provides insightful, candid, and practical advice to the utility industry and their associated government regulatory bodies. Headquartered in Concord, New Hampshire with consulting affiliates nationwide, Accion's specialties range from competitive procurement and utility management to construction monitoring and nuclear decommissioning.

Since its incorporation in 2001, Accion has been routinely involved in high-profile consulting engagements, thus securing a reputation as one of the premier firms providing independent review of utility procurement practices. Accion has served as Independent Evaluator, Independent Monitor, or Independent Observer to state



commissions on over 135 competitive solicitations for energy and capacity supplies from a range of markets including California, Hawaii, Georgia, Colorado, Montana, North Carolina, South Carolina, Washington, Wyoming, North Dakota, Oregon, Florida, Arizona, Texas, New Mexico, Arkansas, Alabama, Louisiana, Puerto Rico, Canada, the U.S. Virgin Islands, and Mexico. Accion Group has also assisted utilities in the preparation for, and the conduct of, power supply solicitations in Maryland, Massachusetts, and Nevada. Having reviewed proposals for generation by renewable sources (including wind, solar, Biomass, wave action, storage, low-head hydroelectric, geothermal, and methane capture), as well as for conventional generation by new-build facilities using nuclear power, natural gas, and coal fuels, our consultants are well-versed in the subtleties of utility procurement practices. Our goal as IE is the same as the purchasing utility and state regulators: ensuring the solicitation obtains the best deal possible for ratepayers, given current market and regulatory conditions in terms of both price and non-price factors.

B. The IE's Role in the RFP

As IE, Accion reviewed the process designed by the Evaluation Team prior to releasing the RFP. This review included the following:

- The Company's efforts to identify prospective bidders and publicize the RFP;
- The terms and conditions that would control both the RFP process and any resulting contracts;
- The evaluation criteria and methodology to be employed;
- The procedures employed to ensure that all bidders would have access to the same information at the same time;
- The form and content of all draft RFP documents;
- The procedures designed to encourage bidder input on the quality and content of RFP documents and RFP procedures; and
- The design and implementation of the affiliate Standards of Conduct protocols.

Accion designed and operated the Website for the receipt of bids, which hosted and captured for review all RFP-related information and all Website activity. The Website facilitated Accion's ability to closely monitor communications during the RFP process. Accion participated in the bidders' conference. Other than those asked during the Conference, all questions from bidders were submitted on the Website and the



Evaluation Team's response to each question was reviewed by the IE prior to the question being answered on the Website. Accion also reviewed the comments provided by the bidders before the RFP was released, discussed those comments that suggested changes to the RFP and PPA with the Evaluation Team, and reviewed the Evaluation Team's responses to the comments, before forwarding them back to the respective bidders.

XI. OVERALL CONCLUSION

The solicitation for Biomass was conducted by GPC pursuant to the Commission's rules. The number of bids was limited, and the pricing received for each bid was higher than the avoided costs. One greenfield bid was released for inability to demonstrate site control and to produce an acceptable letter of credit, leaving only one 70 MW greenfield proposal and two proposals for combined addition of 7.9 MW to existing facilities.

The bidder of the 70 MW greenfield project withdrew its bid, and then returned demanding a levelized price fixed for the 30-year term, after having bid an escalating price structure, along with other changes to the PPA. Staff and the IE accepted the change in price structure because the net impact on ratepayers would not be increased provided the plant operates for 30 years. However, the IE believes it must be recognized that the calculated net benefit of that project is a cost to ratepayers of more than three times the avoided cost. While pricing of the two small addition projects is lower, the price of energy from those projects is twice as high as GPC's avoided cost.

Although working with bidders to negotiate certain terms of the pro forma PPA was necessary to execute contracts, and GPC, Staff, and the IE agreed to a limited number of changes, departure from a non-negotiable PPA is far from ideal. As noted, the IE and Staff repeatedly expressed concern about deviation from the commitment that material terms of the PPA would remain non-negotiable, once approved by the Commission. If bidders expect competitors will be able to negotiate terms after being selected for the competitive tier, there is a significant risk that bidders will "low ball" prices in order to get the opportunity to negotiate greater value. Also, as clearly demonstrated by this exercise, permitting negotiation of PPA terms dramatically prolongs the RFP process: indeed, in the instant case more than a year elapsed between the bid submission date and final contract terms being agreed upon. While the addition of 77.9 MW of Biomass is insignificant to GPC's overall generation portfolio, permitting



this sort of protracted delay in other RFPs would seriously endanger GPC's ability to meet system needs and ensure reliable resource adequacy for customers. Accordingly, the IE strongly urges the Commission to direct GPC not to entertain negotiation of material terms once contracts are approved by the Commission.



1 MR. THOMAS: With your permission, Mr. Kaduk
2 and Mr. Judd would both like to give summaries of
3 their direct testimony.

4 CHAIRMAN SHAW: All right. Go ahead.

5 MR. KADUK: Thank you.

6 Good morning -- well, good afternoon,
7 Commissioners. The Commission's 2022 --

8 CHAIRMAN SHAW: It's still morning.

9 MR. KADUK: The Commission's 2022 IRP final
10 order required Georgia Power to procure up to 140
11 megawatts of new biomass capacity and energy for
12 its customers. This order approved the procurement
13 of biomass resources up to 80 MW in size with
14 expected commercial operation dates of June 2025
15 through November 2029.

16 As ordered by the Commission, the 2023
17 biomass RFP required that bidders provide economic
18 development information with their bid, such as the
19 number and nature of any new jobs the project will
20 provide; the amount of new capital investment that
21 will be put into the project; and other important
22 relevant information to economic development
23 stemming from the project. The fuel required to be
24 used by a biomass facility selected for contracting
25 was biomass material as defined in Georgia Code.

1 The RFP was issued on May 3, and closed on
2 July 14, 2023, with three unique bidders that
3 proposed a total of approximately 108 megawatts,
4 which included only four proposals.

5 Section 1.3.2 of the approved biomass RFP
6 document prohibited bids from affiliates of Georgia
7 Power. And Section 2.2.4 of the approved RFP
8 document prohibited self-build or company-owned
9 proposals from being submitted into this RFP.

10 Staff participated throughout the RFP process
11 and independently analyzed the bids received using
12 Georgia Power's evaluation model. After the
13 determination of the competitive tier that includes
14 system improvement costs, the company identified a
15 portfolio of projects that could meet the
16 procurement target. This portfolio was selected as
17 the short list, and staff agreed with the company's
18 short list determination.

19 In Georgia Power's July 29, 2024,
20 application, the company is requesting that the
21 Commission certify the three winning biomass RFP
22 projects that totaled 77.9 megawatts. In our
23 review, staff finds that:

24 Georgia Power did follow the RFP process as
25 approved by the Commission in the 2022 IRP final

1 order; the three new 2023 biomass RFP PPAs support
2 economic development growth in Georgia; both
3 International Paper and Altamaha Green Energy
4 provided the required supplemental project
5 information that described the potential economic
6 impact of their proposed facilities to the State of
7 Georgia.

8 Georgia Power appropriately amended the
9 existing contracts for the purchase of firm
10 capacity and energy from a renewable qualifying
11 facility utilizing the proxy unit methodology
12 between Georgia Power and International Paper
13 Company for the Flint River Mill and Port Wentworth
14 Mill facilities.

15 Such amendments were necessary to accommodate
16 the new biomass addition PPAs sought for
17 certification, as the additional biomass capacity
18 is at facilities with existing proxy price
19 contracts. Based on our review of the company's
20 application and our independent analysis, staff has
21 the following recommendations:

22 One, the Commission should certify the three
23 new PPAs from the 2023 biomass RFP portfolio.

24 Two, the Commission should approve the proxy
25 price PPA amendments for International Paper's

1 Flint River Mill and Port Wentworth Mill
2 facilities.

3 And three, the Commission should approve
4 Georgia Power's request to include any remaining
5 2023 biomass RFP costs and subsequent PPA costs in
6 its fuel clause and recover such costs through its
7 FCR mechanism.

8 This concludes staff's summary. Thank you.

9 MR. THOMAS: Mr. Chairman, the panel is
10 available for questions from Commissioners and
11 cross-examination.

12 CHAIRMAN SHAW: All right. Any questions
13 from Commissioners?

14 (No response.)

15 CHAIRMAN SHAW: All right. Moving on. We
16 will start with cross. Georgia Interfaith Power &
17 Light.

18 CROSS-EXAMINATION

19 BY MS. WHITFIELD:

20 Q. Good morning, Panel. I'm Jennifer Whitfield
21 on behalf of Georgia Interfaith Power & Light. My first
22 couple of questions are for you, Mr. Judd. Four total
23 bids were submitted in response to this RFP; is that
24 right?

25 A. (Witness Judd) Yes, that's correct. If I

1 might -- am I speaking loudly enough and close enough --

2 CHAIRMAN SHAW: If you don't mind, just get a
3 little closer to the mic or pull it to you. That
4 would be helpful. Thank you.

5 MR. JUDD: Is that better?

6 CHAIRMAN SHAW: That's perfect.

7 A. (Witness Judd) Yes, ma'am.

8 BY MS. WHITFIELD:

9 Q. And one bid was released because it was
10 unable to provide the required documentation. I believe
11 it was either a letter of credit or a firm site control
12 documentation.

13 A. (Witness Judd) It was unable to get site
14 control and it was unable to get financing. That's
15 correct.

16 Q. Okay. So there were three total bids
17 available under this RFP, and those are the same three
18 total now contracts at issue today; correct?

19 A. (Witness Judd) Yes.

20 Q. Okay. I would like to refer you to page 12
21 of your report, Section B, and here you say -- I'll give
22 you a second.

23 A. (Witness Judd) One minute. Let me catch up
24 with you. I'm there.

25 Q. On page 12, Section B, you say that the

1 Commission's policy goal of supporting biomass, and now
2 I'm quoting: "was the most relevant non-price factor, and
3 none of the three bids in the competitive tier was removed
4 from consideration because of price."

5 So does that mean that none of the bids, none
6 of these three bids, were screened for the reasonableness
7 of their price before advancing them to contracting?

8 A. (Witness Judd) I'm going to answer your
9 question in the context of the RFP. Any competitive
10 solicitation is a test of what the market will do and what
11 they will provide in response. This RFP was limited to
12 biomass. You're absolutely correct. We had three
13 bidders, that was the entire universe of options that we
14 had to consider.

15 So the goal of the RFP was to -- when
16 concluded from the conforming bids, so it was the three
17 that moved forward, to present to the Commission what it
18 would be -- what would be required in order to fulfill the
19 goal of the 140 megawatts. As you know we did not reach
20 that full goal, but the bids moved forward into evaluation
21 and through the discussions that we had with the bidders
22 so that we could present today to the bidder -- strike
23 that -- to the Commissioners the output, the result of the
24 RFP, so they could make a fully informed decision.

25 Q. Thank you.

1 A. (Witness Judd) You're welcome.

2 Q. To your knowledge, was there any price point
3 that a bidder could have bid in at which the bids would
4 not have been advanced to the contracting stage?

5 A. (Witness Judd) Again, the goal here was to
6 present in response to the IRP directive what it would
7 cost to have biomass, and it was not a price-driven
8 evaluation. We did not have a price cap, as we do in some
9 RFPs that we conduct. And the goal here was to establish
10 and determine what the cost would be to have additional
11 biomass added to the portfolio.

12 Q. I want to ask you now about the switch for
13 the Altamaha contract, from the escalating price model
14 that was initially bid in, to later a levelized price
15 model. You mention in your -- I believe it's your report,
16 that that switch is revenue neutral for customers. Can
17 you just explain what that means?

18 A. (Witness Judd) It means that the calculation
19 was done from the original bid with an escalating price
20 and then converted that to a levelized price over the term
21 of the contract.

22 Q. And customers would be paying the same amount
23 under the escalating as they are under the levelized over
24 the course of 30 years' performance?

25 A. (Witness Judd) That's correct.

1 Q. What is the consequence for bill payers if
2 the company goes bankrupt in five years from having a
3 levelized price?

4 A. (Witness Judd) Please tell me you're talking
5 about the company as the bidder and not Georgia Power.

6 Q. Yes.

7 A. (Witness Judd) I've had to do three utility
8 bankruptcies, and I don't want to do another one.

9 Q. No, no, no. Me neither. What is the
10 consequence for bill payers if the bidder, in this case
11 Altamaha, goes bankrupt five years in?

12 A. (Witness Judd) The -- presumably -- and,
13 again, having done bankruptcies, whether the contract is
14 rejected or not in the bankruptcy process, but I don't
15 think that's what you're asking. What would be the cash
16 flow requirement to the bidder? Presumably, it would end.
17 They would no longer be -- Georgia Power would no longer
18 be paying for an output from the plant.

19 Q. And would you agree that because the price is
20 levelized, bill payers will have been paying sort of a
21 premium in those early years if the contract doesn't go
22 the full 30 years? So it would no longer be revenue
23 neutral if you're only looking at the forward chunk of
24 those years?

25 A. (Witness Judd) Thank you. I understand the

1 question. I honestly don't know the break point -- the
2 crossover point. I didn't calculate it that way.

3 Q. Okay. Mr. Judd, are you making a
4 recommendation about whether the Commission should certify
5 these contracts as part of your testimony?

6 A. (Witness Judd) I am not.

7 Q. On page 17, in the middle of the page, you're
8 discussing Altamaha, and you make the comment, and I
9 quote: "It would be beneficial to Georgia Power Company
10 ratepayers if the developer chose to terminate the PPA."

11 Can you describe for us what you mean by
12 that?

13 A. (Witness Judd) It's the same conversation
14 you have just had, that the obligation of Georgia Power to
15 that developer would end.

16 Q. So would that mean, then, that ratepayers are
17 better off if this contract ultimately does not go
18 through?

19 A. (Witness Judd) There are different
20 considerations here. And, please, I'm not dodging your
21 question, because better off, that's a qualitative
22 assessment. There's the cost issue. There's also the
23 issue of the determination by this Commission of whether
24 it is a benefit to not only the State but also the
25 ratepayers to have a diversified generation.

1 And typically a utility does try to have
2 diversified generation sources. Not going to slip into
3 a -- we do this a lot. And in a lot of parts of the
4 country, it's heavily hydro. Other places there's
5 different mixture of generation. So, again, qualitatively
6 are they better off to have fewer types of resources? You
7 can probably tell from the gray hair I'm old enough to
8 remember when nuclear was going to be too cheap to meter.
9 And the idea one technology would be sufficient.
10 Obviously, that's no longer the case.

11 As far as the price component, which I think
12 is what you're driving to, that would end if the contract
13 was terminated or the bidder will have an opportunity to
14 withdraw if they exercise that opportunity.

15 Q. So when you wrote that it would be beneficial
16 to Georgia Power customers if the developer chose to
17 terminate the PPA referring to Altamaha, you were
18 referring only to the financial considerations?

19 A. (Witness Judd) That is correct.

20 Q. Okay. Ms. Barber and Mr. Kaduk, you conclude
21 your testimony saying you recommend certification of these
22 PPAs. Could you help me understand which criteria you
23 considered in reaching that recommendation?

24 A. (Witness Kaduk) Sure. So of the
25 competitively bid RFP, these were the three projects that

1 were -- well, of the three projects that were for --
2 sorry. Let me start that again.

3 These three projects, competitively bid
4 through the RFP, were the only ones that were bid in. And
5 our directive was to establish a biomass RFP to procure
6 more biomass resources, and this is what Georgia Power has
7 put in their bid application and we agree with the
8 recommendation.

9 A. (Witness Barber) And I want to add to that.
10 I mean, the Commission made the policy decision in 2022 to
11 add biomass to its portfolios, so staff's objective was to
12 oversee the procurement in Georgia Power, and as you've
13 heard today earlier from their witnesses, this has been a
14 multi year-long process, and these were the projects that
15 were -- remain available to come forward for
16 certification.

17 Q. Is there a PPA cost that could have been bid
18 in by bidders that would have been too high for staff to
19 recommend certification?

20 A. (Witness Barbers) Well, I mean, you know,
21 normally when you go in -- when you have an RFP, normally
22 those things are set in advance of an RFP, when you're
23 going to have those kind of parameters. And obviously, we
24 knew there was going to be limited projects that bid in,
25 but we didn't know. So that was never discussed upfront,

1 you know, were we going to cut it off.

2 Now, obviously, you know, the order also left
3 that up to the Commission at the end of whether -- from a
4 policy perspective, if these projects are in the best
5 interest of customers.

6 Q. So you mention the best interest of
7 customers, and I'm glad you did. By recommending
8 certification, is staff taking the position that these
9 contracts are in the best interest of customers?

10 A. (Witness Kaduk) It's ultimately up to the
11 Commission to decide to weigh the cost of these projects
12 against the benefits that these projects provide, the
13 capacity energy, biomass specific benefits, in addition to
14 the forestry industry benefits and rural, economic job
15 benefits local tax impact, et cetera.

16 MS. WHITFIELD: No further questions.

17 CHAIRMAN SHAW: Georgia Power Company?

18 MR. HIGHSMITH: No questions, Mr. Chair.

19 CHAIRMAN SHAW: Redirect?

20 MR. THOMAS: No redirect, Mr. Chairman. I
21 would just ask that the exhibits be entered into
22 the record and that the panel be excused.

23 CHAIRMAN SHAW: Well, before I excuse y'all,
24 first of all, any other questions from
25 Commissioners?

1 (No response.)

2 CHAIRMAN SHAW: Mr. Judd, I know you've done
3 work here for quite a while on these -- as an
4 independent evaluator, but I'll be honest, this is
5 the first time I've actually had a chance to really
6 look at your experience, and it's pretty
7 impressive.

8 MR. JUDD: Thank you.

9 CHAIRMAN SHAW: And going back to energy
10 advisor to President Carter's administration, but
11 also your experience as an economic development
12 advisor. And since the economic development piece
13 of this is something that this Commission has asked
14 to be included, do you have anything else to add
15 that with regards to the impact that these projects
16 will have on the regions of the state where they're
17 located in terms of things that were not mentioned
18 earlier or may not have been included in the RFP
19 and the bids themselves? And I just want
20 to open -- give you a chance to mention that.

21 COMMISSIONER MCDONALD: And you know,
22 Commissioner Chairman is from South Georgia.

23 MR. JUDD: Fair enough. One thing I would
24 suggest, as I was discussing before, the benefit to
25 the system, the benefit to ratepayers, it's not

1 simply dollars. And earlier when there was a panel
2 from the company that -- you had a discussion with
3 the panel about what future costs might be for
4 these projects to be constructed, the impact there.

5 I would note that just as you had said,
6 construction costs change. The other components of
7 the economic benefit that we received from those
8 bidders went to the jobs. It went to tax revenues.
9 In particular, that hit a note with me -- sir, I'm
10 sorry. You used to be up there.

11 And that resonated because one of my
12 activities -- I have a very, very robust pro bono
13 practice in my little town of working in town
14 government, and for 20 years now, I've been
15 involved in setting local tax rates for the schools
16 and for the town.

17 And I can assure you, sir, what we had for a
18 tax rate 15 years ago is not what we have today,
19 and it's not what it's going to be 15 years hence.

20 The information that Georgia Power
21 considered, that the staff considered, and that my
22 office considered for the economic benefit to the
23 local community from these projects was solely
24 based on the information provided by the bidders.
25 We did not stress test it. We didn't extrapolate

1 into the future how things might change. All we
2 know about forecast is they're going to change.

3 So when you mentioned construction costs,
4 there are those other components as well, which I
5 think would be fair for you folks to consider.
6 They will fluctuate.

7 Are they going to be exponentially different
8 for taxpayers, I hope not, but there will be a
9 difference.

10 CHAIRMAN SHAW: All right. Well, thank you.

11 MR. JUDD: You're welcome.

12 CHAIRMAN SHAW: Any other questions?

13 (No response.)

14 CHAIRMAN SHAW: All right. Panel, you can be
15 excused.

16 MR. JUDD: Thank you, sir.

17 CHAIRMAN SHAW: And that concludes our
18 witness panels.

19 Are there any other housekeeping matters at
20 this time?

21 (No response.)

22 CHAIRMAN SHAW: I'll ask the court reporter
23 at this time to make all exhibits a part of the
24 record. Thank y'all for your time. This hearing
25 is concluded.

1 (Hearing concluded at 11:59 a.m.)
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C E R T I F I C A T E

I Brenda P. Elwell, Certified Court Reporter,
do hereby certify that the foregoing transcript is an
accurate record of the proceedings had in the
above-entitled matter at the time and place therein set
forth.



Brenda P. Elwell, RPR, CCR, B-2023

The minutes of the Administrative Session were
approved this _____ day of _____, 2023.

Jason Shaw, Chairman

Sallie Tanner
Executive Secretary

Education and Work Experience for Jamie Barber

Education

University of West Georgia
 Master of Business Administration-Finance
 August 2009
 West Georgia College
 Bachelor of Business Administration—Accounting
 August 1991

NARUC, Staff Subcommittee on Rate Design, Chair
NARUC Rate School Faculty

11/17 To Present
 5/2020 To Present

Experience

Georgia Public Service Commission

Director, Energy Efficiency and Renewable Energy Unit 6/20 To Present

- Responsible for the oversight of the EERE Unit.
- Provide oversight and policy recommendations for issues related to Energy Efficiency and Renewable Energy.
- Provide Commission Oversight for the implementation of Georgia Power Company's Clean and Renewable Energy Subscription (CARES) Program.
- Facilitator of the Demand Side Management Working Group and Distributed Generation Working Group.
- Review of Proxy Qualifying Facilities Contracts with Georgia Power.
- Review of Renewable Requests for Proposals and Pro Forma Power Purchase Agreements.
- Responds to inquiries relating to net metering, distributed generation, energy efficiency programs, and other related matters.
- Review of Georgia Power Company's Prepay Tariff and implementation of program.

Manager Energy Efficiency and Renewable Energy Group 10/13 To 6/20

ARRA Manager-Internal Consultants, Utilities Division 1/10 To 9/13

- Responsible for the oversight of the group within the Internal Consultants Section.
- Project Leader for issues related to Energy Efficiency and Renewable Energy.
- Project Leader for the implementation of Georgia Power Company's Large-Scale Solar Offering, Advanced Solar Initiative and Advanced Solar Initiative Prime Programs.
- Project Leader for the Certification of 250 megawatts of wind resources.
- Facilitator of the Demand Side Management Working Group.
- Responsible for maintaining awareness of Marginal Rate Offerings of Georgia Power Company.
- Review of Proxy Qualifying Facilities Contracts with Georgia Power.
- Review of Renewable Requests for Proposals and Pro Forma Power Purchase Agreements.
- Responsible for the Commission oversight of the Automated Meter Infrastructure (AMI) Implementation for Georgia Power and addressing customer inquiries related to the safety of AMI meters.
- Responsible for maintaining awareness of Georgia Power's smart grid upgrades to its distribution and transmission system.
- Responsible for maintaining awareness of the status of Georgia Power providing online customer access to usage data.
- Responds to inquiries relating to net metering, distributed generation, AMI, energy efficiency programs, smart grid, and other related matters.
- Review of Georgia Power Company's Prepay Tariff and implementation of program.

Georgia Public Service Commission

10/98 To 1/2010

Utilities Analyst-Natural Gas Section, Utilities Division

- Responsible for maintaining awareness of Base Rates and Rules and Regulations for Atlanta Gas Light Company and Atmos Energy Corporation.
- Review of Negotiated Contracts of Atmos Energy Corporation.
- Maintains Commission contact of assigned certificated marketers.
- Responds to inquiries about Natural Gas Deregulation and other Atlanta Gas Light Billing issues.
- Review the Dedicated Design Day Capacity allocation and Recalculation used by Atlanta Gas Light Company.
- Review of Performance-Based Regulation program of Atmos Energy Corporation.
- Filed and presented testimony regarding Atlanta Gas Light Company's Purchased Gas Costs and Revenues.
- Responsible for the auditing of Purchased Gas Costs of Atlanta Gas Light Company.
- Filed and presented testimony on rate design in Atlanta Gas Light Company Earning's case.
- Project Leader for the auditing of the Pipeline Replacement Program for Atmos Energy for compliance with Commission Order.
- Project Leader for the auditing of Sequent Energy Management.
- Responsible for tracking compliance with the Marketer Service Quality Standards.
- Project leader for Atmos Energy Gas Supply Plan.

Georgia Public Service Commission

10/97 To 10/98

Utilities Analyst Trainee-Gas Section, Utilities Division

- Performed detailed rate analysis that was used in determining base rates for Atlanta Gas Light Company.
- Filed and presented testimony in the United Cities Gas Company's 1998-99 Gas Supply Plan.
- Reviewed marketer applications for certification for financial competence.
- Reviewed proposed changes to rate schedules and terms of service of Atlanta Gas Light Company and United Cities Gas Company.
- Reviewed monthly filings of United Cities Gas Company's Performance-Based Ratemaking Plan.

Georgia Public Service Commission

11/96 To 10/97

Utilities Analyst Trainee-Electric Section, Utilities Division

- Project Manager for a series of Electric Restructuring Workshops.
- Reviewed and prepared sections of the Staff Report related to the Electric Restructuring Workshops.
- Reviewed filed proposed changes to rate schedules and terms of service of Georgia Power Company (GPC) and Savannah Electric Company (SEPCO).

Georgia Public Service Commission

11/94 To 11/96

Accountant-Electric Section, Utilities Division

- Tracked fuel recovery position of Georgia Power Company.
- Reviewed Special Contracts of Georgia Power Company.
- Tracked coal and other fuel prices.
- Participated in IRP review and hearings of GPC and SEPCO.
- Monitored the construction status of combustion turbines for additional capacity needs of GPC and SEPCO.

Georgia Public Service Commission

11/93 To 11/94

Accounting Technician-Administrative Division

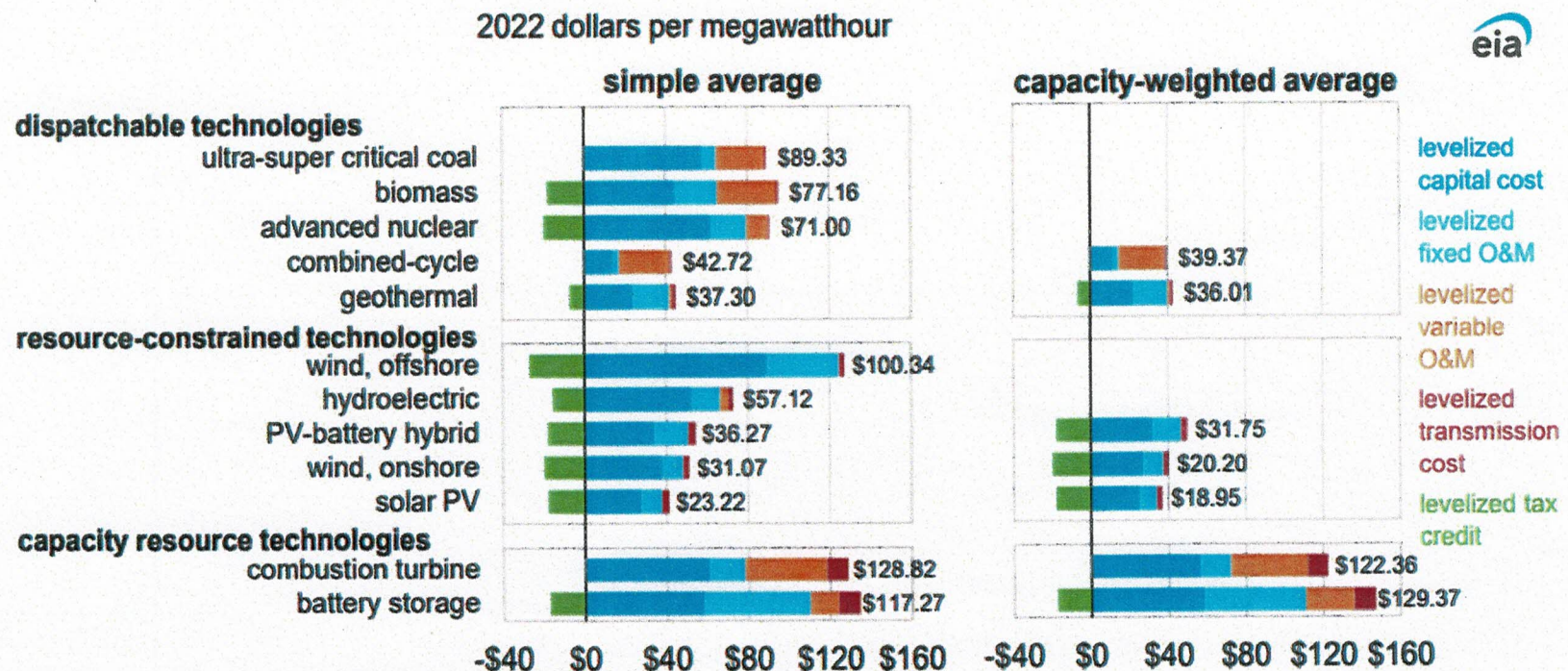
- Responsible for proper classification of Commission expenses.
- Responsible for accounts payable.
- Reviewed Staff Travel Expense Reports.
- Maintained Commission Computer and Vehicle Inventory.

John L. Kaduk
Professional Experience and Educational Background

Mr. Kaduk began his regulatory career with the Georgia Public Service Commission as a cooperative education student in 2000. He graduated from the Georgia Institute of Technology in 2002 with a Bachelor of Science degree in Electrical Engineering. In 2002, Mr. Kaduk was hired as a Public Utilities Engineer in the Telecommunications Unit. In 2006, he joined the Electric Unit, and in 2010 he began working as an Engineer in the Internal Consultants Unit of the Commission as part of the American Recovery and Reinvestment Act group, which later became the Energy Efficiency and Renewable Energy Unit. During Mr. Kaduk's career at the Commission, he has participated in numerous cases including Georgia Power Company's 2007, 2010, 2013, 2016, 2019, 2022, and 2023 Integrated Resource Plans, Georgia Power Company's 2007, 2010, 2013, 2019, and 2022 Rate Cases, and all Georgia Power Company Renewable Request for Proposals and Certifications since 2006.

Mr. Kaduk has testified in: Docket No. 31081, Georgia Power Company's 2010 Integrated Resource Plan; Docket No. 36498, Georgia Power Company's 2013 Integrated Resource Plan; Docket No. 38877, Georgia Power Company's Application for the Certification of the 2015 and 2016 Advanced Solar Initiative Prime Power Purchase Agreements and Request for Approval of the 2015 Advanced Solar Initiative Power Purchase Agreements; Docket No. 40161, Georgia Power Company's 2016 Integrated Resource Plan; Docket No. 41596, Georgia Power Company's Application for the Certification of the 2018/2019 Renewable Energy Development Initiative Utility Scale Power Purchase Agreements; Docket No. 41734, Georgia Power Company's Application for the Certification of the 2018/2019 Renewable Energy Development Initiative Utility Scale Power Purchase Agreements for the Commercial and Industrial Program; Docket No. 42310, Georgia Power Company's 2019 Integrated Resource Plan; Docket No. 42625, Georgia Power Company's Application for the Certification of the 2020/2021 Renewable Energy Development Initiative Utility Scale Power Purchase Agreements; Docket Nos. 4822, 16573 and 19279, Georgia Power Company's Avoided Cost Dockets; Docket No. 43814, Georgia Power Company's Application for the Certification of the 2022/2023 Utility Scale Renewable Power Purchase Agreements; and Docket No. 55378, Georgia Power Company's 2023 Integrated Resource Plan Update.

Estimated levelized cost of electricity (LCOE) and levelized cost of storage (LCOS) for new resources entering service in 2028



Data source: U.S. Energy Information Administration, Annual Energy Outlook 2023

Note: PV = photovoltaic, O&M = operations and maintenance; technologies in which capacity additions are not expected in 2028 do not have a capacity-weighted average. The stated LCOE values include the levelized tax credit component for eligible technologies.