

Deposition of:

Hearing

November 21, 2019

In the Matter of:

Bankston, James H., Et Al. Vs. Alabama Power Company

Freedom Court Reporting

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	Page 1
1	ALABAMA PUBLIC SERVICE COMMISSION
2	MONTGOMERY, ALABAMA
3	
4	IN RE: RATE RIDER RGB
	(Supplementary backup or maintenance power)
5	
6	JAMES H. BANKSTON, et al.,
7	Petitioners/Complainants,
8	vs. DOCKET NO. 32767
9	ALABAMA POWER COMPANY
LO	and
L1	ALABAMA POWER COMPANY,
L2	Petitioner. DOCKET NO. U-4226
L3	* * * * * * * * *
L4	TESTIMONY AND PROCEEDINGS before the
L5	Honorable John Garner, Chief Administrative Law
L6	Judge, at the Carl L. Evans Chief Administrative
L7	Law Judge Hearing Complex, RSA Union Building,
L8	100 North Union Street, Montgomery, Alabama, on
L9	November 21, 2019, commencing at approximately
20	9:00 a.m.; and reported by Stacey L. Johnson,
21	Certified Court Reporter and Commissioner for
22	the State of Alabama at Large.
23	* * * * * * * * *

	Page 2
1	APPEARANCES
2	FOR THE APPLICANT:
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	* * * * * * * * *
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17	THE COURT: For the Record,
18	we're here this morning, November 21,
19	2019, for a public hearing in the
20	matter of Dockets 32767 and U4226.
21	Interested parties were made aware of
22	today's hearing pursuant to a
23	procedural ruling entered in this

appearing on behalf of the applicant?

Is there anyone else who

		Page 6
1	needs to enter an appearance?	
2	MR. TAIT: Daniel Tait, Energy	
3	Alabama.	
4	THE COURT: Mr. Tait, you need	
5	to come on up to the table, sir.	
6	MR. TAIT: Thank you, sir.	
7	THE COURT: You are a party of	
8	Record.	
9	In the way of preliminary	
10	matters, there was a request for some	
11	clarification about the procedure	
12	today. I think that's resolved	
13	itself with Alabama Power's	
14	responsive filings, so the power	
15	company's witness is going to go	
16	first. So I think we've resolved	
17	that to the satisfaction of everyone.	
18	Is that understood?	
19	MR. GROVER: Yes, Judge.	
20	MR. EBERSBACH: Yes, sir.	
21	THE COURT: Very good. As far	
22	as the procedure for presenting the	
23	witnesses, we kind of gave the	

1 Ms. Dean.

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NATALIE DEAN

the witness, after having first been duly sworn to speak the truth, the whole truth, and nothing but the truth, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. GROVER:

- Q. Ms. Dean, could you repeat your position with Alabama Power Company, please.
- A. Yes. My testimony explains how the company developed the backup power service charges under part 1B of Rate Rider RGB. These charges, which are consistent with the requirements of PURPA and Alabama law, enable the company to recover the costs associated with serving the backup power needs of customers with onsite interconnected generation in a nondiscriminatory manner.

I would note that last week the company filed errata to my testimony to correct a data sequencing error. In so doing, the

- 1 company recognized that the capacity
- 2 reservation charge and the RTA -- rate RTA
- 3 super peak charge should be one cent lower
- 4 than I previously indicated. At the
- 5 direction of the Commission, the company can
- file conforming tariff sheets to reflect
- 7 this updated pricing and incorporate any
- 8 additional revisions to the tariff deemed
- 9 warranted.
- 10 Q. So as your summary reflects, you caused
- 11 testimony to be submitted in the Docket
- 12 U4226; is that correct?
- 13 A. That's correct.
- 14 Q. And that testimony concerned proposed
- modifications to the company's Rate Rider
- 16 RGB, correct?
- 17 A. That's correct.
- 18 Q. And outside of the errata item that you just
- 19 noted, to your knowledge, does that
- 20 testimony remain true and accurate to the
- 21 best of your knowledge?
- 22 A. Yes, it does.
- 23 Q. And if I asked you the same questions set

- forth in that testimony outside of the
 errata item you described, you would provide
 the same answers reflected in that
 testimony?
- 5 A. Yes, I would.
- Q. And in connection therewith, you also caused to be filed -- caused to be filed in the docket reply testimony on, I believe,
 December 13, 2018?
- 10 A. That's correct.
- 11 Q. And the same set of questions. To your
 12 knowledge and outside of the errata items
 13 you described, does that testimony remain
 14 true and correct to the best of your
 15 knowledge and belief?
- 16 A. Yes, it does.
- Q. And if I asked you those requests that are set forth in your reply testimony, would you provide the same answers as set forth in your testimony?
- 21 A. Yes, I would.
- MR. GROVER: I think with that,

 Judge, we would tender the witness

- 1 Q. There is also LPS, which is for 2 nonresidential small power producers?
- 3 A. That's correct.
- Q. There is RTA, which is a time of use rate, right?
- 6 A. For residential. Correct.
- Q. For residential. Okay. And finally, rate FD, and that stands for family dwelling?
- 9 A. That's correct.
- Q. So to be clear, the capacity reservation charge applies only to those four rate classes, right?
- 13 A. That's correct.
- Q. And of those four, the rate RTA customer,

 just one of those classes -- the RTA

 customer has the option to avoid the charge,

 but only if they pay a super peak charge; is

 that right?
- A. Actually, customers that take service under
 LPS or school have options to take service
 under different rates set forth in part 1A
 as well.
- 23 Q. Okay. But of the four classes we just

- mentioned, if they want to avoid the
 capacity reservation charge, RTA is the only
 one that can do it by paying the super peak
 charge; is that right?
 - A. No, that's not correct. The customers that take service under SCH or LPS can actually take service under a different rate under RT -- under the part 1A rates.
 - Q. But they can avoid paying the capacity reservation charge by agreeing to pay that super peak charge, those rate classes cannot; is that right?
 - A. That's correct. The rate RTA super peak charge only applies to residential customers.
 - Q. Okay. And that rate super peak charge is
 71 cents per kilowatt hour during the summer
 period, which is June through September?
- 19 A. During the hours of three to five p.m.
 - Q. Okay. And to derive that super peak charge, did the company generally follow the same methodology as it used to come up with the capacity reservation charge?

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- 1 A. Yes, we did.
- 2 Q. Thank you. Now, rate FD is the company's
- 3 standard residential tariff?
- 4 A. Yes, it is.
- 5 Q. It's the rate that most of the company's
- 6 1.2 million residential customers are on; is
- 7 that right?
- 8 A. That is correct.
- 9 Q. And it's the rate FD population that the
- 10 company drew from to devise the part 1B
- 11 charges, right?
- 12 A. That's correct.
- 13 Q. Now, the capacity reservation charge, this
- is a per kilowatt charge assessed against
- the size of the customer self-generation
- 16 system, correct?
- 17 A. The rate itself is applied to the install
- capacity at a customer's residence. Yes.
- 19 That's correct.
- 20 Q. And specifically, it's a nameplate capacity?
- 21 A. It is nameplate capacity. Correct.
- 22 Q. And while the charge applies to any
- customer-sided generation, assuming the

- customer remains interconnected, the reality
 is that almost all customers currently
 subject to it are solar customers, right?
- A. Based on the information I have, that's correct.
- Q. Solar, the company recognizes, is the
 predominant means of non-emergency selfgeneration that in recent years customers
 have increasingly been adopting; is that
 right?
- 11 A. Can you say that one more time. I didn't hear the full question.
- Q. Solar is the predominant means of
 non-emergency self-generation that in recent
 year customers have been choosing to adopt?
 - A. Under the part 1B rates, I would say yes.
- Q. And, in fact, the company designed the charge based on representative profiles of customers it considered likely to adopt solar generation, right?
- 21 A. That's correct. We use actual customer data 22 to do that. Correct.
- 23 | Q. And by looking at -- by looking to the

- 1 production profiles of solar generation?
 - A. I'm sorry. Say that one more time.
 - Q. In devising the charge, you look to the production profiles of solar generation?
 - A. We actually looked at the output of a model solar profile. Correct.
 - Q. Okay. Is it fair to say that concerns about solar adoption are what prompted the company to develop this charge in 2012?
 - A. I would say what prompted the company to look at this in 2012 was that we actually already had larger customers under the part A rates that were taking service from Alabama Power and requiring backup service at that time.

On or around that time, we actually had deployed AMI technology and began to detect feeding back onto our system, and we acknowledged at that time that we had interconnected generators that had not actually applied through the appropriate protocol to actually have interconnected generation on our system. And for the

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- safety and reliability concerns, that was 1 2. what prompted -- one of the reasons that 3 prompted us to investigate that.
- 4 Okay. Thank you. Now, Rate Rider RGB has Ο. been in place for about 30 years; is that right?
- 7 Α. That sounds about right.
- But the capacity reservation charge we've 8 Ο. 9 been talking about, the company didn't 10 propose it until December 2012 and didn't 11 begin assessing it until roughly May 2013; is that correct? 12
- 13 That's correct. Α.
- 14 And that was part of the fifth revision to Ο. 15 Rate Rider?
- 16 Α. It was.

- 17 The charges at that time was \$5 per Ο. 18 kilowatt, which is the charge currently in 19 effect today, right?
- 20 That's correct. Α.
- So a rate FD customer with four kilowatts of 2.1 Ο. 22 solar must pay the company \$20 per month or 23 \$240 per year?

- 1 A. That's correct.
- Q. And must pay that charge for as long as their system remains interconnected?
- A. That's correct. That's the -- that's actually the cost we are recovering to provide backup service to those customers.
- Q. So a residential customer who installed solar like any rate FD customer, they're going to have to pay the company's basic service charge, right?
- 11 A. They're going to have to pay the basic 12 service charge. Which charge are you 13 talking about?
- Q. Well, there's a basic service charge of 14.50; is that right?
- 16 A. Yes. That's correct.
- 17 Q. And that applies to all rate FD customers?
- 18 A. It does.
- Q. So the solar customer on rate FD as well would have to pay that?
- 21 A. That's correct.
- Q. And then they pay a volumetric charge that varies with their level of energy usage,

- 1 right?
- 2 A. Yes, they do.
- Q. And that volumetric charge is designed to
- 4 recover both variable and fixed costs,
- 5 correct?
- 6 A. Yes, it is.
- 7 Q. And then under the Rate Rider, they would
- 8 pay this additional charge according to the
- 9 nameplate capacity if they're solar
- 10 installation?
- 11 A. If they chose to interconnect onsite
- generation with the company's system, they
- are subject to Rate Rider RGB, and, yes,
- they have the option to pay the capacity
- 15 reservation charge.
- 16 Q. Well, if they're on rate FD, they would have
- 17 to pay, correct?
- 18 A. Well, they have the option to take service
- 19 under a different rate structure.
- 20 O. Like RTA?
- 21 A. Like RTA. Correct.
- 22 Q. In which case, they would pay the super peak
- 23 charge?

- 1 A. That's correct.
- Q. Okay. So when the charge was first adopted
- in 2013, there were just 79 customer
- 4 accounts subject to it?
- 5 A. That's correct.
- 6 Q. And today there are approximately 155
- 7 customers subject to Rate Rider RGB?
- 8 A. That's correct.
- 9 Q. But that includes customers who are covered
- 10 under part 1A of the charge, right?
- 11 A. The 155?
- 12 Q. Yes.
- 13 A. The 155 applies to both part A and part B.
- 14 And I'll note the 155 represents the number
- that was looked at about a year ago.
- 16 Q. Okay. So it's not necessarily current?
- 17 A. It's not a current number. That's correct.
- 18 | 0. Do you have a current number?
- 19 A. I have a current number that's subject to
- 20 part B. I don't have a total
- 21 interconnected -- well, I'm sorry. I do
- have an approximate of about 197.
- 23 Q. Okay. And what's the number that's subject

- 1 to the part B?
- 2 A. Today?
- 3 O. Today.

- 4 A. Today that number is somewhere around 132.
- 5 Q. Okay. And just to be clear, the part A
- 7 reservation charge; is that right?
- 8 A. The part A customers pay for backup through the design of their rate.

customers do not pay the capacity

- 10 Q. Right. So they don't pay the capacity 11 reservation charge?
- 12 A. They don't pay the capacity reservation 13 charge, but they do pay for backup service.
- Q. Okay. Thank you. So you said 132 customers under part B. That's out of some

 1.2 million residential customers for the
- 17 company?
- 18 A. Yes.
- Q. So would you agree that in 2013 and even today the amount of installed customer-sided solar capacity that's interconnected to Alabama Power's system is pretty small?
- 23 A. I would -- I don't know what you classify as

- 1 small.
- Q. Well, do you know -- there's 132 customers.
- 3 Do you know what the combined nameplate
- 4 capacity is for those customers?
- 5 A. I would say it's just over, I would say,
- 650 kilowatts.
- 7 Q. Okay. And with that compared to a total
- 8 capacity for the company of between 13,000,
- 9 14,000 megawatts?
- 10 A. Yes.
- 11 Q. Okay. Did the company consider the level of
- 12 penetration of customer-sided solar in its
- 13 service territory to be a relevant
- consideration before adopting the charge?
- 15 A. Say that one more time.
- 16 Q. Did the company consider the level of
- 17 penetration of customer-sided solar on its
- 18 system to be a relevant consideration before
- 19 adopting the charge?
- 20 A. I would say the company considered any
- 21 customer that needed backup service needs to
- 22 be a relevant consideration to the Rate
- 23 Rider RGB requirements.

- Q. Okay. So does that mean the answer to my question is, no, you did not consider the level of penetration to be relevant?
- 4 A. I would say we looked at all penetration of all types of generation.
- Q. Okay. But you said a moment ago around
 600 kilowatts versus 13-, 14,000 megawatts
 for the system. Was that a relevant
 consideration?
- 10 A. Yes. I would also note you're only quoting
 11 the backup needs for the part B rates.
- There's a considerable number of megawatts served under the part A rates as well.
- Q. Well, we're here today to talk about the part B charges.
- 16 A. Okay.
- Q. And did the company look at any data before
 adopting this charge regarding how many more
 customers it expected to adopt solar on a
 going forward basis?
- 21 A. No, we did not look at forecasting solar adoption.
- Q. Did the company have any data suggesting

- solar penetration on the system was reaching
 a point that it could affect system
 reliability?
 - A. I would note that any customer that expects backup needs on our system without planning for that would impose reliability considerations on our system.
 - Q. Was there any indication before adopting the part B charges that the relatively small levels of existing solar customers were those likely to install solar were having or were likely to have an adverse impact on the company's financial integrity?
 - A. In the absence of cost recovery measures to recover the cost of our business, I would say the company absolutely would consider whether or not we could recover those costs.
- 18 Q. But would it affect your financial integrity
 19 in terms of credit ratings?
- 20 A. If I did not have adequate cost recovery
 21 cost measures in place, absolutely. That's
 22 true of any cost of my business.
- 23 Q. Even for 600 kilowatts?

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- 1 A. Even for 600 kilowatts. That's correct.
- Q. Did these solar customers drive any specific infrastructure costs relating to interconnection and reliable operation of
 - A. Can you ask that one more time.

the grid?

- Q. Did the solar customers that were existing at the time you adopted this charge drive any specific infrastructure costs relating to interconnection and reliable operation of the grid?
- A. I don't have that information. I would say the company had to consider the full requirements needs of the customer with onsite -- interconnected onsite generation.
- Q. Did those solar customers require the company to procure any additional capacity?
- A. I don't have that information. Not to my knowledge.
- Q. Now, the capacity reservation charge applies
 based on the size of the customer's system
 and not based on their actual usage,
 correct?

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- 1 A. That's correct.
- Q. Now, you're aware that some affected customers filed a complaint with this
- 4 Commission about the charge, correct?
- 5 A. Yes, I am.
- Q. Have you read the affidavits of the customers involved in this action?
- 8 A. Yes, I have.
- 9 So those customers allege that the charge Ο. 10 will cost them thousands of dollars over the 11 life of their installed systems significantly undermining their investment 12 13 and lengthening its payback period. Do you 14 have any reason to dispute that the 15 customers have been impacted as they allege?
 - A. I don't have any reason to dispute that. I would say that they have requested the company to provide a service to them and there's a cost to that service.
 - Q. Now, in response to the complaints, the company made a filing to increase the charge by 42 cents per kilowatt and simultaneously moved to dismiss the complaint, correct?

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- 1 A. Correct.
- Q. And now there's an errata filing lowering your proposed increase by one cent, correct?
- 4 A. That's correct.
- 5 Q. So if approved, the new charge would be \$5.41 per KW?
- 7 A. That is correct.
- Q. So if it's approved, the complainants would now pay 5.41 per kilowatt rather that the \$5 they pay today?
- 11 A. That's correct.
- Q. Which would negatively impact the economics of their private investments even more than the current charge?
 - A. I can't speak to the economics of a customer's choice to install interconnected onsite generation. I can tell you the charge recovers the cost to provide backup power service to those customers.
- Q. But you understand it is affecting the savings they would otherwise realize without the charge, correct?
- 23 A. I can tell you that my consideration is to

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- recover the cost to provide service to the 1 2. customers that have decided to interconnect 3 onsite generation.
 - Now, you would acknowledge that customer-Ο. sided solar provides certain benefits, right?
- Α. Can you elaborate?

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- 8 Ο. Well, at a minimum, would you agree that a customer with solar reduces system costs when they're able to rely on self-generation 10 11 during peak times?
- 12 Α. Can you say that one more time, please.
- 13 That a customer with solar reduces system Ο. 14 costs when they're able to rely on self-15 generation during peak times?
- I would say that customer avoids the 16 Α. variable cost associated with costs. 17
- So the company doesn't have to supply that 18 Ο. 19 electricity to that customer if they're 2.0 self-generating?
- 2.1 Keep in mind, the capacity reservation Α. 22 charge actually recovers the cost to have 23 capacity available to serve those needs when

- and if they need it whenever that time frame is.
- Q. I understand that. But there is a variable energy benefit, correct?
- A. And I would say we actually did take that into consideration in the development of the charge.
- Q. Right. So there is a system benefit at least in that respect, correct?
- 10 A. I would say the customers avoid that cost.
- 11 Correct.
- 12 Q. And so does the company?
- 13 | A. Yes.
- Q. Now, peak times are generally when the system is most stressed, correct?
- 16 A. That is correct.
- Q. And marginal energy production is at its most expensive?
- 19 A. Yes, it is.
- Q. So if customers are self-supplying the
 electricity during peak times, that reduces
 system stress and system costs?
- 23 A. Say that one more time, please.

- Q. If customers are self-supplying electricity during peak times, that reduces system stress and system costs?
 - A. Correct. But if they don't produce, I have to stand ready to serve them whatever that time is, including the peak.
 - Q. Okay. That wasn't my question but I understand. Similarly, to the extent the solar -- the solar customer is not using capacity during peak times, that frees up capacity for use by other customers, does it not?
- 13 A. That's correct.

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- Q. But the company didn't perform any assessment of the costs and benefits of distributed solar generation before instituting this charge or the proposal to increase it, correct?
- A. I would say we actually did the benefits.

 We actually did consider the variable cost benefits that the customer avoids, and we actually -- in the consideration of the fixed cost avoidance, we actually did give

- credit for that. To the extent that you're talking about something other than that, the capacity reservation charge actually recovers the cost of backup. I think if you're talking about something else, that is better suited in a different tariff.
 - Q. Well, the company did file some responses to supplemental data requests served by the Commission, right?
- 10 A. Yes.

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- 11 Q. And do you recall request number 4?
- 12 A. I don't remember the number of the questions.
- Q. Well, you were asked did the company
 consider and quantify any benefits that may
 be provided on a consistent basis by such
 onsite generation.
- 18 | A. Yes.
- Q. And do you recall the company said that it did not perform any independent assessment of the benefits or costs of interconnected onsite generation in developing the capacity reservation charge in the RTA charge?

- The capacity reservation charge 1 Α. 2. actually is meant to recover the cost of 3 providing backup. As I stated before, the 4 benefits, other than the variable cost 5 benefits that we actually already did talk 6 about and did consider and a percentage of the fixed cost benefits that we actually did 8 consider, no, any additional benefits 9 associated with the production of that facility are not suited recoverable under 10 this tariff. 11
- 12 Q. Okay. But I think you just acknowledged
 13 there are variable energy and fixed cost
 14 benefits?
- 15 A. Yes. And we did acknowledge those in the calculation.
 - Q. Okay. So you did not use -- Southern

 Company has developed a framework for

 considering the cost and benefits of

 distributed solar. You're aware of that,

 correct?
 - A. If you're talking about the framework that was used on behalf of Georgia Power.

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- 1 Q. Yes, but developed by Southern Company,
- 2 correct?
- 3 A. That's correct.
- 4 | Q. And you didn't consult that framework?
- 5 A. No, we did not.
- Q. And you didn't develop a similar framework
 for Alabama?
- 8 A. No, we did not.
- 9 Q. So as we sit here today, the company hasn't

 10 assessed whether distributed solar
- generation in its territory may provide a
- net benefit at least up to some level of
- 13 penetration?
- 14 A. Again, I'll say the benefit associated with
- the production of any solar facility is
- 16 better suited on a -- in a different tariff.
- 17 You're talking about the benefit that
- generators put back on our system. That
- doesn't have any bearing on the cost
- 20 recovery of providing backup service to
- 21 those customers under this charge.
- Q. So you're talking about solar exported to
- 23 the grid?

- 1 A. That's correct.
- 2 Q. So you acknowledge that's a benefit?
- 3 A. I would say that to the extent it avoids
- 4 variable costs that the company incurs, yes.
- 5 Q. And frees up capacity?
- 6 A. Capacity -- it depends on what you talk 7 about by frees up capacity.
- Q. Well, if a solar customer is a net exporter during system peak, they're providing both an energy benefit and they're not using the company's capacity at all so that other customers can use it; is that right?
 - A. Right. But I have to stand ready to serve that generation anytime that customer needs it up to and including the peak.
 - Q. Are you aware that your sister utility,

 Georgia Power, proposed but withdrew a

 charge similar to the capacity reservation

 charge in 2013?
- 20 A. I'm aware that they looked at that, yes.
- Q. But that wasn't relevant to your determination either?
- 23 A. Of something that Georgia Power did in a

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			Page 35
1		different jurisdiction?	
2	Q.	Right.	
3	A.	No.	
4	Q.	Do you know how Georgia Power's solar	
5		MR. GROVER: Your Honor, I	
6		object. We've given a little bit of	
7		a leash talking about other	
8		jurisdiction, but I mean, last time I	
9		checked, we're here in Alabama before	
10		the Alabama Public Service Commission	
11		so just with that caveat.	
12		THE COURT: Yeah, let's keep	
13		those questions to a minimum as far	
14		as if you want to touch on it	
15		briefly, but I don't want to dwell on	
16		that issue.	
17		MR. EBERSBACH: Your Honor, that	
18		was my last question.	
19	Q.	Just to establish that you didn't consider	
20		that relevant.	
21	Α.	The things that I considered relevant in the	3
22		development of the capacity reservation	

charge are charges that Alabama Power incurs

- on behalf of serving all of its customers,
 especially for those customers that ask for
 the service of providing backup service to
 them. Those were the costs that we assessed
 when developing the capacity reservation
 charge.
 - Q. So the experience of other states with higher levels of solar penetration than Alabama, you considered irrelevant to your determination?
 - A. I don't know how solar penetration in a different state affects the cost here in Alabama.
 - Q. So the answer is, yes, you did not consider it relevant?
- 16 A. I did not.

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- 17 THE COURT: I think her answer
 18 speaks for itself.
 - Q. Now, the company's position is that the capacity reservation charge is needed to cover the cost of providing backup service to those self-generating customers, right?
- 23 A. That's correct.

- Q. But the company did not do any cost of service analysis specific to the population of rate RD customers, did it?
- 4 A. I'm sorry. I didn't hear the question.
 - Q. The company didn't do any cost of service analysis specific to the rate FD customers with solar, did it?
- 8 A. Yes, we did. That's not correct.
 - Q. Well, you looked at the usage of customers who had adopted solar but prior to their adoption of solar; am I right about that?
 - A. Right. It wouldn't -- it wouldn't make sense for me to use a profile after they adopted solar. I needed to know what their load profile looked like before they adopted solar.
 - Q. Okay. So you didn't look at the actual metered net usage of existing partial requirements customers subject to part B of the rate rider?
 - A. Well, I need to understand what the customer looked like before they installed generation and after they installed generation to

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- 1 understand the costs associated with that.
- 2 | 0. And --
- A. Of which I don't have that information available to me.
- Q. Well, you -- customers who have adopted solar, you do have their net usage?
- 7 A. I have their net usage. Correct.
- 8 Q. And that's what you send them a bill for,
 9 correct?
- 10 | A. I'm sorry?
- 11 Q. That's what you bill them for, correct?
- 12 A. For their net usage?
- 13 | O. Yes.
- 14 A. I actually do bill them for their net usage under supplementary service rate. Correct.
- 16 | Q. So you have that data?
- 17 A. I do have that data, but I don't have their solar production data.
- Q. Right. But the -- when you say you compared data before and after solar adoption, you weren't looking at the actual net metered -- the net usage date for those customers, you were looking at a representative profile to

- which you had applied a solar production profile; is that right?
 - A. I looked at the before usage of actual customers prior to them installing onsite generation. And the reason for that is understanding how to -- how to use that information. I need to understand what their profile looks like ahead of them installing generation. I need both sets of information in the same subset to be able to evaluate that.
 - Q. Okay. But had you used actual metered net usage data, you would know exactly what demands the customer -- solar customer placed on the system and when, would you not?
 - A. Yes, I have that information, but I don't have -- what I don't have available to me is the total consumption of the house. I only have the net. So if I'm only looking at the net, I don't know what their load profile looked like before they installed it, which is a critical piece of information.

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- Q. But you do know exactly when they're using the system, right?
- 3 Α. Right. But I need to understand of the --4 if I'm looking at a ten kilowatt -- ten 5 kilowatt residence, somebody that demand is 6 ten kilowatts and they've installed a two kilowatt generator, I need to understand the 8 relationship between what the entire household is to understand how to 9 appropriately recover the cost for backup. 10 11 I wouldn't want to charge them backup for the full ten. 12
 - Q. But with net usage, could you not determine whether those solar customers as a class remain within the normal variation for the residential class as a whole?
- A. When you say normal variation within the class as a whole, I don't know what you mean.
- Q. Well, rate FD is a volumetric energy, right?
- 21 A. Yes.

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Q. And it's designed to recover both variable and fixed costs as we've discussed, right?

- 1 A. That's correct.
- Q. And you would agree that there is load
 diversity among residential customers as a
 class, right?
- 5 A. Yes, there is.
- Q. Not just in terms of how much electricity they consume but when they consume it?
- A. I would say a residential class as a whole tends to peak about the same time.
- Q. And rate FD is designed to recoup the company's fixed and variable costs with consideration of that load diversity among residential customers, correct?
- 14 A. Yes.

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- Q. Okay. So going back to your analysis, you developed a representative load profile for customers without onsite generation. And that is a rate FD customer, right?
- 19 A. That's correct.
- Q. You then reduced that representative
 customer's usage by the expected hourly
 production of the onsite solar generation as
 modeled by the PB watts tool?

1 A. Right.

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- Q. And specifically the hourly production of one kilowatt of solar?
- 4 A. That's correct.
 - Q. Would you agree that a residential customer with only one kilowatt of solar is unlikely to ever have excess production to the grid?
- 8 A. I don't know that to be a fact.
- 9 Q. So ultimately, you came up with the two
 10 profiles -- representative profiles, one
 11 with one kilowatt of solar and one without?
- 12 A. Yes.
- Q. And you determined that the representative customer of one kilowatt of solar is less costly to serve; is that right?
 - A. I would say -- in terms of less costly to serve, I would say they avoid the variable cost as we stated earlier, but I do not avoid any of the fixed cost to serve that customer. I have to stand ready to serve that customer. I cannot change my infrastructure to serve that customer. They might need me at any time and I have to

- stand ready to serve them, so I do not avoid
 the fixed cost associated with that.

 O. Do you happen to have your exhibit MD 4 with
 - Q. Do you happen to have your exhibit MD 4 with you?
 - A. Give me a minute to find it, please.

6 THE COURT: While she's looking 7 for that, I continue to hear the 8 chirping of an electronic device. 9 It's annoying the heck out of me and 10 it's taking away my focus. Τf 11 anybody's streaming this proceeding, shut it down right now. 12 We don't

record proceedings. We don't stream live hearings here at the Commission.

Any live streaming needs to be shut down right now. It's not permitted.

If that's what I'm hearing, the

chirping, that needs to stop because it's annoying the crap out of me.

 $\label{eq:Now, proceed now that I can} % \left(\left(\frac{1}{2} \right) + \frac{1}{2} \left(\frac{1}{$

- Q. Ms. Dean, you have Exhibit MD 4 before you?
- 23 A. Yes, I do.

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- Now, I understand your testimony you just 1 Ο. 2. gave, but I just want to ask you does this 3 document not show that the fixed cost 4 component for the representative solar 5 customer is less than for the nonsolar 6 customer?
- 7 Α. What you're assuming is that that customer will never require backup from the company.
 - Ο. And if a customer never required firm backup, those capacity cost savings would be there; is that your testimony?
 - Yes, if they did not interconnect to the Α. system and require and ask for the company to provide backup power service to them, they would reduce these costs. That's correct.
 - Okay. Now, I think we can agree it's Ο. unlikely a solar customer would never require backup if they're interconnected, correct?
- 2.1 Absolutely they would require backup. Α.
- 22 But neither should we assume that a solar Ο. 23 customer will always require backup to the

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- full extent of their system's nameplate capacity, right?
- A. Correct. I think we provided information to show that.
- Q. Backup power is for when the customer's system is not producing what it would generally produce. Do you agree with that?
- A. I believe I can tell you what the rate says backup power is supposed to be for.
- 10 Q. Well, you recall we took your deposition --
- 11 A. Yes.
- Q. -- earlier this year, and you said that
 backup power is for when the customer's
 system is not producing what it generally
 would produce. Do you stand by that
 description?
- 17 | A. Yes.
- 18 Q. It's for unscheduled outages, backup power?
- A. I would say again what I stated at the
 deposition, it is for periods when the
 generator is not operating when it should be
 operating.
- Q. Okay. It's to serve in place of what's

- ordinarily generated by the customer's facility?
 - A. I would say it's in place to serve when it should be generating for the customer.
 - Q. Now, the company's assumption is that for every ten kilowatts of solar on its system, it must hold six and a half kilowatts in reserve as backup; is that right?
- 9 A. That's correct.

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- 10 Q. Is that capacity reserved exclusively for the solar customer?
 - A. I would say the calculations that we've set forth and what we've shown represents the capacity needs to serve the backup generation needs of these particular customers.
 - Q. But are you saying that that six and a half kilowatts -- just to use that as an example -- it's only there for the solar customer or can it be used for other purposes when it's not needed to support the solar customer?
- 23 A. Well, look, if I am evaluating how I serve

my customers -- let's just say three people in this audience have interconnected solar, all three of them have interconnected one kilowatt of solar, I'm required to serve 100 percent of their needs no matter when that happens. The point of the capacity reservation charge and the reference to the six and a half kilowatts that you talk about or the 65 percent actually represents at any given point in time that three kilowatts of backup power that I'm supposed to serve, I only need 65 percent of that.

0. Okay.

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- A. But I still have to stand ready to serve each individual customer's needs 100 percent of the time whenever they need it, but I'm recognizing that -- through customer diversification that, yes, I should not expect to serve 100 percent of that for all three of those customers all at the same time.
- Q. So you don't need to reserve capacity on a one-to-one basis?

- 1 A. Not for backup power.
 - Q. And that's due to diversity as you just mentioned?
 - A. Correct.

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THE COURT: While you have a little break there, let me just make a clarifying statement here as far as videoing. We don't record Commission meetings where it's involving a contested public hearing. So I don't want to see anybody recording anything. You've got the recording of what's transpiring here with the court reporter on the Record, which will be available for anyone to read. So I don't want to see any videoing at this point. I don't know if that was clear earlier. Particularly live streaming, but any recording at all. So that needs to stop.

All right. Proceed. I'm sorry.

Q. Ms. Dean, just a clarification. So I may

- reference your initial written direct and reply written direct testimony, do you have that before you?
- 4 | A. I do.
- 5 Okay. Thank you. So now, you've noted in Q. your testimony that the federal statute 6 known as PURPA, which is Public Utilities 8 Regulatory Policies Act, and I believe you reference that as saying for the proposition 9 10 the company cannot assume a hundred percent 11 of customers who've adopted their own generation, that their systems will all be 12 13 down at the same time?
- 14 A. That's correct.
 - Q. Okay. And I think the language from PURPA is you can't assume reductions in electric output by every onsite generator will occur simultaneously or during system peak or both. Does that sound familiar?
- 20 A. Yes.

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Q. Now, is it your understanding PURPA actually requires Alabama Power to furnish backup service, right?

- 1 A. If the customer requests it, the company has to provide it.
- Q. And it also says that the utility where they
 must reserve such backup capacity, it's
 proper for them to recover the cost
 associated with doing so?
- 7 A. Correct. And not have it subsidized from other customers.
- 9 Q. But at the same time, the rates must be just and reasonable and in the public interest, correct?
- 12 A. Yes.
- Q. Okay. Now, you recognize that -- or do you recognize that the regulations are designed to encourage small power construction?
- 16 A. I can't speculate on the purpose of the regulations.
- 18 Q. Well, you've cited order 69 --
- 19 A. Yes.
- 20 (Simultaneous cross-talk.)
- 21 | Q. -- expense your testimony?
- 22 A. Yes.
- 23 Q. You're familiar with that document?

- 1 A. Yes, I am.
- 2 Q. And that it first issued the regulations and
- 3 talked about --
- 4 A. Yes.
- 5 Q. So are you familiar with language in that
- 6 document about purpose of those regulations
- being in part to encourage small power
- 8 production?
- 9 A. If you could read that to me, I could...
- 10 Q. Do you have that document with you?
- 11 A. I don't have it.
- 12 | Q. Okay.
- MR. GROVER: Actually, point of
- reference, I think you do. It's in
- 15 the reply testimony.
- 16 THE WITNESS: Okay. Thank you.
- 17 MR. GROVER: It's the yellow
- 18 sheets. Okay.
- 19 Q. And, Ms. Dean, I'm referring to page 12215.
- 20 A. I don't know if I have that page.
- 21 MR. GROVER: Actually she
- doesn't have that page.
- THE COURT: That's MD reply 5,

producers?

- A. I don't. Can you point to which
 paragraph -- which paragraph it is, please.
- Q. The paragraph right at the bottom that says, secondly, some utilities charge discriminatorily higher rates for backup power service to generators and small power producers. You see that language?
- 8 A. Yes.
- 9 Q. But am I correct that none of this part of
 10 the order 69 is cited in your testimony; is
 11 that correct?
- 12 A. It wasn't included as an exhibit in the testimony, no.
- 14 Q. Or discussed in the body of the testimony?
- 15 A. Not to my recollection, no.
- Q. Now, in addition to being just and
 reasonable and in the public interest, rates
 for sales to these small power producers by
 utilities cannot be discriminatory in
 comparison to rates charged to customers
 without self-generation unless such
- 23 A. Right.

differential treatment is justified, right?

- Q. And do you understand that to mean justification must have empirical support?
- 3 | A. Yes.
- Q. Do you understand that to be
 nondiscriminatory, the rate for backup
 service must be based on the probability
 that the self-generating customer will or
 will not contribute to the need for and use
 of backup capacity?
- 10 A. What section is that cited in, please?
- Q. I believe that's cited in your testimony -your reply testimony at page 6, lines 4 to
- 13 6.
- 14 A. Okay. You said page 6?
- 15 | O. Yes, ma'am. Lines 4 to 6.
- 16 | A. Yes.
- Q. And it -- so it -- is that where the diversity considerations we've been talking about come into play?
- 20 A. Give me a second to read it again.
- 21 0. Sure.
- 22 A. Okay. I would say again in our analysis
 23 what we said was exactly as I explained it

- earlier, I'm assuming that at any given

 point in time, I'm not going to have to

 serve 100 percent of the backup service

 needs required of each and every customer

 all at the same time.
 - Q. And do you consider that a form of probability analysis?
- 8 A. I guess so.

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- 9 Q. So just a few questions about the
 10 determination -- what I'll call the
 11 diversity credit of 35 percent that you
 12 extend to the solar customer. You've noted
 13 that determination was based on several
 14 factors, such as customer diversity?
- 15 A. Correct.
 - Q. And also things like annual utilization of the onsite generation and its expected output during system peak?
- 19 A. Yes.
- Q. And there were some others, but am I correct that in each instance the company relied on no numerical representation of those factors?

- A. I think what we stated was that there wasn't
 a single calculation or mathematical
 equation that produced a 65 percent number.
 We utilize multiple pieces of information to
 evaluate, to use the company's informed
 judgment, to determine that was the
 appropriate amount of capacity to hold
 available.
 - Q. Okay. But you recall I asked you about this in your deposition, and I think in each instance you said judgment, not a numerical representation.
 - A. Can you say that one more time.
 - Q. At your deposition when I asked you about this, you said the company relied on its own judgment but not any numerical representation of any of those factors that were discussed.
 - A. Right. I don't have a calculation to point me to -- a single calculation to point me to 65 percent. I do have information available to me that I evaluated and consulted that actually informed my judgment.

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- Q. Okay. But just to be clear, we were talking about four different factors, and for each of those factors, I believe your prior testimony was that there was no numerical representation for any of those factors?
- A. I would have to look at that testimony. I
 don't recall exactly that. I did have
 pieces of information available to me that I
 did consult. Annual utilization of the
 generator otherwise known as capacity factor
 is actually something that we did produce
 information about.
- Q. Okay. The company relied on no data regarding the frequency of unscheduled outages of customer-sided solar, did it?
 - A. The frequency of outages? I believe we represented information in the modeled solar load shape that actually looked at the instances in where outages did occur.
- 20 Q. But unscheduled outages is the question.
- 21 A. I think your definition of unscheduled 22 outage and mine may differ.
- 23 Q. What's yours?

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- A. Again, I said it's anytime the generator should be operating and it's not --
- 3 Q. Okay. So --
- 4 A. -- and I'm providing backup power service to them.
- Q. And the data you looked at had those instances built into it?
- 8 A. I would say a single solar load shape that was modeled had it for a single customer.
- Q. Both the -- what you might call the normal variability and also the unexpected outage, both of those things?
- 13 A. The normal variable at a given point in time.
- Q. I mean, do you make a distinction between normal variability and an unscheduled outage?
- A. I would say an outage of the generator,
 anytime it is not operating when it should
 be, is an unscheduled outage.
- Q. Now, regarding the company's -- I'll call it the 65 percent determination for shorthand, would you agree that that determination

- figures prominently into the company's calculation of the \$5.41 charge?
- 3 A. Can you say that one more time.
- Q. That your determination of 65 percent being the appropriate backup need, that figures prominently into your -- to the number you've ultimately come up with to assess against?
 - A. It was a piece of information that was used in the calculation to provide backup power service.
- Q. But if the number was 5 percent, the charge would be correspondingly lower, correct?
 - A. And if it was a hundred percent, it would be correspondingly higher.
- 16 | Q. That's all my math skills right there.

Now, PURPA, the statute we've been talking about, that draws a distinction between supplementary and backup power,

20 right?

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- 21 A. Yes.
- 22 Q. And so does Rate Rider RGB?
- 23 A. Yes, it does.

- Q. Under PURPA, supplementary power is electric energy or capacity used by a facility in addition to that which it ordinarily generates. Is that your basic understanding?
 - A. Yes. I would have to consult the exact language from the rate, but that sounds about right.
 - Q. Whereas, backup power, we've talked about unscheduled outages, that would replace, not be in addition to, but it would replace what would ordinarily be generated were it not for the unscheduled outage?
 - A. Yes.

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- Q. And when you talk about supplementary power, an interconnected customer with solar, assuming they don't have storage, is unlikely to be able to meet all of their electricity needs with self-generation.

 Would you agree with that?
- 21 A. Can you say that one more time.
- Q. Talking about supplementary power, an interconnected solar, assuming they don't

- 1 have storage, is unlikely to be able to meet
- 2 all of their electric needs with self-
- 3 generation?
- 4 A. Are you talking about a point in time, or
- 5 are you talking about in totality?
- 6 Q. Well, let's say a residential customer with
- 7 four kilowatts.
- 8 A. Yes.
- 9 Q. They're still going to need you if they're
- 10 interconnected, right?
- 11 A. Yes, they're going to need me for
- 12 supplementary service as well as backup.
- Q. And so for one thing, the customer source is
- unlikely to ever produce at its full
- nameplate capacity. Would you agree with
- 16 that?
- 17 A. I don't disagree with that.
- 18 O. And won't produce as much as or even at all
- when there's cloud cover?
- 20 A. I would say that's when they need me to
- 21 provide backup power service to them.
- 22 Q. Not supplementary power?
- 23 A. No. If the generator is supposed to be

- producing during daylight hours and it is not producing, I'm providing backup power service to that generator.
 - Q. And a solar system won't produce at night obviously?
- A. No, it does not produce at night. And I've taken that into consideration in my analysis.
 - Q. So in those instances to the extent of their unmet power needs, the company (sic) purchases electricity from the company?
- 12 A. I'm sorry. Say that again.
- 13 Q. In those instances when the solar system

 14 isn't producing to the extent of their unmet

 15 power needs, the company (sic) purchases

 16 electricity from the company?
- 17 A. The company purchases --
- 18 Q. The customer purchases electricity from the company.
- 20 A. The customer -- if the generator is not
 21 producing, the customer -- and they're
 22 interconnected to the system and the
 23 company's providing firm backup power

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- service, that customer is consuming usage
 from the company no matter when that occurs.
- 3 | 0. At the full retail rate?
- 4 A. At the full retail rate, at the supplementary power rate. Correct.
- Q. The supplementary rate is the same as the rate that would apply to any rate FD customer, right? It's that volumetric energy charge?
- 10 A. It is.

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- 11 Q. And that's designed to recover both fixed and variable cost as we've discussed?
- 13 A. Yes, it is. It's not designed to recover the cost of backup.
 - Q. And really even for unscheduled outages when the customer system is unexpectedly down and they as a result purchase power from the company, they're paying to the extent of their usage both variable and fixed costs, correct?
- 21 A. Say that one more time.
- Q. They're paying to the extent of their usage both variable and fixed costs under rate RFD

- when there's an unscheduled outage and they 1 2. draw from the grid?
- 3 Α. Rate FD, yes. But keep in mind, that 4 customer is a partial requirements customer 5 and not a full requirements customer.
- 6 Now, for supplementary power, Rate Rider RGB Q. assesses no capacity reservation charge, 7 8 correct?
- 9 Α. Say that one more time.
- 10 For supplemental power, Rate Rider RGB Ο. 11 assesses no capacity reservation charge?
- 12 Α. For supplemental power?
- 13 Right. Ο.
- 14 It's a partial requirements customer. Α. 15

The customer by definition has installed

- interconnected onsite generation and has 16
- 17 modified their supplementary power rate to
- 18 include the cost of backup, which is served
- 19 under the capacity reservation charge.
- 20 Okay. I'll move on. So the Ο. Right. 2.1 capacity reservation charge is just for 22 backup power, not supplemental power, right?
- 23 The capacity reservation charge recovers the Α.

- cost of providing backup power service to
 those customers when they need it.
 - Q. In distinguishing between what's supplementary and backup power, would you agree that the key is determining what a solar generation system ordinarily generates?
- 8 A. Say that one more time.

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- Q. Let me ask you this. The company would not consider it appropriate to assess the backup charge for supplementary power needs, correct?
- A. I will tell you that the customer has modified their consumption from the company such that they are a partial requirements customer. They have asked the company to provide an additional service to that customer. They are paying for the supplemental service during times when the generator is not producing. Yes, they're paying for that both for the supplemental needs and for the backup power needs. The capacity reservation charge actually

recovers any additional cost above and 1 2. beyond what's recovered through the 3 supplementary power rate to pay for the cost 4 of backup power. I think we acknowledged in 5 the testimony the reason why we want to look 6 at the cost that the customer pays under the supplementary power rate is so we do not 8 over recover cost associated with providing 9 backup.

- Q. And we'll get to that in a moment. In developing the capacity reservation charge, you relied on the PB Watts tool as we talked about. That tool has built into it certain assumptions about weather variances and invertor efficiency, correct?
- A. Yes, it does.

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- Q. And the company then weighted the load shape based on the three weather zones that represent solar production across the Alabama Power service territory?
- A. I would say we represented all of the weather across Alabama in a single load shape.

- Q. So does the company consider that resulting profile indicative of what a solar installation would ordinarily generate in its service territory over the course of a year?
- A. I would say it would be an average across the state for one single customer.
- Q. Well, so, then, how did you determine what a solar system ordinarily generates?
- 10 A. How did I determine what a solar system
 11 ordinarily generates?
- 12 Q. Right.
- 13 A. Based on the data produced from N Rail PB
 14 Watts tool.
- Q. And then you weighted it across the weather zones?
- 17 A. To represent an average customer -- single customer -- in our service territory.
- Q. So is that consistent with what you would expect a solar system for that representative customer to ordinarily generate over the course of a year?
- 23 A. For a single customer.

- Q. But that was the representative customer that you used to develop the charge, correct?
- 4 A. That's correct.
 - Q. Now, in your reply testimony, you say backup power covers all reductions and onsite generation, including unscheduled outages associated with the absence of sunlight. Do you recall that?
- 10 A. Yes.

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- Q. And I believe you said this before. So you would consider backup power as needed for reductions in output due to cloud cover?
 - A. Yes. If the solar system should be producing and instantaneously has a cloud cover come over it, I am absolutely required to stand ready to serve the needs of that customer whenever that happens.
 - Q. But hasn't the weather information you already took into account to develop your solar production profile -- doesn't that weather data already include assumptions about the cloud cover one might ordinarily

- 1 expect in a year?
- A. As I mentioned for a single customer, it

 does, but what it doesn't look at is

 multiple customers across my territory

 generating at the same time. That profile

 does not represent that.
- Q. Now, you -- in your reply testimony, you
 provided an EPRI study of distributed solar

 PV performance in Alabama, correct?
- 10 A. Yes.
- 11 Q. And that's a -- you have that with you?
- 12 | A. I do.
- Q. That's a 2015 report, but it's based on data collected from 2011 through 2013?
- 15 A. Yes.

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- Q. And to be fair, while you submitted this
 report with your reply testimony, you did
 not rely on it when you initially made your
 determination for the charge, correct?
 - A. That's correct. I did not have this information -- I didn't have this information available to me or I wasn't aware of it at the time I developed the

- capacity reservation charge, but I would say
 based on the information in this study, it
 absolutely validates the company's
- conclusions that 65 percent capacity is

 sufficient to meet the backup power needs of
- all of our customers across our territory.

 Variability is one thing that comes into

 play when you look at that, as I mentioned

9 earlier.

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- Q. Right. So you say in your reply testimony the report demonstrates that solar resources in Alabama are often unavailable and can be expected to be unavailable in multiple regions simultaneously?
- 15 A. That's correct.
- 16 Q. Can I get you to turn to page 2-2 of that report.
- 18 A. Okay.
- Q. And do you see the language in the final
 paragraph, however, the calendar is clear
 that across the two locations daily profiles
 can vary quite a bit?
- 23 A. Yes.

- Q. And it goes on to say, for example, on
 August 27th, Tuscaloosa has a mostly clear
 day while Mobile experiences significant
 cloud cover in the afternoon?
- 5 A. Correct.
 - Q. Now, August is a summer month, a time when it's hot and demand on the system can be quite high?
- 9 A. Yes.

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- Q. So isn't EPRI saying here on such a summer day even if it's cloudy in Mobile, it could be perfectly clear in Tuscaloosa?
 - A. I think what the study is saying is that there is variability across the entirety of our territory on any given day, especially in the summer.
 - Q. So would you agree on that August 27th date that's discussed here, the company wouldn't be required to maintain full backup for a solar system in Tuscaloosa and in Mobile?
- A. And I don't think I'm -- I think that is taken into account with the 65 percent capacity that we used in our calculation.

- 1 That's why it wasn't a hundred percent.
- Q. Okay. Now, I want to get back to the point
 you just made about the company didn't want
 to overcharge customers for supplementary
 service --
- 6 A. Yes.

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- Q. -- and backup. So after determining that the fixed capacity cost was 65 percent of that \$129 per kilowatt difference between the solar and nonsolar customer, you did another calculation, correct?
- 12 A. Say that one more time.
- Q. So you've applied that 65 percent -- or the
 35 percent credit if we want to call it
 that -- then you did a -- as I understand
 it, you did another calculation, and your
 purpose there was to make sure that the
 customer wasn't overcharged?
 - A. That's correct.
- Q. In here what you focused on was the difference in expected annual cost recovery between the two profiles; is that right?
- 23 A. To the best of my recollection, yes.

- Q. And you also switched from a one kilowatt solar profile to a 4.3 KW, which you said represents the average size of onsite generation for interconnected customers?
 - A. That's correct. I used a one kilowatt system to determine the cost per kilowatt to provide backup power service to customers with interconnected onsite generation, and then I needed to represent what actual customers were doing on my system. Correct.
 - Q. Not actual customers, the representative profile you developed?
 - A. The representative profile based on actual customer usage.
 - Q. Now, you determined the representative solar customer purchases some 5,358 kilowatt hours fewer annually from the company than the customer without solar; is that right?
 - A. That's correct. They've modified their profile. They are consuming less from me and generating it themselves.
- Q. Now, in part of the errata filing, this results in the cost recovery difference of

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- 1 \$609?
- 2 A. Yes.

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- Q. And to this amount, you applied the cost of service savings identified earlier in your testimony and discussed this morning, namely, the variable energy cost reduction and the fixed capacity cost reduction associated with the 35 percent credit?
- 9 A. Say that one more time.
 - Q. Okay. To this figure of \$609 difference in cost recovery, you applied -- and I can refer you to page 18 of your initial written direct -- you applied cost of service savings identified earlier in your testimony, namely, the variable energy reduction -- energy cost reduction and the fixed capacity cost reduction associated with the 35 percent credit?
 - A. Yes, the acknowledgment that I'm not holding
 100 hundred percent capacity available.

 Again, I'm utilizing 65 percent, so I'm
 giving them the credit of not holding
 100 percent capacity available to serve

- 1 them.
- Q. Right. And your testimony is that both of
- 3 those things -- the variable energy cost
- 4 reduction and the fixed capacity reduction,
- 5 you call them both cost of service savings
- in your testimony, correct?
- 7 A. Can you point me to that page again, please.
- 8 Q. Page 18 of your initial written direct at
- 9 line 19.
- 10 A. Page 18. What was the line again?
- 11 Q. 19.
- 12 | A. Of my reply testimony?
- 13 | Q. No, ma'am. The initial testimony.
- 14 | A. Initial testimony. Yes, I think I
- acknowledge a portion of the fixed cost
- savings, again, because I'm not holding
- 17 | 100 percent capacity available to serve all
- these customers all at the same time.
- 19 Q. Okay. So taking the two reductions
- 20 together, you determined that the cost to
- 21 serve this partial requirements customer was
- reduced by \$330 annually?
- 23 A. Yes. That's correct.

- Q. In other words, the representative customer with solar is \$330 less costly to serve than the customer without solar?
- 4 A. Based on this analysis, yes.
- Q. But this still left the company short \$279,
 and that's the difference between the 609 we
 were just talking about that you
 theoretically would have recovered from this
 customer had they not invested in solar and
 the \$330 cost of service reductions
 resulting from the solar?
 - A. Right.

- Q. And then you divided that figure by the size of the system and 12 months of the year, which gives you the capacity reservation charge?
- 17 A. That's correct.
- Q. So how did this help you distinguish between supplementary and backup service so as to avoid overcharging the customer?
- A. So if you'll recall from the analysis, I

 calculated the cost recovery for a customer

 without solar and a cost recovery with

I have to stand ready to serve that 1 2. I think as we identified earlier, customer. 3 I don't avoid any of the fixed cost to serve 4 that customer. I acknowledge the fact, as 5 we discussed earlier with the example, that 6 it's not appropriate for me to hold 100 percent capacity available for each and 8 every customer all at the same time. And so 9 I provide that information. I avoid the 10 variable cost associated with that because 11 I'm not burning fuel to serve those customers, and I acknowledge the fact that 12 13 I'm not holding 100 percent of the backup power needs to serve all of those customers 14 15 all at the same time.

- Q. Which is more expensive to the company, to hold 100 percent capacity in reserve or 65 percent?
- A. It's more expensive to hold 100 percent available to serve the customers.
- Q. Now -- so you -- I suppose we could agree that the -- there's 10,127 kilowatt hours billed to the customer with solar. Could we

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- call that the supplemental service?
- 2 A. No. There's backup in there as well.
- 3 Q. I'm just asking about supplemental service.
- 4 | So that would be --
- A. Right. But in order for me to answer that
 question, I would have to say that no backup
 power service was needed at all at any time
 when that solar panel was producing.
- 9 Q. I'm not asking about backup service at all at this point.
- 11 A. Right.
- Q. Would you agree that the 10,127 that the
 customer still purchased from the company,
 that that's what they purchased net of their
 system's production, correct?
- 16 A. I would say that's what they purchased from
 17 the company net of the system production.
 18 Correct.
- Q. So would that be supplemental service, those billings?
- 21 A. I would say they're billed under the
 22 supplementary service rate, but to the
 23 extent those kilowatt hours were consumed

- because of an outage, backup power could be considered in that as well.
 - Q. So, then, how do you know you're not overcharging the customer for --
 - A. Because I'm taking that into account when I calculate what they pay for supplemental service.
 - Q. Now, the resulting net unrecovered cost of \$279, that's the cost of providing backup service, correct?
- 11 A. For that representative customer. Correct.
 - Q. Does that figure tell you anything about how often the customer's system experiences an unscheduled outage?
 - A. Again, that's not what they're paying for.

 They're paying for me to hold capacity

 available to serve them whenever they need

 it, whether that's due to an unscheduled

 outage because of damage to the panel,

 whether it's due to cloud cover because it's

 not a sunny day when it's supposed to be

 sunny, that's what that is recovering the

 cost for, to provide that service to those

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- customers who have required it from the utility.
 - Q. Okay. And I understand your position. I'm just trying to establish the number doesn't have anything to do with how frequently the customer's system experiences an unscheduled outage.
 - A. Because it's designed to recover the cost to stand ready to serve them whenever that might be.
 - Q. The company does not contend that it has a right to any particular level of usage and associated billings from a customer, does it?
- 15 A. Say that one more time.
- 16 Q. The company does not contend that it has a
 17 right to any particular level of usage and
 18 associated billings from a customer,
- 19 correct, any customer?
- 20 A. A right to?
- 21 Q. Correct.

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- 22 A. I'm not exactly sure what you're asking.
- Q. Well, suppose a residential customer without

- solar went from buying 15,000 kilowatt hours
 a year to 10,000 because their kids left for
 college, the company couldn't send the
 customer a bill for the difference, could
 it?
 - A. I would say those are two totally

 different -- that's -- that's -- no, they -
 we couldn't recover costs of something that

 we didn't incur.
- Q. And when the college kids come home for the summer and home usage shoots back up, the company has to provide that power but it wouldn't assess a backup charge for having held that capacity in reserve in the interim, correct?
 - A. Right. That's a full requirements customer.

 The company is required to serve 100 percent of that customer's needs. Again, they're a full requirements customer. They are not a partial requirements customer.
 - Q. So let's look at the example you give in your reply testimony at pages 9 and 10. And I'm looking to the bottom of page 9, line 16

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- and 17, and going on to the next page. So
 there you're talking about a full
 requirements customer with a peak demand of
 ten kilowatts?
- 5 A. Yes.
- Q. And you say Alabama Power must be prepared to meet that ten kilowatts at any time, including during system peak. You see that?
- 9 A. Yes.
- Q. You go on to say that were that same
 customer to install five kilowatts of solar,
 the company must still be prepared to meet
 the original full capacity requirement of
 ten KW?
- 15 A. That's correct.
- Q. But we've established that under PURPA,

 Alabama gives that customer a 35 percent

 credit, and that means the effective backup

 requirement for the solar installation is

 not five KW, but 65 percent of that,

 correct?
 - A. No. I'm actually required to stand ready to serve 100 percent output. As I described

- earlier in my example, the 65 percent 1 2. acknowledges that over the entirety of the 3 group of customers that have installed 4 onsite generation, I'm not holding 5 100 percent for each and every one of those 6 all at the same time to serve them. But for a single individual customer, absolutely I'm 8 required to serve 100 percent of their needs 9 at any given time. 10 But you can't charge them for the five 0.
 - Q. But you can't charge them for the five kilowatts of backup, you can only charge them for 65 percent or 3.25 kilowatts?
 - A. Correct. I have acknowledged the fact that

 I'm not holding 100 percent available --
- 15 Q. Okay.

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- 16 A. -- to serve them.
- THE COURT: If you'll back away

 just a little bit from the

 microphone. I think we're getting

 some feedback.
- 21 THE WITNESS: Okay.
- THE COURT: You're good. It's
- just there's a little bit of --

1 THE WITNESS: Okay. 2. THE COURT: A little more 3 distance will help. 4 Thank you. 5 So what you feel is legitimate for that Q. 6 customer is to charge not for five kilowatts but for 3.25 in this example, 65 percent of five kilowatts? 8 9 Α. Say that one more time. Can you repeat that 10 one more time. Yes, ma'am. The customer we were just 11 Q. talking about where they installed a five KW 12 13 system, insofar as what the company feels is 14 legitimate to bill that customer for, it's 15 65 percent of five, not the full five? 16 Α. I'm recovering the cost to provide backup 17 cost to that customer. To the extent that 18 I've got multiple customers that have the 19 ability to use that generation at the same 2.0 time and rely on my customer 2.1 diversification, assuming I don't have to 22 serve 100 percent of the needs of every

single customer all at the same time, yes,

- 1 that's what the 65 percent represents.
- Q. And it's cheaper for the company to hold
- 3 3.2 KW in reserve than five KW?
- 4 A. Yes, it would be. I think I acknowledged that earlier.
- Q. So that customer, that ten KW demand customer having adopted solar, is less costly to serve?
- 9 A. And we acknowledge that in our calculation.
- 10 Q. Just a few final questions, Ms. Dean.
- The capacity reservation charge does

 not vary with the level or pattern of the
- customer usage, correct?
- 14 A. The capacity reservation charge?
- Q. Does not vary with the level or pattern of the customer's usage?
- 17 A. No. I'm standing ready to serve that

 18 customer whenever they need it.
- Q. The charge is not impacted by the extent to which the customer reduces or contributes to
- 21 system demand?
- 22 A. I'm holding capacity available to serve 23 those customers. That is what the charge is

- 1 recovering cost for.
- Q. I understand. But to answer my question,

 it's not impacted by the extent to which the

 customer reduces or contributes to system

 demand?
- A. I would say we acknowledge that in the 65 percent.
 - Q. So the question is -- the answer is, no, the charge is not impacted by the extent to which the customer reduces or contributes to system demand?
 - A. I think we actually did take that into account in the 65 percent versus the hundred.
 - Q. So the effect of this charge is that two customers each having five kilowatt systems will pay the same charge even if one is a net consumer during system peak and the other is a net producer or even an exporter during the system peak; is that true?
- 21 A. Are you talking about two customers with interconnected generation?
- 23 Q. Yes. Same size system, five KW.

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- 1 A. That they will pay the same thing?
- 2 0. Yes.
- 3 A. It depends on how their system produces. I
- 4 can't say that two solar facilities produce
- 5 the exact same thing at the same time.
- 6 Q. That's not my question. They will both pay
- 7 the same charge even if their usage patterns
- 8 are totally different?
- 9 A. Are you talking about the capacity
- 10 reservation charge?
- 11 Q. Yes, ma'am.
- 12 A. They will pay the charge based on the
- installed capacity that they have
- interconnected to the company's system and
- asked the company to back up.
- 16 Q. And the capacity reservation charge has
- 17 nothing to do with whether those actual
- customers have usage patterns within the
- normal variation for the -- of usage for the
- 20 rate FD class as a whole?
- 21 A. Say that one more time. I'm not sure what
- 22 you're asking me.
- 23 Q. The charge has nothing to do with whether

- the actual customer have usage patterns
 within the normal variation of usage for the
 rate FD class as a whole?
 - A. I don't think a customer that requires backup power service has the same usage pattern. They're a partial requirements customer. They do not have the same usage pattern.

THE COURT: Speaking of backing up, if you'll slide the microphone forward just a little bit.

THE WITNESS: Sorry. Is that better?

- Q. Do you know whether the actual customer subject to the charge -- do you know whether their net usage patterns are -- fall within the average for the rate FD class as a whole or higher than average, lower than average?

 Do you know?
- A. I don't know that. But I can tell you they are a partial requirements customer and they require backup power service from the company.

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		Page 09
1	MR. EBERSBACH: Your Honor,	
2	those are all my questions.	
3	Thank you.	
4	THE COURT: Other intervenors?	
5	Mr. Tait?	
6	MR. TAIT: I do have a few	
7	questions.	
8	MR. GROVER: Your Honor, can I	
9	just get a clarification? I don't	
10	mean to, like, interrogate Mr. Tait.	
11	But I feel like the rules of practice	
12	for a corporation or a corporate body	
13	to inquire or interrogate the	
14	witness, they need to be an officer	
15	or a full-time employee of the entity	
16	on whose behalf they're inquiring.	
17	THE COURT: We can get	
18	clarification on that. As I	
19	understand it, Mr. Tait is the COO of	
20	the association.	
21	MR. TAIT: That is correct.	
22	MR. GROVER: Okay. So you are a	
23	a full-time employee?	

1	MR. TAIT:	Yes.	
2	THE COURT:	That's	my
3	understanding.	If you	wi

understanding. If you will confirm

4 that.

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5 MR. TAIT: That is correct.

> MR. GROVER: Okay. Very good.

Please.

CROSS-EXAMINATION

BY MR. TAIT:

All right. Very good. Thank you.

Ms. Dean, we talked a little bit about -- I'm going to refer probably to some of the questions, and so stop me if anything is not clear from referring to those questions. But we talked a little bit about supplementary power and backup power. of my -- do you believe that the average Alabamian that is receiving service under these rate schedules that you have understands the distinction between supplementary and backup power, or like in your professional judgment would you say that most people understand the distinction

- between supplementary and backup?
- 2. I would say that those customers that choose Α. 3 to install generation should understand that 4 the operation of a generator is not a simple 5 It's not easily understood. 6 why the utility does it. And so to the extent that customers choose to do that, I 8 would say the operation of a generator is 9 much more complicated than the rate that we have set forth to recover the cost of backup 10 11 power service.
- Q. Would you say that you conducted -- that the company regularly conducts cost of service rate making -- conducts cost of service studies in order to establish its rates?
 - A. Yes, we do. In fact, we did so in this case.
 - Q. Okay. Do you believe that cost of service rate making or cost of service studies should include all known benefits and all known costs?
 - A. I believe what we represented here was the cost of service to provide backup power

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service to those customers. To the extent 1 2. that you are talking about benefits from the 3 actual production of the facility put back 4 on my system, as I mentioned before, that 5 doesn't have anything to do with the cost of providing backup power service to these 6 customers that have requested that service 8 from the company.

- Q. But just to be clear, a cost of service -in your professional judgment when you do a
 cost of service study for anything, whether
 it be in this particular case or not, you
 take into account all of the known
 benefits -- costs and benefits when you're
 looking at establishing a particular rate,
 say, for your schools rate or for a small
 industrial provider? You do all known costs
 and benefits to those cases, correct?
- A. I evaluate the cost of my business against those who have caused that cost to happen.
- Q. Okay. You mentioned earlier that in response to a question from -- about Georgia

 Power and the rate rider that was developed

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- by -- sorry -- not the rate rider but the
 framework that was developed by Southern

 Company, I'm just wondering -- you

 mentioned, if I understood this right, that
 that was not taken into consideration in
 this particular case; is that correct?
 - A. No. And it appropriately shouldn't be. I'm developing the cost to provide backup power service under this rate rider. As I mentioned before, if what you're talking about is the actual benefit from the production of that facility put back on my system, that doesn't have anything to do with providing backup power service. That is a service that I'm providing that these customers have asked me to provide.
 - Q. Did you maybe not take that into account but consult with colleagues, especially in the Southern Company family, that may have gone through similar types of work that you were undertaking in their states?
 - A. Again, I think I'm charged with recovering the cost of providing backup power service

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under this rate rider that occurs in the state of Alabama under the jurisdiction of this Commission.

Q. Okay. Just a few more questions.

So you mentioned earlier that you had approximately, not an exact number here, but approximately around 650 kilowatts of installed -- I don't know if that was solar or self-generation, you know, in total.

Does the company also track information regarding, say, energy efficiency programs that it operates or natural energy efficiency that may occur through, say, things like codes and standards?

A. So I'll clarify when we're talking about the 600 kilowatts that you talked about, that only applied to the part B rates. There is a significant amount of generation, again, as I stated before, that's subject to the part A rates. So what I'm talking about here today is the cost of providing backup power to those customers that have requested that from me.

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- Q. Okay. Very good. Thank you for that clarification. But do you also -- does the company also track information regarding its energy efficiency programs, how much energy it's able to save or avoid generation for through its programs, or does it also track information regarding, say, codes and standards that might happen from, say, making HVACs more efficient over time, how that might impact the company as well?
 - A. I'm not sure if we do or not. I'm sure we do at some point or some level, and, yes, customers have the option to install efficiency measures if they so see fit. I will also state that those customers remain full requirements customers and do not require backup service power from me. This is an entirely separate service that I'm providing, and there's a cost to that.
 - Q. You mentioned earlier that if someone had -you were talking about a one kilowatt array
 for purposes of finding a one -- you know, a
 per kilowatt hour charge or the cost there

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and it failed, you had to stand ready to 1 2. provide a hundred percent of that power. 3 if that one KW -- let's assume is a one KW 4 system failed, you had to be ready to 5 provide one kilowatt of power backup, does 6 the company also do something similar for when there is a sizeable load addition? 8 instance, say, someone purchases an electric 9 car or a second refrigerator for their 10 garage to enjoy an Alabama football game, 11 right, does the company also take those types of things into consideration in terms 12 13 of now you have new load with which you have 14 to back up?

A. I wouldn't say I'm backing that up. I would say that's a full requirements customer. As I've stated before, this is not about the full requirements customers. I have a class of customers served under the rate FD population that are different shapes and sizes. Those customers have not asked me to provide backup. These customers with interconnected onsite generation have asked

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- 1 me to provide an additional service to them.
- 2. I'm sorry. Perhaps my question was slightly Ο. 3 unclear. I was talking about in this 4 particular instance that I was giving you of 5 someone who was, say, a solar interconnected 6 customer, they have a capacity reservation charge they were already paying on that system but then add new load to that system 8 9 to put them either at or above maybe where 10 they were prior to the solar array, and so 11 I'm wondering how this rate and this process would affect that person. 12
 - A. I would say unless they add additional solar panels, they're not asking me to provide additional backup service.
- Q. Okay. So the company itself also protects itself against backup as well, right? It has a reserve margin, correct?
- 19 A. The company does have a reserve margin.
- 20 Q. Do you know what the reserve margin 21 currently is for the company?
- 22 A. I don't have that number available to me 23 right now.

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- I believe -- well, I believe it --1 Ο. 2. I'll just go -- let's just say 16 percent. 3 And I say that because 16 percent is the 4 current reliability standard as established 5 by NAERC, the North American Energy 6 Reliability Council. And so these are reliability standards, right, that the 8 company and every utility -- Alabama Power 9 is no different -- must abide by in order so 10 that, say, a power plant goes down, it still 11 has enough in reserve capacity to be able to meet the demands of its customers; is that 12 13 correct?
 - A. Yes, the company is required to hold reserves available in circumstances beyond a typical situation.
 - Q. Very good. You mentioned in some earlier statements that you have 35 percent -- you call it a diversity credit, I believe. But there was a -- you know, 65 percent that you were holding back as a portion, if you will, that you had to be ready to serve. Even though you had to serve a hundred percent of

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 - A. I would say what I mentioned was 65 percent should be sufficient for all of the generation interconnected to my system to provide backup to that.
 - So I want to drill down a little bit on the Ο. 65 percent. If you have -- you mentioned that if you're charging the 65 percent backup but are required to provide the hundred percent and you have -- you're able to give some of that credit, right, it doesn't have to be one to one because you have some generation -- you have some diversity, whether it be weather or location, the very things you made that representative profile, you're able to provide some diversity there. Would you agree, then, that because there is that diversity that allows you to provide that credit that as the diversity of the system

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- if it increases would actually allow the
 company to lower the fee and/or eliminate
 the fee if there were sufficient diversity
 to overcome it?
 - Well, you're assuming that the diversity --Α. what I'm giving credit to is the diversity of the generation. But the information that I have available to me, which represents that certain groups of customers, namely, my residential class, drive my peak. actually require me when at their peak -their noncoincident peak -- at that time the customer -- residential customer peaks, they need me and that drives my system peak. to the extent that you're suggesting that diversity, you're talking about the generation itself. I'm talking about when my customers use my product, and I know that my residential class drives my peak and I know that information is well in excess of 65 percent. So that means that when my customers need me, I have to stand ready to serve them.

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- 1 Q. So to make sure that I understand completely
- what you're saying, you're saying that
- 3 because it's a residential customer as
- 4 opposed to the -- all the customer classes
- 5 together, that's what would cause the
- 65 percent to be 65 percent as opposed to
- 7 | maybe something much lower; is that correct?
- 8 A. I'm saying it's based on the customers that
- 9 take firm backup power service from me under
- 10 the part B rates.
- 11 Q. But the 35 percent credit that you gave,
- 12 now, that was in large part driven by -- I
- 13 mean, there were other factors, but there
- were some related to diversity, right?
- 15 A. Yes.
- 16 Q. And so can you explain to me all the
- 17 diversity factors that were considered
- 18 there?
- 19 A. All of the diversity --
- 20 | O. Yeah. Like what adds to diversity?
- 21 A. Are you talking about to --
- 22 Q. For the 35 percent.
- 23 A. -- to provide 65 percent backup?

- Q. Yes, for the 35 percent credit that is applied, some of that at least is related to diversity.
- Α. That's a piece of information. I mentioned earlier I relied on multiple pieces of information, one of those was the actual capacity factor of interconnected solar generators. We know that number is somewhere around 15 to 20 percent. basically means the solar generators produce -- it's their annual solar -depending on the time period, it's their production over the maximum amount available, and on an annual basis, that number is somewhere around 15 to 20 percent. That is a piece of information. reflected that we looked at how much these generators produce at the time the system That is a piece of information that peaks. we had available to us. In addition to that, I look at how my customers use my product across the entirety of my year but at -- specifically at the peak. That is an

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- important number to me, and I know my
 residential class needs me to provide
 capacity to them at the time I peak. Their
 coincidence with me is well in excess of
 formula in the content of the coincidence with me is well in excess of
 - Q. If I understand what you just said

 correctly -- and please correct me if I'm

 wrong -- that because the residential is

 well in excess of 65, are you arguing that

 you could actually raise that, it should be
 higher?
 - A. No. I believe all of that -- those pieces of information informed my judgment for me to say 65 percent is fair and appropriate for me to hold available capacity to serve these customers.
 - Q. All right. I think I just have one final question.

Earlier, we talked a little bit about the differences between potential solar customers -- customers who have onsite solar generation and those who do not. In the sense of comparing them and their overall

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- load profiles, you talked a little bit about
 how they -- you compared before and after,
 for instance. Has the company conducted any
 analysis of a representative load of solar
 customer after they've gone solar?
 - A. Are you -- I'm not sure what you mean.
 - Q. What I'm getting at here is after -- say you have 190-some-odd -- I can't remember the exact number now -- the 190-something people who are connected to you under this particular rate that have onsite generation, that you believe the vast majority are solar, correct?
- 14 A. Correct.

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- Q. Okay. And so in those cases, I'm wondering have you looked at the characteristics of that small group of people and how they compare to the overall residential rate class?
- A. I think we talked about that. I have net energy consumption. If all I'm looking at is what those customers have produced or -- or what they're imposing on my system today,

that's their net consumption. That does not reflect the amount of capacity that I have to hold available to serve them at any given point in time. Again, go back to my analogy of the -- in the testimony that talked about ten kilowatts and they installed five kilowatts of solar, if I'm only looking at the net profile, I haven't taken into consideration the fact that at any given point in time, I have to stand ready to serve ten kilowatts.

MR. TAIT: No further questions.

THE COURT: Any questions from

the attorney general?

MS. MARTIN: I have just two.

CROSS-EXAMINATION

BY MS. MARTIN:

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Q. Ms. Dean, I'm Olivia Martin. I'm here on behalf of the attorney general, and we represent rate payers as a whole, so we represent not a specific class but all of the rate payers. And as I understand your testimony, the rate was developed so that

- rate payers as a whole are not subsidizing
 partial requirements customers or solar
 customers?
 - A. That is correct. And that is the intent of this charge.
- Q. So do you anticipate that the inputs and
 data that you used to develop Rate RGB would
 change as there was more solar penetration
 in the market or not?
- 10 A. Can you ask that one more time.
 - Q. Well, as there's more solar penetration in the market, you would have more data, more information, and perhaps your assumptions might change. So at that point, would Rate RGB be modified or changed?
 - A. Well, let me clarify. I actually don't have metered data associated with the production of the onsite facilities. I don't have that information available to me. I'm not authorized to collect that data today, so I don't have that. What I did do was actually use model data to represent solar systems on -- in the state of Alabama. So, no,

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- 1 based on additional information,
- 2 penetration, I don't expect that information
- 3 to be materially different than what I've
- 4 assumed here.
- 5 Q. So if we had an -- instead of having less
- 6 than 200 solar customers, if we had 5,000,
- you think this data would be good?
- 8 A. I think based on the cost to serve these
- 9 customers in this time frame, I do believe
- 10 this data to be sufficient.
- 11 Q. Is the company required to charge cost-based
- 12 rates?
- 13 \mid A. Yes, we are.
- 14 | Q. And so how often do you update your rates?
- 15 A. I'm sorry?
- 16 Q. How often do you change your rates based on
- 17 cost -- how often do you do cost of service
- 18 studies?
- 19 A. Our rates are evaluated annually under the
- 20 RSE mechanism to determine the cost to serve
- 21 customers.
- 22 Q. Thank you.
- MS. MARTIN: I have no further

27th where it seems to indicate some changes

- or differences in variability in Tuscaloosa 1 2. and Mobile. Are you oriented as to that? 3 I'm sorry. I got ahead of you.
 - Α. Yes, I am.

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- What I just wanted to point out, look Q. at, if you will, there's a chart on 2-2, depicts what appears to be monthly production for August 2012 in the city of 8 Tuscaloosa. How would you describe the output levels for August 30th?
 - I would say it's not producing anything. Α.
- 12 Q. And then turn the page, and for the city of 13 Mobile, August 2012, how would you describe the production levels for the city of 14 15 Mobile?
- 16 Α. It also is not producing anything.
- 17 Thank you. Ο.
- 18 THE COURT: Mr. Grover, if 19 you'll speak up. We're having a 20 little bit of difficulty.
- MR. GROVER: 2.1 I'm sorry, Your 22 This is what happens when I Honor. 23 sit down. I'm a diaphragm speaker.

		iage iii
1		I don't want to stand and shout.
2		COMMISSIONER CAVANAUGH: Can you
3		ask that question one more time and
4		let her answer it?
5		MR. GROVER: Absolutely,
6		Commissioner.
7	Q.	My question was comparing the output levels
8		for August 30, 2012, for the cities of
9		Tuscaloosa and Mobile on pages 2-2 and 2-3
10		of the EPRI study, which is an exhibit to
11		your reply testimony, would you deem those
12		to be consistent with one another.
13	A.	I would say they both are requiring full
14		backup at that time at the same time.
15	Q.	Thank you, Ms. Dean.
16		MR. GROVER: That's all I have,
17		Judge.
18		THE COURT: All right.
19		Ms. Dean, thank you for your
20		testimony. Appreciate you being
21		available today for cross-
22		examination.
23		We're about an hour and
	1	

		Page 111
1	45 minutes in. Why don't we take a	
2	very brief five-minute break before	
3	we go into presentation of the next	
4	witness.	
5	We're off the Record for a	
6	five-minute break.	
7	(Recess from 10:45 a.m. to	
8	11:08 a.m.)	
9	COMMISSIONER CAVANAUGH: Once	
10	again, I will repeat this is not our	
11	regularly scheduled monthly meeting.	
12	This is a formal hearing. For that	
13	reason, we ask you to display proper	
14	decorum, and Judge Garner will go	
15	over the rules again for this	
16	hearing, this formal hearing. It	
17	will be led by our chief	
18	administrative law judge, Judge John	
19	Garner. And just make sure your	
20	phones are still off, and I'll, once	
21	again when it's over, try to remind	
22	you to turn them back on.	
23	Judge Garner, I'll turn the	

1 meeting back over to you.

THE COURT: Thank you, Madam

President.

3 President

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Just a refresher for those who may have come in late, we do have a formal public hearing today, so we expect normal formal decorum to be observed. And we're not going to tolerate any disturbances of any kind. We have security here. We'll escort you out if you're not in compliance. There may or may not be a warning on that.

And there's no recording of this session because this is a contested public hearing and, quite honestly, if there's an appeal of this case, it goes directly to the Supreme Court, and so we're subject to the exception of -- or the exclusion of what a meeting is under open meetings. So we can go forward with enforcing that requirement, and

1	that's what we're going to do just to
2	keep everything from being disruptive
3	and distractions from transpiring.
4	So if you will all comply with those
5	rules. As there was fairly good
6	compliance with that early on, I just
7	would expect you to continue to
8	observe proper decorum as we go
9	forward.
10	So with that, I believe we
11	are ready to go back on the Record
12	officially, and we are ready for the
13	presentation of the next witness.
14	MR. JOHNSTON: Your Honor, with
15	your permission, we call Karl Rabago
16	to the stand.
17	THE COURT: All right. Have a
18	seat.
19	KARL RABAGO
20	the witness, after having first been duly
21	sworn to speak the truth, the whole truth, and
22	nothing but the truth, was examined and
23	testified as follows:

DIRECT EXAMINATION

2. BY MR. JOHNSTON:

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- 3 Mr. Rabago, please state your name and full O. 4 business address for the Record.
- 5 Α. Sure. My name is Karl Rabago, and my 6 business address is 2025 East 24th Avenue, Denver, Colorado.
- 8 Ο. And by whom are your employed?
- 9 Α. I am self-employed by Rabago Energy, LLC. 10 I'm also a part-time employee of Pace Energy 11 and Climate Center based at the Elizabeth Howell [] School of Law at Pace University 12 13 in White Plains, New York.
- 14 On whose behalf are you testifying? Ο.
- 15 I'm testifying on behalf of GASP and named Α. intervenors. 16
- Mr. Rabago, on November the 14th, 2018, did Ο. you prepare and cause to be prefiled in this docket both a confidential and public disclosure version of 54 pages of direct 2.1 testimony in question and answer format?
- 22 Yes, sir, I did. Α.
- 23 Did you also cause to be prefiled along with Q.

- 1 your testimony and exhibits marked as
 2 Exhibits KRR 1 through KRR 2?
 - A. Yes, I did.

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- Q. Do you have any changes to your previous filed direct testimony or exhibits at this time?
- A. Well, I do want to point out as I mentioned in the intro that the testimony says -- because I was living in New York -- that my home address was in White Plains. I've since moved. I now live in Denver. That's the address that I previously provided.

Second, while I -- when I prepared that testimony, I was serving as the executive director of the Pace Energy and Climate

Center. I've since moved on to be a senior advisor to the center and that went along with my move back home to Denver.

And then third, I want to note that my testimony was obviously filed so early that it did not incorporate the company's latest errata.

And then finally, I actually do have

- one line edit that I need to make in my testimony.
 - Q. Would you cite that testimony and edit you need to make?
 - A. That error appears on page 15 of my testimony at line 5. I erroneously there say the phrase, the few DG customers it currently has. What I was doing was falsely -- incorrectly saying that the stratification exercise used to DG customer data. I knew better and I should have known better. A proper substitution of correct words would be strike the few DG customers it currently has and replace with separates rate FD customer sample load profiles for the class as a whole into four groups.

And I have no other changes.

Q. Okay. And beyond that, beyond the errata that the company has just filed and the changes that you just cited, if I were to ask you the same questions that appear in your prefiled testimony at the hearing today under oath, would you answer the same?

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1	A. The same or substantially the same, yes.
2	MR. JOHNSTON: Your Honor, I
3	move to have Mr. Rabago's direct
4	prefiled testimony be entered into
5	the Record as if they were given
6	orally from the stand.
7	THE COURT: We can do that. I
8	don't know that it's really necessary
9	given the posture of this proceeding.
10	It's already in the Record. I don't
11	really think that's a necessity.
12	Normally that is what we do, but we
13	normally don't have so much back and
14	forth about prefiles.
15	MR. JOHNSTON: Understood.
16	THE COURT: Since we didn't do
17	it for the other side it's already
18	in the Record and his revisions have
19	been noted, and so that I think
20	covers it. But you're correct that
21	that's normal procedure, but I don't
22	think in this case that it's
23	necessary to do that.

- 1 BY MR. JOHNSTON:
- Q. Mr. Rabago, did you prepare a summary of your testimony?
- 4 A. Yes, I did.

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5 MR. JOHNSTON: Your Honor, with permission, I'd like to ask

Mr. Rabago to read his summary.

THE COURT: Absolutely.

A. Thank you very much. Madam Chair, members of the Commission, Your Honor, as I said before, my name is Karl Rabago. My testimony overview is as follows:

A very few of Alabama Power's small customers have made significant personal investments to purchase and install solar power generators that provide some of the electricity that those customers use for day-to-day life. Alabama Power has proposed and secured approval to charge special rates that eliminate much of the savings that those customers expect to realize from their investments.

Through its Rate Rider RGB, the company

has imposed punitive, discriminatory, and
unlawful charges on self-generation
customers. The charges were in the past
approved by this Commission on application
by the company. Since that approval, GASP
and other named intervenors have filed a
complaint with the Commission seeking an
order that the company withdraw the punitive
charges and rates in Rate Rider RGB. My
testimony addresses the many ways in which
Alabama Power Rate Rider RGB is inconsistent
with Alabama and federal law, the ways in
which the company relied on unreasonable
methods for calculating the charges it
imposes under Rate Rider RGB for backup
service and the ways in which the resulting
charges are inconsistent with established
principles of electricity rate design and
implementation.

Solar customer generators typically do not produce all the electricity they need for their homes or small businesses. For that reason, self-generators typically

interconnect to the grid in parallel. That means that the customers can use the electricity they generate when it's available and other times, such as when the sun goes down, can use electricity provided by the local franchised utility provider. The purposes of self-generation are to reduce electricity bills, to increase use of environmentally friendly generation, and to increase energy self-reliance.

Solar naturally creates a tension with a traditional monopoly utility business model because utilities make profits through sale of electricity that they seek return of and on their invest -- and on -- they generate and deliver this electricity.

Customer-installed solar cuts into the traditional utility profit-making business model by reducing sales. But solar also reduces utility costs, especially because it generates before and during summer peak demand periods when demands and costs are often highest.

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The law requires that rates, including
Rate Rider RGB, must be just and reasonable,
nondiscriminatory, and consistent with
applicable regulations. The law also
defines the obligation of the utilities in
crafting rates and tariffs that apply to
these generators. Because variable
resources like solar systems do not operate
around the clock, they regularly require
supplementary power service. That's power
service the customer needs in addition to
what the customer generator normally
produces. There's no dispute here that
solar customers pay a full retail rate for
supplemental service. They pay for each and
every kilowatt hour they draw from the grid,
and those payments fully cover the variable
and fixed costs associated with that usage.
Typically despite the reduced level of usage
resulting from their solar investments,
these customers remain well within the range
of normal usage patterns, which utilities
like Alabama Power plan for when they

1 develop their rates.

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This proceeding is not about supplemental power service. It's about backup power service. Customer generator systems like all generators are also subject to unscheduled outages. During these events, which could result from severe weather or unexpected electronic breakdowns, such as in the invertor systems that convert direct current into alternating current, the utility must provide backup power service. Utilities like Alabama Power are required to provide supplementary power service and backup power service on reasonable, nondiscriminatory terms. Alabama Power has instead secured and continues to seek Commission approval to charge customers for backup service through Rate Rider RGB through a discriminatory, unjust, and unreasonable rate calculation and design. THE COURT: Mr. Rabago, let me

I just made eye contact with

stop you a moment.

1	a violator of the recording policy
2	sitting right here on the second-to-
3	last row, all the way to end. If you
4	will escort him out, sir. Raise your
5	right hand like you just committed a
6	foul, because that's what you just
7	did.
8	UNIDENTIFIED SPEAKER: Is this
9	not
10	THE COURT: You just violated
11	protocol.
12	UNIDENTIFIED SPEAKER: Is this
13	not a public
14	THE COURT: I'm not answering
15	any questions. Just leave the
16	premises before it gets worse than it
17	already is.
18	Sorry, Mr. Rabago.
19	A. No problem. The company takes the logical
20	and unreasonable position that it must
21	always maintain backup generation for
22	customer generators and charge for this
23	permanent standby energy capacity on a

1	reservation basis. It is this always
2	available reservation of power that the
3	company bases its charge for backup power or
4	regardless of actual experience or data
5	concerning unscheduled outages at customer
6	generation facilities. Rather than measure
7	the number of times and the duration of
8	events under which customer generators
9	require or are likely to require backup
10	power service based on actual metered data
11	and experience, Alabama Power has
12	constructed a hypothetical process with only
13	the most tangential connection to real-world
14	data. Ultimately, the company's analysis
15	rests on an estimate of sales that the
16	company loses when customers generate their
17	own electricity. This lost sales
18	calculation for a hypothetical customer with
19	only a token adjustment that the company
20	says it would not make but for the explicit
21	requirement in federal regulation is the
22	foundation of Alabama Power's backup service
23	charge in Rate Rider RGB. The charges are

inappropriate, and in my view, they're unlawful because they rely on projected revenue deficiencies and not on cost to serve customers. The company's analysis shows that solar customers are less costly to serve than customers without solar. It's only when lost revenues are inserted in the calculation that the company establishes the basis for its charge. But lost revenues are not the same as cost of service.

Monopoly utilities like Alabama Power do not have a right to any particular level of billings from their customers. Customers seek to lower their bills in all sorts of ways. Solar is just one. That is their right. And the utility has no right and should have no right to claw those savings back in the form of unjustified charges.

So I'll wrap up here. The charges that Alabama Power assesses under Rate RGB are punitive, they're confiscatory, they're unjust, and they're unjustified. They directly undermine the economics of customer

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choice to invest in self-generation, in many cases cutting the expected savings in half. The effect, if not the purpose, of these charges is to deter customer-sided solar development in this company's solar territory. And in this unfortunate respect, the charge has been remarkably successful. The charges are one of the principle reasons that sun-rich Alabama trails other states in solar development and the many jobs that this nation industry is creating. I know of no other investor-owned utility that assesses a charge this punitive for backup service.

While utilities in other states
certainly have tried to do what Alabama
Power has done, those attempts have been
rejected as improper for several reasons.
This included in Georgia where Alabama
Power's sister utility, Georgia Power,
operates and which has a much higher level
of customer-sided solar generation. The
only reason -- the only reasonable remedy

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for the company is to withdraw the backup service charge provisions of Rate Rider RGB and start collecting the data needed to determine what, if any, charge is just and reasonable. The company is entitled to charge customer generators for the cost it occurs to provide service during unscheduled outages.

With solid state solar generation facilities, which have no moving parts, unscheduled outages still occur, and the frequency and impact of such outages can be calculated or at least estimated on probabilities grounded in measured experience. The company should be ordered to use legitimate experience-based data about unscheduled outages and their frequency to develop backup service charges.

Your state is blessed with great solar resources that provide free fuel for electricity generation. Taking advantage of solar can create new jobs and strengthen Alabama's economy and enhance your energy

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1	independence. Alabama is presented with and
2	should take advantage of this opportunity,
3	the regulatory support for growth and the
4	non the utility solar generation market.
5	That concludes my overview.
	-
6	MR. JOHNSTON: Your Honor,
7	Mr. Rabago is now available to answer
8	questions from the bench or for
9	cross-examination by the parties.
10	THE COURT: Thank you, sir.
11	Mr. Grover?
12	MR. GROVER: Your Honor, I think
13	we reserve just for the party for the
14	burden of ultimate production to
15	reserve any questions for Mr. Rabago
16	subject to questions from the bench,
17	the attorney general, or from staff.
18	THE COURT: So you have no
19	questions at this time?
20	MR. GROVER: Not at this time,
21	no.
22	THE COURT: Let's go to the
23	attorney general's office.

1	well, Mr. Grover?
2	MR. GROVER: Nothing further,
3	Your Honor. Thank you.
4	THE COURT: I've given some
5	thought to post-hearing briefs, which
6	I don't think we really need because
7	this evidence has been vetted at
8	several different levels. So I think
9	we've pretty well gone over the
10	testimony. What I do think might be
11	productive, however, is briefs in the
12	form of proposed order. If the
13	parties would like to do that, that
14	might be helpful. And I'll allow
15	that from each side. The deadline
16	for that would be December 20th. The
17	transcript will turn around that's
18	going to be pretty tight, but I will
19	offer that if the parties are
20	interested in lieu of a post-hearing
21	brief, post-hearing brief in the form
22	of a proposed order.
23	MR GROVER: The 20th is fine

the additional testimony that's been

1	provided today, and then a decision
2	will be rendered at the appropriate
3	time. And the decision will be
4	rendered at an open meeting of the
5	Commission, which everyone will be
6	able to attend and perhaps video, if
7	they'd like to. There's a
8	distinction. It's not intended to be
9	a joke. There is a distinction in
10	the two types of meetings. So it
11	will be an open and transparent
12	decision whenever it is rendered. It
13	will be on an agenda and noticed, and
14	you can all tend if you'd like. And
15	there obviously is a transcript that
16	as soon as it's available it will be
17	posted on the website, and you can
18	have access to that. In fact,
19	everything that's in the official
20	file outside of what transpired today
21	is already available for anyone to
22	review, and you can avail yourselves
23	of that as you so desire. So we

		Page	133
1	appreciate all the parties and all		
2	the individuals who made an effort to		
3	attend today. We appreciate your		
4	interest.		
5	And with that, the matter is		
6	taken under advisement and that will		
7	conclude the public hearing.		
8	(Proceedings and testimony		
9	concluded at 11:29 a.m.)		
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1	REPORTER'S CERTIFICATE
2	STATE OF ALABAMA
3	AUTAUGA COUNTY
4	I, Stacey L. Johnson, Certified Court
5	Reporter and Commissioner for the State of
6	Alabama at Large, hereby certify that on
7	November 21, 2019, I reported the proceedings
8	and testimony in the matter of the foregoing
9	cause, and that pages [] through [] contain a
10	true and accurate transcription of the
11	examination of said witnesses by counsel for the
12	parties set out herein.
13	I further certify that I am neither of kin
14	nor of counsel to any of the parties to said
15	cause, nor in any manner interested in the
16	results thereof.
17	This the 9th day of December, 2019.
18	
19	Stacy L. Johnson
20	STACEY L. JOHNSON, CCR
	Commissioner for the
21	State of Alabama at Large
	CCR 386, Expires 9/30/2020
22	COMMISSION EXPIRES: 6/22/2023
23	

[**& - actual**] Page 135

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