



Deposition of:  
**Hearing , Volume II**

*March 10, 2020*

In the Matter of:  
**Petition For A Certificate Of Convenience  
And Necessity / IN RE:**

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1 ALABAMA PUBLIC SERVICE COMMISSION

2  
3 ALABAMA POWER COMPANY,  
4 Applicant.

5 DOCKET NO. 32953

6 IN RE:  
7 PETITION FOR A CERTIFICATE OF CONVENIENCE AND  
8 NECESSITY  
9

\* \* \* \* \*

10 VOLUME II

11 \* \* \* \* \*

12  
13 TESTIMONY AND PROCEEDINGS before the  
14 Honorable John A. Garner, Chief Administrative  
15 Law Judge, at the Carl L. Evans Chief  
16 Administrative Law Judge Hearing Complex, 900  
17 RSA Union Building, 100 North Union Street,  
18 Montgomery, Alabama, on Tuesday, March 10, 2020,  
19 commencing at approximately 9:00 a.m., and  
20 reported by Haley Tunnell, Certified Court  
21 Reporter and Commissioner for the State of  
22 Alabama at Large.

23 \* \* \* \* \*

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16 \*\*\*All exhibits retained by ALJ Garner and are  
17 not attached to the transcript.

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1 P R O C E E D I N G S

2  
3 THE COURT: All right. We're here  
4 for the continued hearing of Docket 32953. We  
5 are continuing with the presentation of  
6 Alabama Power's case in chief. I believe we  
7 are to Mr. Bush's testimony at this point in  
8 time.

9 Any housekeeping matters we need to  
10 address before we jump in?

11 MR. McCARY: No, sir.

12 THE COURT: Okay. All right. You  
13 can call Mr. Bush at this point in time.

14 MR. GROVER: Okay. Mr. Bush,  
15 please.

16 MIKE BUSH,  
17 the witness, having been sworn or  
18 affirmed to speak the truth, the whole truth,  
19 and nothing but the truth, testified as follows:

20 DIRECT EXAMINATION

21 BY MR. GROVER:

22 Q. Can you state your name for the record  
23 please.

1 A. My name is Mike Bush.

2 Q. By whom are you employed, Mr. Bush?

3 A. Southern Company Services.

4 Q. Okay. And what is your business address?

5 A. 600 North 18th Street, Birmingham, Alabama.

6 Q. And did you cause direct testimony to be  
7 filed in this proceeding?

8 A. Yes.

9 Q. Okay. And do you have any changes to that  
10 direct testimony?

11 A. I do not.

12 Q. Okay. If I asked the questions that are  
13 posed in that direct testimony to you, would  
14 your answers be the same?

15 A. Yes, they would.

16 Q. Okay. Did you also cause rebuttal  
17 testimony to be filed in this proceeding?

18 A. Yes, I did.

19 Q. Okay. And similarly, do you have any  
20 changes to that rebuttal testimony?

21 A. I do not.

22 Q. And if I ask you a question set forth in  
23 that testimony, would your answers be the same



1 as recorded there?

2 A. Yes.

3 MR. GROVER: Okay. Your Honor, we  
4 move to have Mr. Bush's direct and rebuttal  
5 testimonies moved into the record subject to  
6 cross-examination.

7 THE COURT: Mr. Bush's testimony  
8 will be admitted subject to cross.

9 BY MR. GROVER:

10 Q. Okay. Mr. Bush, do you have an opening  
11 summary you would like to present?

12 A. Yes, I do.

13 Q. Okay. Please.

14 A. Madam President, Commissioners, and Your  
15 Honor. Good morning. Today I will be  
16 discussing the merits of building a new combined  
17 cycle gas turbine generator for the customers of  
18 Alabama Power Company. According to the U.S.  
19 Energy Information Administration, natural gas  
20 generation made up 38 percent of the total  
21 energy supply in the United States in 2019 and  
22 the EIA produced natural gas to continue to  
23 increase its total production of electricity

1 through 2015. The Barry Unit 8 combined cycle  
2 project, if approved by this Commission,  
3 represents a unique opportunity for Alabama  
4 Power to secure the additional reliable  
5 cost-effective dispatchable capacity. If  
6 authorized and upon completion, Barry Unit 8  
7 will be among the most efficient advanced  
8 combined cycle generator units in the world.

9 The EPC agreement governs the design,  
10 instruction, and commissioning of Barry Unit 8,  
11 contains a number of features that are intended  
12 to shift the risks inherent in a project of this  
13 kind. Alabama Power is committed to providing  
14 clean, safe, reliable, and affordable service to  
15 our customers. By authorizing Barry Unit 8 to  
16 be built, this Commission will ensure that the  
17 customers of Alabama Power will have a resource  
18 that can meet their ongoing needs for years to  
19 come.

20 Thank you.

21 Q. Thank you, Mr. Bush.

22 MR. GROVER: With that, Your Honor,  
23 we tender him for cross-examination.

1 THE COURT: All right. Any  
2 cross-examination for Manufacture Alabama?

3 MR. CLARK: No, sir, Your Honor.

4 THE COURT: That brings us to you,  
5 Mr. Hill.

6 MR. HILL: We have no questions.

7 THE COURT: All right. That brings  
8 us to Sierra Club.

9 MS. CSANK: Your Honor, if I may  
10 just have a moment to get situated.

11 THE COURT: Sure.

12 MS. CSANK: Your Honor, I don't  
13 know -- my recollection of the order was that  
14 there may have been some additional  
15 interveners ahead of Sierra Club, but I may be  
16 mistaken, such as Energy Alabama.

17 THE COURT: No. They're actually  
18 after you in the order.

19 CROSS-EXAMINATION

20 BY MS. CSANK:

21 Q. Good morning, Mr. Bush.

22 A. Good morning.

23 Q. I'm Diana Csank, counsel for Sierra Club.

1           Sir, you worked for Mississippi Power in  
2     the early '90s; correct?

3     A.     That's correct.

4     Q.     Since then, you have worked for Southern  
5     Company Services; right?

6     A.     Yes.

7     Q.     Mississippi Power, as we heard yesterday,  
8     is a subsidiary of Southern Company; correct?

9     A.     Yes.

10    Q.     And Southern Company services is also held  
11    by Southern Company?

12    A.     Yes.   That's correct.

13    Q.     So you've worked for Southern through its  
14    subsidiaries for about 30 years?

15    A.     That seems right, yes.

16    Q.     And you moved to your current role as  
17    manager of generations planning and development  
18    more than a decade ago in 2009; correct?

19    A.     That's right.

20    Q.     And Southern's regulated system refers to  
21    the combined systems of Georgia Power,  
22    Mississippi Power, and Alabama Power; right,  
23    sir?

1 A. That's right.

2 Q. And those companies, Georgia Power,  
3 Mississippi Power, and Alabama Power, are often  
4 referred to as the, quote/unquote, "retail  
5 operating companies" or ROC; is that right?

6 A. They are.

7 Q. Okay. And you're familiar with the  
8 testimony of exhibits pre-filed by Southern  
9 Company witnesses in this case?

10 A. I am, yes.

11 Q. And so, for example, you have reviewed and  
12 agree with Mr. Kelley's pre-filed testimony  
13 exhibits; is that right?

14 A. That's right, as I understand them.

15 Q. Were you asked to review and critique any  
16 of those testimonies in the exhibits before they  
17 were filed?

18 A. I was not.

19 Q. So you were only reviewing them after the  
20 fact, after they were filed?

21 A. Right.

22 Q. All right. And remember, sir, the other  
23 conversation this morning, you're under oath.

1           So you have no -- okay. You agree that,  
2       for example, when Mr. Kelley or other company  
3       witnesses used that acronym ROC that typically  
4       refers to the retail operating company?

5       A.     That would be my general understanding,  
6       yes.

7       Q.     That's commonly used at Southern; right?

8       A.     It is used. I don't know how common it is,  
9       but it's used at Southern.

10      Q.     Okay. At points in today's conversation, I  
11      might also refer to the retail operating  
12      companies as sister companies.

13           Can we agree to that?

14      A.     Okay.

15      Q.     Okay. And you hold primary responsibility,  
16      as you testified, for supplies side, resource  
17      planning and development for Southern Circulated  
18      System?

19      A.     That's right.

20      Q.     The system we were just talking about.

21           And you've held your supply side  
22      responsibility since 2009?

23      A.     That's correct.

1 Q. And you do not communicate with Alabama  
2 Power's customers as part of your job  
3 responsibilities?

4 A. That's not part of my responsibilities.

5 Q. Do you know if other Southern Company  
6 services, colleagues of yours, have that  
7 responsibility with respect to the retail  
8 operating customers -- retail operating  
9 company's customers?

10 A. Just to clarify, you're asking if I know if  
11 there is anyone at Southern Company Services who  
12 talks to the customers of the operating  
13 companies?

14 Q. Let me just tweak that question and make  
15 sure that I that get the point across, which is  
16 whether -- like you hold primary responsibility  
17 for a certain subject, whether there's someone  
18 at Southern Company Services who holds primary  
19 responsibility for that type of customer  
20 communication that you know of.

21 A. I can't think of anyone right now.

22 Q. Okay. So in terms of, for example, the low  
23 income residence customers, there's no one who

1 has that portfolio and that focus at Southern  
2 Company Services?

3 A. Not that I can think of right now.

4 Q. Okay. And just so that we're clear,  
5 Southern Company Services is technically a  
6 consulting arm of Southern that helps with  
7 relevant analysis for the retail operating  
8 companies; correct?

9 A. That's part of what we do. That's right.

10 Q. Okay. So do you know if the Southern  
11 Company Services doesn't provide that kind of a  
12 low income residential focus consulting support,  
13 the retail operating company, if there's another  
14 entity that does so?

15 A. I'm not sure, but, you know, the operating  
16 company could do that.

17 Q. Do they, to your knowledge, from 30 years  
18 of working at Southern?

19 A. I don't know.

20 Q. You don't know.

21 Would it surprise you if they didn't have  
22 that?

23 A. I'm sure that we talked to our customers,



1 but I'm just not sure exactly how that process  
2 would work.

3 Q. Okay. But in terms of upper management's  
4 priority, you're privy to those given your  
5 senior role within Southern Company Services,  
6 are you not?

7 A. My focus, again, is on the supply side  
8 technology for our companies, and so that's a  
9 long way really from a residential customer.  
10 I'm trying to provide service at the lowest  
11 appropriate cost to them, but my focus is on  
12 utility scale and generation.

13 Q. Right. But in terms of -- isn't it your  
14 responsibility to serve all customers?

15 A. Right. But the resources that we deploy  
16 are for serving all customers. That's right.

17 Q. So you don't make it your practice to  
18 inquire specifically into the impacts of your  
19 recommendation to retail operating companies,  
20 like Alabama Power. You don't advise them on  
21 the subject of the impact to low income  
22 residential customers?

23 A. I do not.

1 Q. Do you know any of the company witnesses  
2 who holds such an analytical role focused on low  
3 income residential customers?

4 A. I'm not aware of one who would be.

5 Q. Your rebuttal testimony refers to Alabama  
6 Power's claimed needs; correct?

7 A. That's right.

8 Q. Actually, before we go down this line, are  
9 you a Southern shareholder?

10 A. I am.

11 Q. Could you state for the record  
12 approximately how many shares you hold or have  
13 access to?

14 A. Well, I don't know explicitly. I think  
15 it's approximately 5,000 shares.

16 Q. And you yourself are not a low income  
17 customer of any of the retail operating  
18 companies?

19 A. I wouldn't think that.

20 Q. Okay. Sir, you did not perform any part of  
21 the analysis of Alabama Power's claimed needs in  
22 this case, did you?

23 A. I did not.

1 Q. Nor did you verify their analysis?

2 A. I did not.

3 Q. And to be clear, intercompany interchange  
4 contract is not in any way part of your job  
5 responsibilities or duties either?

6 A. It is not.

7 Q. Are you offering an opinion as to the cost  
8 efficacy or the need for any other resources in  
9 the petition besides Barry 8?

10 A. I am not.

11 Q. And that's because you were not asked to do  
12 an analysis on those other resources by Mr.  
13 Kelley?

14 A. That's right. I was asked to provide an  
15 option of new generation for Alabama Power  
16 Company, and that's what we have done in  
17 Barry 8.

18 Q. So given the breadth of your supply side  
19 responsibilities, they didn't consult at all on  
20 those other supply side resources that they're  
21 including in the petition?

22 A. I think our team performed some due  
23 diligence on the acquisition, because we

1 understand how those units operate and we  
2 integrate them into our system. As far as, you  
3 know, analysis, I don't believe we did.

4 Q. Okay. Just for the record when you say  
5 "the acquisition," you're referring to the  
6 Central Alabama Power Plant?

7 A. That's right.

8 Q. And just remind us, that's a plant in  
9 where?

10 A. I believe that's in Billingsley, Alabama.

11 Q. Okay. And did you perform any sort of  
12 analysis on -- sorry.

13 What kind of analysis? Specifically, what  
14 was that due diligence?

15 A. It would help with the team that went to  
16 actually look at the facility and see how it's  
17 operating, ensure that it is sound mechanically,  
18 operate sufficiently, those type of things.

19 Q. And it's your team that also typically  
20 reviews environmental compliance issues  
21 associated with the supply side resources in  
22 terms of the economic screening of those  
23 resources?

1 A. Our team is a development team, where we  
2 pull people from experts from across the system.  
3 So we would rely on our environmental subject  
4 matter experts for environmental-type questions.

5 Q. Okay. Those environmental subject matter  
6 experts, none of them are company witnesses in  
7 this case, are they?

8 A. That's right.

9 Q. Okay. What are the other subject matter  
10 experts that you used in that scope of work that  
11 you just identified?

12 A. Are you talking specifically for building a  
13 new combined cycle, like Barry 8?

14 Q. For starters.

15 A. Okay. That would include the environmental  
16 subject matter experts. It would include a fuel  
17 and fuel supply experts. It would be reviewing  
18 with our transmission system experts, our siding  
19 expert. Those are -- and, of course, our  
20 engineering experts as far as the technology  
21 itself and its capabilities. It's a broad team,  
22 very diverse team.

23 Q. Anyone else besides environmental

1 transmission, fuel siding, and engineering in  
2 terms of those specific subject matter experts?

3 A. Well, we would include for a contract  
4 like -- for Barry 8, for the EPC contract that  
5 we cited, it would include legal overview,  
6 include supply chain. It would include site --  
7 direct site expertise. You know, at Barry 8, we  
8 have experience both with combined cycle  
9 technology, and so those existing subject matter  
10 experts would be part of the team as well. So  
11 those would all be part of the broader team.

12 Q. Okay. And just to make sure we all  
13 understand, you referred to the -- I think those  
14 other terms are clear, but we can explore them.

15 Supply chain, what does that mean?

16 A. We have an arm of the company that helps us  
17 to ensure that we are efficient in how we go to  
18 the market for acquiring materials, and that  
19 group helps us in that regard as we develop  
20 projects.

21 Q. So it's a little -- you were saying how you  
22 go to the market.

23 So they do RFP?

1 A. They help us -- they help us to develop the  
2 RFP.

3 Q. Again, RFP is an acronym for Request for  
4 Proposal?

5 A. That's correct.

6 Q. It's basically a market solicitation?

7 A. That's right.

8 Q. It's usually a written document that goes  
9 out to competitive market for these various  
10 resources and components that make up those  
11 resources; is that right?

12 A. That's right.

13 Q. Okay. And there's other services too that  
14 you might get, such as engineering --

15 A. That's right.

16 Q. -- about the solicitations.

17 You testified about the -- about the  
18 particular requests for proposal for  
19 solicitation in this case, and that concerns the  
20 turnkey solutions; right?

21 A. That's right.

22 Q. Were you asked to advise the company on the  
23 totality of their approach to the procurement

1 for the resource additions in this case?

2 A. Could you clarify a little bit what you  
3 mean?

4 Q. That was an inartful question.

5 Besides that turnkey solicitation that you  
6 testified about, are there -- were you asked for  
7 input on the rest of the procurement that the  
8 company did to identify resources to meet its  
9 claim needs?

10 A. Our focus was really on combining cycle and  
11 at the Barry site.

12 Q. So the answer is no?

13 A. That's correct.

14 Q. And help us understand this relationship  
15 between the retail operating companies and  
16 Southern Company Services.

17 The reason they're seeking out your  
18 services is because you have a specialized  
19 expertise that may not reside internal to the  
20 operating companies; correct?

21 A. That's right. We're able to do things as a  
22 shared service. We provide that service for all  
23 the operating companies, and it actually reduces



1 cost and enhances expertise. So instead of  
2 every operating company having to have their own  
3 development team, and they won't develop  
4 projects as often as other companies might,  
5 we're able to capture some of those  
6 efficiencies.

7 Q. Sounds good. And so at the outset, when a  
8 retail operating company approaches you and says  
9 there's this evolving potential need issue and  
10 they're trying to evaluate it and look for a  
11 potential solution, is there a conversation that  
12 you have about what are the relevant Southern  
13 Company consulting services that may apply to  
14 that process to ensure you maximize its  
15 efficiencies you were just describing?

16 A. I think, generally, the operating companies  
17 understand what our team does, so I'm not sure  
18 there's a need to refresh. And we have  
19 relationships with folks at the operating  
20 company in that we'll work with them if they  
21 have a need.

22 Q. So it's at their discretion when they come  
23 to you for what service?

1 A. It is.

2 Q. That was a compound question.

3 A. That's right.

4 Q. Both when they come to you and what they  
5 come to you for is at their discretion?

6 A. That's correct.

7 Q. So that's a one-way direction. You don't  
8 tell them, look, you have this issue; we think  
9 you need to X, Y, and Z services?

10 A. That's right.

11 Q. And is there a formalized  
12 prohibition against you advising them in that  
13 way?

14 A. No. We do give them, I think, through our  
15 planning process, they understand sort of the  
16 generic technology options available, and so  
17 they would look to us to have that expertise  
18 understanding of those technologies and see the  
19 effect that, I think, the generic plan that Mr.  
20 Kelley mentioned includes some of those  
21 technological options that we would have  
22 included as appropriate for planning purposes.

23 Q. So, again, just to make sure that we're on

1 the same page in terms, when you say the  
2 "planning process," that's the -- I should  
3 probably pause.

4 You were here yesterday and overheard most  
5 of the proceedings yesterday?

6 A. Yes, I was here.

7 Q. So is it fair to assume that you -- you  
8 tell me otherwise, but I'm going to talk about  
9 things that transpired yesterday. And if you're  
10 not familiar or agree or for some reason you  
11 need a clarification, let me know.

12 A. Certainly.

13 Q. And so yesterday, the coordinative planning  
14 process was referenced. Is that the planning  
15 process that you're referring to now?

16 A. I was specifically talking about expansion  
17 plan, but it's part of the coordinative planning  
18 process, yes.

19 Q. So there's a distinction between the  
20 planning process for the proposed expansion  
21 under review today and the coordinative planning  
22 process?

23 A. Well, a component of the coordinating

1 planning process would be the development of a  
2 specific expansion plan, a generic expansion  
3 plan, so that's a component of that process.

4 Q. But so what makes a planning process  
5 coordinated? Is it the retail operating  
6 companies are in communication with one another,  
7 consulting one another, and having some kind of  
8 shared work to develop plans?

9 Is that what coordination means?

10 A. There's probably lots of -- there's lots of  
11 components that may go into the coordinative  
12 process, and Mr. Weathers is our resource  
13 planning manager and would be excellent at  
14 answering and defining that question.

15 Broadly speaking, there's a lot of  
16 components that go into the plan that we  
17 coordinate. So all of the operating  
18 companies -- just talking about my area, for  
19 example. All of the operating companies, I  
20 would communicate with them. Hey, these are the  
21 technology options available for, say, simple  
22 cycle CT, here are the options available for a  
23 combined cycle, and then there's multiple

1 configurations of those types of technologies  
2 that could be available. They all understand.  
3 They all agree that why don't we use these as  
4 our generic options and that we use them to  
5 plan. So all of that is coordinated and  
6 understood in the company. So that's part of  
7 the plan, and that's the part I would play in  
8 the plan.

9 Q. So it sounds like the coordination happens  
10 at the forecasting reserve margin review stage,  
11 but not necessarily when they -- the retail  
12 operating companies then start to plan for  
13 whatever changes may be necessary to meet their  
14 target reserve margin; is that correct?

15 A. I think each operating company is  
16 responsible for their own plan.

17 Q. Okay. And going back to that list that you  
18 hopefully identified the subject matter expert  
19 at Southern Company Services who make up this,  
20 quote/unquote, "team," that's your team; right?

21 You oversee that team?

22 A. We -- as far as all the subject matter  
23 experts, well, they're not -- they don't

1 directly work for me. But when we have a  
2 project identified, we are the ones responsible  
3 for pulling those subject matters experts  
4 together and developing the project.

5 Q. So you yourself may not have the expertise  
6 necessary to verify the analysis performed by  
7 those various constituents?

8 A. That's right. We rely on their expertise.  
9 For example, transmission planning, I rely on  
10 them. I'm not a transmission planner.

11 Q. So just, again, for completeness then, I  
12 think you probably remember, but I believe one  
13 of the company witnesses yesterday identified  
14 for us that there is no Southern Company  
15 Services transmission expert here with us at the  
16 hearing; correct?

17 A. That's what I recall, yes.

18 Q. In terms of a witness who the company plans  
19 to testify.

20 Same question for fuel.

21 A. That's correct.

22 Q. What about siding?

23 A. No specific customer here for that or

1 person for that.

2 Q. All right. What about engineering; no?

3 A. No.

4 Q. What about legal?

5 Is there a legal expert among the company  
6 witnesses?

7 A. We do have counsel here with us.

8 Q. Indeed. But are they testifying at this  
9 hearing that you know of?

10 A. No, they're not testifying.

11 Q. And supply chain, I don't know if those  
12 were legals. I believe that's under one.

13 A. No, we don't have a supply chain witness  
14 here.

15 Q. Your rebuttal testimony refers to demand  
16 side resources, does it not?

17 A. I do briefly speak of those in reference to  
18 the Rocky Mountain Institute's report.

19 Q. All right. And just for the record, in  
20 case we slip into acronyms again, that institute  
21 is often also referred to as RMI?

22 A. That's right.

23 Q. But you did not perform any part of the

1 analysis of the company's demand side or any  
2 sources. Indeed, it's still under -- underway,  
3 in progress?

4 A. That's right. Mr. Kelley spoke to that  
5 yesterday.

6 Q. Nor did you verify that in progress  
7 analysis or whatever has been completed of it?

8 A. Again, are we talking about the --

9 Q. Demand.

10 A. -- analysis? I haven't verified any  
11 analysis.

12 Q. I believe yesterday Mr. Kelley drew a  
13 distinction between demand side resources and  
14 distributive energy resources.

15 Do you have an understanding of that  
16 distinction?

17 A. It's not my area of expertise.

18 Q. But presumably, if it's not demand side, it  
19 must be supply side, and you hold primary  
20 responsibilities for supply side.

21 So presumably, there's some kind of supply  
22 side indication to this term distributive  
23 energy?



1 A. That's right. But customers can have  
2 resources at their site generally.

3 Q. Did you, in your generic planning process  
4 or otherwise, identify specific distributive  
5 energy solutions that the company may use,  
6 Alabama Power Company, for the purposes of its  
7 needs in this case?

8 A. No, I did not.

9 Q. Okay. Does anyone at Southern Company  
10 Services hold expertise related to the  
11 distributive energy resources and program?

12 A. Again, there would be a lot of folks that  
13 have -- that understand distributive energy  
14 resources, and it's really the definition -- can  
15 you can define distributive energy resource?  
16 That's part of the problem.

17 How would you define distributive energy  
18 resource?

19 Q. Sir, you're the expert. I would prefer to  
20 have you define it, please.

21 A. You know, broadly speaking, it could be --  
22 it could be generation at a customer site. So  
23 that could be anything from a large -- a rather

1 large 50 to 100 megawatt combustion turbine all  
2 the way down to solar on somebody's roof. It's  
3 a broad aspect of the types of generation that  
4 it could be.

5 Q. Okay. And as we sit here today, you simply  
6 don't know what kind of analysis has been  
7 performed either by Southern Company Services or  
8 Alabama Power with respect to such resources?

9 A. That's right. I do not.

10 Q. Sir, your rebuttal testimony also refers to  
11 the supply side renewable resources; is that  
12 correct?

13 A. Can you point to me where you're  
14 specifically talking about?

15 Q. Generally, I mean, throughout you refer to  
16 the renewable as part of your critique; for  
17 example, Ms. Wilson's analysis?

18 A. Yes, I did look at renewables that she had  
19 in her analysis.

20 Q. Besides that look, did you perform any part  
21 of Alabama Power's analysis of the supply side  
22 renewable resources?

23 A. I did not.

1 Q. Nor did you verify that analysis that it  
2 performed?

3 A. I did not.

4 Q. That's not your purview?

5 A. That's not my purview.

6 Q. But it's not your purview only because the  
7 company at its discretion did not ask you to  
8 look?

9 A. It's not my purview, because generally for  
10 those types of RFP, our team is not involved.  
11 We would be more looking at if the company  
12 wanted to build, for example, a facility.  
13 That's our focus, building a facility.

14 Q. Building supply side renewable facilities?

15 A. We could help our customers do that. Our  
16 company will do that, if they chose to do that.  
17 That's right.

18 Q. When you say "customers," did you in that  
19 instance mean --

20 A. Operating companies.

21 Q. Have you provided that kind of service to  
22 other retail operating companies?

23 A. We have.

1 Q. But not to Alabama Power in this case?

2 A. We have been involved in -- well, not in  
3 this case. Absolutely not.

4 Q. So really, your purview in this case is  
5 this limited look at combined cycle gas  
6 turbines, like Barry 8; is that right?

7 A. That's right. It's really a Barry 8  
8 combined cycle.

9 Q. Okay. And before we get too far into  
10 Barry 8, I just want to understand. I know  
11 you're not a siting expert, but why -- this is a  
12 unit that's being proposed on an existing site  
13 near the coast, near Mobile; right?

14 A. That's correct.

15 Q. Why that site?

16 A. Well, that site in particular has a number  
17 of attributes that make it very beneficial for  
18 adding a combined cycle there.

19 Q. Could you identify those attributes for us,  
20 please?

21 A. Sure. First of all, it's a cycle that we  
22 already own that has available property there.  
23 It's a site that has existing infrastructure

1 available both from transmission interconnect  
2 opportunities as well as a site on the gas  
3 system, generally speaking, that has lots of  
4 flexibility and provides a low-cost option there  
5 as well. It's actually a site that we have  
6 existing combined cycle, so we have a level of  
7 expertise with that technology already at that  
8 site. So those are some of the reasons that  
9 made it an attractive site.

10 Q. And what about -- kind of all of your eggs  
11 in one basket, are there any risks associated  
12 with putting multiple generators at one site?

13 A. There are risks of having multiple  
14 generators at one site, but it's a risk that we  
15 deal with all the time. We have that across the  
16 system. We have multiple generators at single  
17 sites across the system, and we're able to  
18 manage that risk.

19 Q. So besides the fact that you've done it  
20 before, do you have any other way to reassure  
21 the commission that that, in fact, is necessary  
22 and least cost to site Barry 8 adjacent to these  
23 existing units?

1 A. Could you clarify your question? I'm  
2 sorry.

3 Q. Well, let's try this first.

4 MS. CSANK: Madam Reporter, would  
5 you please read back the question?

6 (Whereupon, the court reporter  
7 read the requested portion of the  
8 record.)

9 Q. Sir, that was a compound question, so let  
10 me break it up for you.

11 You identified in your earlier answer that  
12 you -- that Southern has sites where it locates  
13 multiple generators; right?

14 A. That's correct.

15 Q. Okay. And besides that fact, what other  
16 facts or documents do you have of analysis of  
17 the risks associated with siting Barry 8 at that  
18 site of existing generating units?

19 A. I don't have any documentation that was  
20 done.

21 Q. But given the breadth of your experience  
22 and as a resident of Alabama, you're aware that  
23 Alabama, in particular the coast, is vulnerable

1 to extreme weather events, is it not?

2 A. Certainly, we do have extreme events,  
3 extreme weather events.

4 Q. And you have personal knowledge and  
5 experience that such extreme weather events have  
6 happened?

7 A. That's right.

8 Q. Okay. But you're not aware of any analysis  
9 performed about the Barry site's vulnerability  
10 to such extreme weather and flooding, et cetera?

11 A. Not specifically, no.

12 Q. Okay. So the commission in this case has  
13 no information from the company to reassure it  
14 about the magnitude or the impact of those types  
15 of risks; right?

16 A. Not specifically, no.

17 Q. Okay. And just for the record, to the  
18 extent you know, similarly, there's no  
19 comparable siting risk analysis in the company's  
20 case for Central Alabama or Hog Bayou?

21 A. I'm not aware of anything in there.

22 Q. And just to round out why that might be  
23 helpful to the commission, again, giving your

1 breadth of experience on the supply side,  
2 extreme weather can cause outages in the summer  
3 or the winter; right?

4 A. Extreme weather could cause outages  
5 whenever that weather occurs. It doesn't  
6 necessarily cause outages, but it can.

7 Q. So for example, sir, are you particular  
8 with the Hurricane Florence and gas unit in  
9 North Carolina that it took out?

10 A. Not specifically, no.

11 Q. Would it surprise you that a hurricane like  
12 Florence could cause a steam generator or a  
13 fossil -- strike that.

14 Would it surprise you that extreme  
15 weather, such as a hurricane, would cause a  
16 combined cycle generator to have to go offline?

17 A. It wouldn't surprise me, no.

18 Q. But you have no analysis, again, of  
19 specifically those types of risks associated  
20 with Barry 8?

21 A. Not specifically, no.

22 Q. So Barry 8 traces back to a vendor  
23 approaching you in 2016 with a fixed price



1 turnkey combined cycle project proposal.

2 Do I have that right?

3 A. That would be the genesis of the idea  
4 behind the fixed price turnkey originally, yes.

5 Q. And so it struck you as an interesting  
6 proposal; right?

7 A. Yes.

8 Q. And did you shop it around to other retail  
9 operating companies?

10 A. Yes.

11 Q. Did any of them pursue a fixed price  
12 turnkey combined cycle project proposal?

13 A. No.

14 Q. But Alabama Power did?

15 A. Well, Alabama Power was the first operating  
16 company that had an identified need, and so they  
17 were the first to pursue this as an option.

18 Q. And this 2016 proposal y'all got, that  
19 didn't correspond to any particular capacity  
20 deficit on Southern System?

21 A. It did not.

22 Q. Or any particular capacity deficit on  
23 Alabama Power system?

1 A. No, it was generic. We were approached  
2 just generically by one of the equipment  
3 manufacturers.

4 Q. Okay. And that 2016 proposal informed your  
5 work for the company when they came to you in  
6 2017?

7 A. I think that's right.

8 Q. And you all still did not have any  
9 particular capacity deficit in mind at that  
10 time?

11 A. Not necessarily. I mean, we understood  
12 that the system was dealing with winter  
13 liability type issues, and so we understood that  
14 there could be a deficit.

15 Q. So you solicited more proposals like that  
16 2016 proposal from original equipment  
17 manufacturers, OEMs; right?

18 A. For the solicitation for Barry 8, yes.  
19 What we did is we went to the market through OEM  
20 for that particular site for a particular type  
21 of configuration of combined cycle.

22 Q. And you also had a particular date range in  
23 mind for when you wanted that in service; right?

1 A. That's right.

2 Q. So you were capturing the snapshot of what  
3 the market could provide with those constraints  
4 and nothing beyond that because that's the  
5 nature of the solicitation?

6 A. That's right.

7 Q. So you can't say, for example, what kind of  
8 pricing or performance attributes may be  
9 available, say, in the '24/'25 time range?

10 A. No. That's not what we went to the market  
11 for.

12 Q. Nor could you provide information about  
13 such attributes that far out in time?

14 A. No, I don't have that information.

15 Q. But we can agree that generally technology  
16 is improving in terms of its performance and  
17 price?

18 A. The cost of the technology generally has,  
19 but I think, as Mr. Kelley mentioned yesterday,  
20 supply and demand has a significant impact on  
21 what you might pay for a particular technology  
22 or configuration. And so as you deal with  
23 changes in the marketplace, identified needs by

1 utilities for more generation, that has a  
2 tendency to cause prices to actually go up even  
3 if the technology itself could be less costly  
4 and more efficient.

5 Q. And specifically, in terms of the OEMs for  
6 gas burning resources, there's been some big  
7 news in that sector; hasn't there?

8 A. There has.

9 Q. There have been large layoffs and  
10 contractions of the support services offered for  
11 those types of resources, has there not?

12 A. I'm not sure with large layoffs, but I  
13 understand there has been some contraction in  
14 that area.

15 Q. Okay. And those might also impact the  
16 price, not just of the initial capital spent,  
17 but eventually kind of components and  
18 maintenance down the line over decades of these  
19 long life assets; no?

20 A. I think there is a lot of things that  
21 actually can affect things over time.

22 Q. You have no documents analyzing those types  
23 of risks for this commission, do you?

1 A. We do have some protection for particularly  
2 in Barry Unit 8. Not only the construct of the  
3 EPC agreement for constructing the unit, but we  
4 also negotiated simultaneously a long-term  
5 service agreement that has those -- some  
6 protections in it. So we have protections for  
7 our customers for an extended period of time  
8 through the negotiation of that contract.

9 Q. Okay. But do you have comparable risk  
10 management as you described to that negotiation  
11 in that agreement for Central Alabama and Hog  
12 Bayou; do you know?

13 A. I don't know.

14 Q. And what about beyond that agreement? Do  
15 you have any other analysis of those types of  
16 risks we just talked about?

17 A. I don't.

18 Q. And if you don't have it, the other company  
19 wouldn't either?

20 A. Not that I'm aware of.

21 Q. So back to your turnkey solicitation in  
22 '18, January 2018, you went out to the market;  
23 right?

1 A. That's correct.

2 Q. And you received final proposals in  
3 August 2018?

4 A. That's right. We'd seen final proposals in  
5 August of 2018.

6 Q. And to be clear, I think this is clear, but  
7 just to make sure, this is different from the  
8 capacity RFP that was referenced yesterday?

9 A. Yeah. This was done outside of RFP to  
10 provide an option for the company to compare the  
11 RFP options against.

12 Q. And you're familiar with Mr. Kelley's  
13 exhibits to the capacity RFP itself, the  
14 document?

15 A. Maybe not the detail.

16 Q. But at one point you reviewed it after it  
17 was issued. You weren't consulted prior to it?

18 A. That's right.

19 Q. And we were talking earlier about an  
20 efficiency. So why would you have two  
21 solicitations if you were already -- or if the  
22 company was already confident that the terms of  
23 the capacity RFP were clear enough to the market

1 to identify the company's projected needs and to  
2 properly solicit market solutions to those  
3 needs?

4 A. Well, it's two separate processes. And  
5 really, it's a risk issue, I think, the company  
6 is dealing with. So, for example, you don't  
7 know what the company is going -- what the  
8 market is going to provide from a solicitation  
9 for capacity. That is different than the  
10 solicitation that we went through.

11 We went through a solicitation for an  
12 option to build a physical combined cycle, and  
13 so that physical combined cycle option then  
14 became something the company could compare to  
15 other alternatives in the marketplace. And not  
16 knowing what those alternatives in the  
17 marketplace would be, this is -- you know, this  
18 became an option, and after evaluation done by  
19 Mr. Looney, it was identified as a very economic  
20 option providing significant value to the  
21 customers of Alabama Power.

22 Q. But you didn't perform a comparable fixed  
23 priced turnkey solicitation for renewables, did

1     you?

2     A.     I did not, no.

3     Q.     Nor did the company, as far as you know;  
4     right?

5     A.     No. I think Mr. Kelley identified  
6     yesterday that for a capacity need in the  
7     winter, that renewables would not provide  
8     capacity available.

9     Q.     Let's put capacity to the side for a  
10    moment, and we can come back to it.

11           But you just identified for us this  
12    potential benefit from a separate distinct  
13    process to go and give the market additional  
14    information about what kind of solution you may  
15    want; such as, a fixed priced turnkey proposal,  
16    but you limited that effort to combined cycle  
17    generators, did you not?

18    A.     I'm talking about Barry Unit 8.

19    Q.     Yeah.

20    A.     And so for the Barry site, our team was  
21    charged to identify the appropriate combined  
22    cycle at that site, and that's what we did.

23    Q.     So you also can't speak to fixed price



1 turnkey proposals at other sites and what the  
2 economics of those would be?

3 A. We did not engage the market for that.

4 Q. And I think we've already said this, and  
5 your counsel, I'm sure, will object if it has  
6 been asked and answered, but you do not have  
7 analysis based on market solicitation for a  
8 comparable turnkey fixed price solution that  
9 involved renewables; such as, solar panel  
10 batteries, do you?

11 A. I do not, no. That wasn't what we were  
12 charged to do.

13 Q. And so far as you're familiar with the rest  
14 of the company's pre-filed testimony exhibits,  
15 you don't know of anything like that in those  
16 pre-filings?

17 THE COURT: He's here to testify  
18 just about Barry 8, as I understand; right?  
19 Let's keep the questions specifically to what  
20 he's here to testify about.

21 MS. CSANK: Thank you for your  
22 indulgence, sir.

23 BY MS. CSANK:

1 Q. And again, to the scope of your specific  
2 analysis, sir, that did not involve a review of  
3 existing resources on the company's system?

4 A. No, it did not.

5 Q. Sir, you made some pretty broad statements  
6 about the cost efficacy of Barry 8 in relation  
7 to not just the company's system but the  
8 Southern regulated system; correct?

9 A. That's right.

10 MS. CSANK: Okay. And working off  
11 of those statements, I ask for a little bit of  
12 latitude from Your Honor, Judge Garner, to ask  
13 this line of questions.

14 BY MS. CSANK:

15 Q. So you do have knowledge, of course, of  
16 existing resources on the Southern System?

17 A. Yes, I do.

18 Q. But you did not perform any analysis of  
19 existing resources on that system for the  
20 purposes of this case?

21 A. I did not.

22 Q. But you do know that currently combined  
23 sister companies have roughly 45 gigawatts of

1 capacity?

2 A. That sounds right.

3 Q. Currently combined sister companies also  
4 have roughly one gigawatt of solar?

5 A. That seems approximately maybe somewhat  
6 larger now. It's a little bit more now.

7 Q. Why do you say that?

8 A. Because I think I heard Mr. Weathers  
9 yesterday mention a 1,300 megawatt, but that's  
10 still close to a gigawatt.

11 Q. And do you know, as we sit here today, how  
12 much solar is planned in the next coordinated  
13 planning process by the sister company beyond  
14 that 1.3 gigawatts?

15 A. I couldn't say specifically.

16 Q. Okay. Likewise, combined, the sister  
17 companies have roughly one gigawatt of wind?

18 A. That seems right.

19 Q. By contrast, Southern Power, which we  
20 established yesterday, as a Southern subsidiary  
21 has more than 4,000 megawatts of renewables?

22 A. That's my understanding, yes.

23 Q. Southern Power is not regulated; right?

1 A. No, that wouldn't be my understanding.

2 They are regulated.

3 Q. They are regulated?

4 A. Yes.

5 Q. By whom?

6 A. By the FERC.

7 Q. Okay. Federal Energy Regulatory  
8 Commission?

9 A. Yes.

10 Q. Not by the State Regulated Utility  
11 Commission?

12 A. I don't believe so.

13 Q. Southern Power shares its resources with  
14 sister companies, like Alabama Power?

15 A. It's my understanding that there are  
16 certain units that Southern Power has in the  
17 southeast that are included in the pool for  
18 economic dispatch, but that would not be all of  
19 their resources.

20 Q. Explain.

21 A. Southern Power -- again, I'm not an expert  
22 on Southern Power, but they have resources, as  
23 far as I know, in California, in Texas, North

1 Carolina. So those resources would not be part  
2 of the pool.

3 Q. Do you know how much of that 4,000  
4 megawatts is accessible to Alabama Power?

5 A. I don't.

6 Q. Now, let's turn to the timing of new  
7 resources, like Barry 8.

8 And when was Barry 8 selected -- when was  
9 this site for Barry 8 selected?

10 A. As I recall, in late 2017.

11 Q. Do you recall a particular person who  
12 selected that site?

13 A. No.

14 Q. Was it a team of individuals?

15 A. It would be -- our team would have done  
16 screening of a number of a different sites and a  
17 number of different technologies to come up with  
18 the most cost effective site for Alabama Power.

19 Q. So your team keyed up the analysis. And  
20 who was the decisionmaker?

21 A. For the --

22 Q. The site selection.

23 A. -- the site itself? We would have reviewed

1     it with the entire company, with Alabama Power,  
2     to make that decision.

3     Q.     So senior management, presumably, they made  
4     that decision.

5             Was there a particular individual?

6     A.     I don't remember if there was a particular  
7     individual.

8     Q.     In your experience bringing the new  
9     combined cycle unit online into service  
10    including planning, permitting, and procurements  
11    takes approximately five years?

12    A.     Every site would be different, but that's  
13    approximately correct.

14    Q.     Or it could be done faster?

15    A.     For a combined cycle, again, possibly.

16    Q.     Have you seen it done faster?

17    A.     Not generally for us, no.

18    Q.     Okay. What about for others?

19    A.     I'm sorry?

20    Q.     What about for others?

21    A.     I don't really keep up with how others do  
22    theirs.

23    Q.     So you don't perform a benchmark analysis

1 to ensure that you're kind of keeping up with  
2 the pack?

3 A. As far as?

4 Q. The way you select and evaluate and  
5 implement supply side solutions for your  
6 customers.

7 A. Every resource is going to be very  
8 different in how it's deployed. The site is all  
9 very different and the cost associated with that  
10 are very different. So what we try to do is  
11 provide a low-cost option or least cost option  
12 for our customers, and that's what we did in  
13 this case.

14 Q. But in terms of that broader question on  
15 benchmarking and in measuring and managing, how  
16 you compare in terms of your supply side  
17 procurement of utilities, you have no documents,  
18 such as benchmark analysis, do you?

19 A. I don't.

20 Q. Bringing a new combustion turbine online  
21 including planning, permitting, and procurement  
22 may take slightly less, approximately four  
23 years; is that right?

1 A. For a combustion turbine, in that general  
2 time frame.

3 Q. Okay. And for the combined cycle unit that  
4 you're focused on, Barry 8, has permitting been  
5 completed?

6 A. Some aspects of permitting have.

7 Q. What aspects?

8 A. We have permits from the Corp of Engineers,  
9 and we have submitted an air permit, but that  
10 has not been completed.

11 Q. And why would you need a permit from the  
12 corp?

13 A. For -- one issue may be for wetlands  
14 mitigation.

15 Q. So wetlands impact building Barry 8?

16 A. It's a very minor wetland impact, yes.

17 Q. But you don't have any documentation to  
18 substantiate how minor?

19 A. Those were all provided for the permit,  
20 through the permit process, to the Corp of  
21 Engineering. It's in their authority to give us  
22 that permit, and they have.

23 Q. Do you have any documents in this case that



1 show the commission that you've minimized the  
2 environmental footprint of Barry 8?

3 A. No. What do mean by minimizing  
4 environmental footprint?

5 Q. What does that mean to you, sir?

6 A. I was thinking about the size of the  
7 site -- the footprint of the site itself is what  
8 came to my mind.

9 Q. You mean the physical area?

10 A. That's right.

11 Q. Okay. So thank you for making sure we're  
12 clear.

13 And with that understanding of  
14 environmental footprint as the area that Barry 8  
15 and its associated facilities will use, same  
16 answer?

17 A. That's right.

18 Q. What about a broader question then to you,  
19 which is the full range of environmental  
20 impacts, land, air, water, do you have documents  
21 of having, in fact, minimized those types of  
22 impacts at Barry 8?

23 A. No.

1 Q. The expected life of a generic combined  
2 cycle unit is 30 or more years; right?

3 A. A generic combined cycle we would say has  
4 an expected life of 40 years.

5 Q. And what's that based on?

6 A. It's based on engineering studies, our  
7 understanding of the technology itself, and the  
8 historical operations.

9 Q. So technically, it's feasible to live that  
10 long for combined cycle generator; is that --

11 A. That's right.

12 Q. That's what expected life means?

13 A. Right.

14 Q. So for example, for economic reasons, it  
15 may not live that long?

16 A. Our expectation, all the evaluations that  
17 we've done for Barry 8, there is -- its  
18 expectations that will live for 40 years and be  
19 economically beneficial to our customers for  
20 all 40 years.

21 Q. But that wasn't my question.

22 MS. CSANK: Madam Reporter, can you  
23 read back my last question?

1                   (Whereupon, the court reporter  
2                   read the requested portion of the  
3                   record.)

4       Q.    Let me try it again.

5            I wasn't yet getting into your expectations  
6    for Barry 8 specifically.  Rather, I was in the  
7    generic sense asking you, sir, about whether a  
8    combined cycle generator due to economics could  
9    be retired earlier than its expected life.

10   A.   Is there a particular type of economics  
11   that you're referring to?

12   Q.   Well, again, sir, I'm looking to you for  
13   expertise.  I'm just a lawyer.

14           What kind of economic conditions might  
15   cause a combined cycle generator to be retired  
16   before the end of its expected life?

17   A.   Again, in our analysis, generic combined  
18   cycles operate through the time frame in which  
19   we've evaluated them.  So we don't see an  
20   economic impact in that area.

21   Q.   And just to make sure I understand that  
22   statement, you're saying that in the context of  
23   Barry 8 specifically?

1 A. Specifically, and then just generally, in  
2 our generic analysis, we find combined cycles to  
3 be economic long-term.

4 Q. There's a lot of input that go into the  
5 specific analysis or generic analysis; right?

6 A. That's correct.

7 Q. And you're not presenting any of that  
8 generic analysis in this case, are you?

9 A. No.

10 Q. So there's no way for the commission to  
11 verify the generic analysis that you just  
12 described?

13 A. I think if you look at the Alabama Power's  
14 expansion plan, their IRP, generically, you see  
15 combined cycles interspersed in that analysis.

16 Q. What does that tell us about the cost  
17 efficacy, though, of those generic units? Not  
18 much according to Mr. Kelley, but that was just  
19 the benchmark; right?

20 A. That's right.

21 Q. So just back to this question of expected  
22 life versus potential futures where a generic  
23 combined cycle generator may not live out its

1 expected life economics can you agree might be a  
2 reason, even though you don't think that's one  
3 right now?

4 A. Again, if there's a particular type of  
5 economics that you're talking about, but --

6 Q. Let me try it. So in terms of --

7 A. We use economic evaluation when we look at  
8 the benefit of the resource and a cost of  
9 resource.

10 Q. So rather than talking in the abstract,  
11 let's go back to Barry 6 and 7. You're familiar  
12 with that combined cycle technology that's  
13 located currently at Barry?

14 A. Yes.

15 Q. And you at least have some familiarity with  
16 the process -- the approval process for getting  
17 this commission's approval for those units, do  
18 you not?

19 A. Very, very generically.

20 Q. And you were here yesterday when we were  
21 discussing this commitment by the company that  
22 was included as a condition of approval by the  
23 commission to have shareholders there that

1 stranded assets risks associated with Barry Unit  
2 6 and 7; right?

3 A. I was here when that discussions happened,  
4 yes.

5 Q. So with that understanding of a potential  
6 economic reason for retiring a combined cycle  
7 generator before the end of its useful life, do  
8 you have any -- do you agree that there might be  
9 such economic reasons for early retirement?

10 A. I think in the instance of Barry 8, which  
11 I'm here to talk about, it would be very  
12 unlikely.

13 Q. All right. And it could also be legal  
14 reasons -- right? -- why a combined cycle  
15 generator would be required to retire earlier  
16 than expected?

17 A. I assume there could be. Do you have a  
18 particular type of legal issue you're talking  
19 about?

20 Q. Well, have you, sir, performed an analysis  
21 or had cause to be performed an analysis of such  
22 legal risks -- regulatory risks?

23 A. No. The company did perform a series of

1 evaluations and scenarios for Barry 8 and found  
2 it to be a very economic option. So there was a  
3 range of evaluations performed.

4 Q. And what you're referring to just then,  
5 that's the analysis presented by company witness  
6 Looney?

7 A. That's correct.

8 Q. Anything beyond that for the commission?

9 A. No.

10 Q. So as we said earlier, you focus on supply  
11 side resources; correct?

12 A. Yes.

13 Q. And you're good at your job; right? You've  
14 been promoted and assigned more  
15 responsibilities?

16 A. I would like to think so, yeah.

17 Q. For more than a decade, you have monitored  
18 the market for supply side resources that are  
19 available to Southern's regulated system;  
20 correct?

21 A. That's been part of my responsibility, yes.

22 Q. Okay. And based on that responsibility and  
23 that experience monitoring the market, you know

1     that costs are changing all the time in the  
2     market of supply side resources that are  
3     available to the retail operating companies;  
4     correct?

5     A.     That's correct.

6     Q.     And you agree that it's not just the  
7     capital costs that you look at when trying to  
8     make sure you are providing the best value for  
9     customers. You have to look at everything?

10    A.     That's right.

11    Q.     But obviously, you can't look at  
12    everything, so there must be a way that you  
13    figure out what are the relevant material  
14    factors that are going to impact the cost of  
15    potential resource solutions; right?

16    A.     That's right.

17    Q.     And how do you go about going from the  
18    desire to be circumspect to a practical analysis  
19    that really hones in on the key risks and the  
20    key cost components of your resource planning  
21    and procurement?

22    A.     Again, you may want to talk to Mr. Looney.  
23    It sounds like those risks are ongoing,



1 long-term risks that you're talking about. For  
2 us, we were looking at the risks comparing a  
3 combined cycle technology with the in-service at  
4 a particular point in time between  
5 one manufacturer's resource and another  
6 manufacturer's resources. That's what we did  
7 here for Barry 8.

8 Q. Okay. So you're not offering an opinion  
9 or -- you're not offering opinions about the  
10 full set of costs and risks associated with  
11 Barry 8, are you?

12 A. No. I provided information as far as the  
13 viability to build, construct, own, and operate  
14 a unit like Barry Unit 8.

15 Q. But in terms of operation, what exactly are  
16 you offering as opinion or support?

17 A. It would be the long-term service agreement  
18 that we had with the resource when it goes in  
19 service.

20 Q. Anything beyond that?

21 A. No.

22 Q. So, sir, when Barry 6 and 7 asset risks  
23 were committed to shareholders, how were you as

1 a shareholder given notice of that decision; do  
2 you recall?

3 A. I don't recall at all.

4 Q. As a shareholder, have you had any -- have  
5 you received any communications about Barry 8  
6 from the company?

7 A. I don't think I -- I haven't directly, no.

8 Q. Investor presentation, for example?

9 A. I haven't reviewed investor presentation.  
10 I would think it's likely that some  
11 communication may have occurred in that regard,  
12 but I don't know.

13 Q. So yesterday, I had a brief conversation  
14 with Mr. Kelley about this construction work in  
15 progress docket.

16 Do you recall that?

17 A. I recall.

18 Q. He pointed to you as maybe someone who  
19 could explore that a little further, and I'll  
20 keep it short, I promise.

21 You may recall me asking Mr. Kelley about  
22 this term "total project." Does that mean  
23 anything special to you?

1 A. Not particularly, no.

2 Q. Okay. So far as you know, total project  
3 simply refers to the scope of work for  
4 engineering, constructing, and procuring Barry 8  
5 up to the point of it being in service in the  
6 fall of 2023?

7 A. That's how I would think about it. That's  
8 one way definitely to define it, I would think,  
9 of those terms.

10 Q. That's how the term project has been used  
11 in communications within Southern?

12 A. Generally, we talk about in-service costs.  
13 And so if that's the context, then those are  
14 the -- that's the cost you mentioned, are the  
15 in-service costs.

16 Q. But that's the project?

17 A. Right.

18 Q. The project isn't the 40-year operations  
19 beyond that in-service date?

20 A. It depends on the context and use of the  
21 word "total project."

22 Q. Okay. So you don't have a cost estimate  
23 for that additional 40 years once the unit comes

1 online, do you?

2 A. I don't have the specific cost estimate,  
3 no, but that was considered in Mr. Looney's  
4 evaluation.

5 Q. So far as you know, in terms of the  
6 analysis the company has provided to this  
7 commission, it's limited to what Mr. Looney is  
8 offering?

9 A. That's my understanding with regard to  
10 Barry 8.

11 Q. And I don't want to clear the room.

12 In your direct testimony, you refer to the  
13 estimated in-service costs of Barry 8, and it is  
14 what is it is, that figure.

15 Do you know when that estimate was first  
16 provided to the commission and staff?

17 A. When that estimate was first provided to  
18 the commission staff, I don't know.

19 Q. When was that estimate first provided to  
20 the company by Southern Company Services?

21 A. We -- I think it would have been in May of  
22 2019. Once we received information back from  
23 the marketplace of some options and finalization

1 options that we have requested, I think our  
2 final update would have been available.

3 Q. Okay. And again, that cost, in your direct  
4 testimony, gets Barry 8 to the point where it is  
5 available to run nothing more; right?

6 A. That's right. That's the in-service cost.

7 Q. Okay. And what is the status of Barry 8 in  
8 terms of physical alterations at the site; do  
9 you know?

10 A. Not very much physical alterations, and  
11 specifically, for the Barry 8 component, there  
12 really is no activity at all at the site.

13 Q. But I believe, at your deposition, you  
14 described an access road as being built?

15 A. That would be infrastructure. It's another  
16 component of the EPC. Sorry. I don't mean to  
17 confuse you. But a component of the contract is  
18 that doing infrastructure work for us, so there  
19 has been actually some very minor work there,  
20 but more work will be ongoing through the  
21 development. It's really just very limited  
22 preparatory work and infrastructure work for  
23 access in and around the site is what's going

1 on.

2 Q. And so infrastructure besides the road, are  
3 there other associated facilities that are  
4 already being procured components, you know,  
5 being moved to the site that you know of?

6 A. No.

7 Q. And even so, can you give us, again,  
8 without verbalizing confidential information, a  
9 ballpark of how much has been spent to date on  
10 Barry 8?

11 A. A limited amount.

12 Q. Can you say whether it's in the millions of  
13 dollars?

14 A. I don't know how much, what level of  
15 confidentiality, what level we have, but it's --  
16 it's, again, limited work just for preparatory.

17 Q. Okay. We can come back to that and talk  
18 about it in a confidential setting, if you  
19 think.

20 So you do not know whether the fuel costs  
21 for Barry 8 over its 40-year expected life would  
22 be more than the project cost a year?

23 A. I think Mr. Looney would have done that

1 analysis.

2 Q. But you, in terms of identifying and  
3 evaluating and moving forward Barry 8 as you  
4 have, don't have that information?

5 A. I don't.

6 Q. So your testimony that the, quote/unquote,  
7 ultimate cost of Barry 8 is, quote/unquote,  
8 reasonably reflected in the estimated in-service  
9 project cost that you provide, it's nothing more  
10 than an opinion about that in-service cost;  
11 right?

12 A. When you say "nothing more than an  
13 opinion," what do you mean by that?

14 Q. Forgive me. You testified about the  
15 ultimate cost of Barry 8.

16 A. Right.

17 Q. And, I guess, I'm just trying to clarify.  
18 By ultimate, you really just mean the in-service  
19 estimated cost?

20 A. That's right.

21 Q. You're not talking about the totality of  
22 the cost associated with Barry?

23 A. No, I'm not.

1 Q. You are aware that the commission in this  
2 case may choose to grant the certificate for  
3 just some of the proposed resources and not all  
4 of them?

5 A. Yeah. I would think the commission has  
6 purview to make that decision, absolutely.

7 Q. Okay. And so have you participated in any  
8 planning for the event that the commission  
9 decides to deny Barry 8?

10 A. I have not at this point.

11 Q. Have there been discussions about starting  
12 to make such plans even if that planning hasn't  
13 begun?

14 A. Not with me. No discussion with me.

15 Q. Wouldn't it be prudent to have those kind  
16 of contingency plans?

17 A. Well, I'm not saying the company doesn't  
18 have contingency plans. It's just for the work  
19 we do, where we provide a resource, it takes a  
20 long time for that process to happen. So if the  
21 commission were to deny this, then another  
22 process to start up could take years and could  
23 delay Barry 8 longer than the company has a more



1 specific immediate need. And so delaying  
2 Barry 8 then, would require a need. I could not  
3 build four in that timeframe. That could be the  
4 impact of it. I don't know specifically if it  
5 would or not, but...

6 Q. But in terms of the agreement that you have  
7 with some vendors for Barry 8, that agreement  
8 has a timeline; right?

9 It sort of interim dates that were  
10 anticipated as part of the project; right?

11 A. That's right.

12 Q. And because this is a contested proceeding,  
13 you all haven't gotten the decision from the  
14 commission that you were expecting on the  
15 timeline in that agreement, have you?

16 A. We definitely don't have the commission's  
17 decision yet.

18 Q. So what are the implications for that  
19 timeline in the agreement?

20 A. The implications are we will continue to  
21 work with the consortium to make decisions on  
22 how we go forward. You know, our goal would be  
23 to -- we see Barry 8 as a very economic option

1 for our customers, and so our goal really would  
2 be to move forward and see if we can make sure  
3 we keep it on target for the in-service by  
4 November 2023 and limit costs as much as  
5 possible.

6 Q. But so in terms if the commission were to  
7 say that, you know, it wanted some additional  
8 analysis from the company to really reassure  
9 that the economic make sense or there is a need,  
10 as we sit here today, do you know whether that  
11 November '23 target in-service date could be  
12 met, if such an additional analysis were  
13 performed?

14 A. I'm not -- I don't know why it couldn't be.

15 Q. Okay. But you don't have any concrete  
16 analysis of how much flexibility there is in  
17 that timeline, do you?

18 A. No. But the way we laid out the structure  
19 was that you have minimal work. You identify  
20 the limited amount of work that you can do to  
21 ensure that you can still meet that November '23  
22 deadline. And that is the focus to minimizing  
23 those costs, but doing the things that need to

1 be done to ensure that we can get that target.

2 Q. And generally speaking, you can expedite a  
3 construction timeline. It's just a matter of  
4 additional costs for expediting?

5 A. Generally, you would expect to pay more if  
6 you plan to expedite. That's right.

7 Q. But as we sit here, you don't have a range  
8 to present the commission of how much expediting  
9 could be done and at what incremental costs?

10 A. No, I don't.

11 Q. But you could readily perform such  
12 analysis, if requested by this commission?

13 A. That evaluation could be performed.

14 Q. And do you, sir, have a position on or an  
15 opinion about whether the economics of Barry 8  
16 would still work for the company if it were to  
17 take on the stranded asset risk as proposed by  
18 Sierra Club witness Wilson?

19 A. I don't see Barry 8 as having stranded  
20 asset risks if we were -- the company or our  
21 customers.

22 Q. Explain.

23 A. Again, in the analysis work that we have

1 done and performed, the ongoing costs are less  
2 than the ongoing benefits of the resource. It  
3 shows significant value through time for our  
4 customers.

5 Q. So if you're so confident in your analysis,  
6 then why not have shareholders take on that  
7 risk?

8 A. I think Mr. Kelley talked about this  
9 yesterday. I can represent that Barry 8 is  
10 going to be an efficient resource for our  
11 customers, and it will be really more efficient  
12 than any other resource, any other thermal  
13 resource, on the Southern system, so from a  
14 stranded cost risk is very low for Barry 8.

15 Q. So I understand why you would say that as a  
16 shareholder, but is there any way in which  
17 Southern tries to address a potential conflict  
18 of interest with employees who are shareholders  
19 but also tasked with seeking least cost  
20 solutions for customers?

21 A. Could you maybe clarify your question just  
22 a little bit?

23 Q. Is there a protocol? Is there some kind of

1 Southern protocol that checks a potential bias  
2 by employees, such as yourself, who is a  
3 shareholder, who is supposed to be performing  
4 analysis in the interest of customers?

5 A. Sure. I think in this particular process,  
6 there was a built-in check. Because, remember,  
7 I independently identified a project at the  
8 Barry site for a combined cycle, and then I gave  
9 that information, that cost information of  
10 performance information, to someone else, and  
11 then they independent of me evaluated that  
12 against other options available in the  
13 marketplace. So I think that independence by  
14 itself is a way that is a check.

15 Q. Okay. And specifically, you gave your work  
16 product to Mr. Looney?

17 A. To his team. That's right. The  
18 performance evaluation.

19 Q. Anyone else who was independent in terms of  
20 the check?

21 A. Mr. -- I think Mr. Kelley was involved in  
22 that process as well.

23 Q. Anyone else who is --

1 A. I don't know who was all in that process.

2 Q. Okay. So I think I heard you just not give  
3 an opinion on whether the commission should  
4 condition approval on company shareholders  
5 taking on the stranded asset risks for Barry 8;  
6 is that right?

7 A. Yeah. I don't see a significant risk. I  
8 don't see any risk for Barry 8 on the stranded  
9 asset perspective.

10 Q. But as far as my question, which was about  
11 your opinion about Ms. Wilson's recommendation  
12 that the commission, should it decide to approve  
13 Barry 8, should condition that approval on  
14 shareholders bearing the stranded asset risks,  
15 you do not have an opinion on that, do you?

16 A. The commission has a wide purview in this  
17 case to make decisions as they see fit.

18 Q. Is that a yes or no, sir?

19 A. You know, the commission -- again, I would  
20 leave it to the commission.

21 THE COURT: Just give an answer, and  
22 then you can give your explanation on the  
23 answer. Let's do that, because we're going to

1       be here all day, if you don't.

2                   THE WITNESS:   Sorry, Your Honor.

3       BY MS. CSANK:

4       Q.     So is that a no, sir?

5       A.     No, I don't think that --

6       Q.     You don't think what, sir?

7       A.     I don't think that the company should take  
8       stranded asset risks.

9       Q.     And what's that opinion based on?

10      A.     Again, it's a low risk for the asset to  
11      happen, but it's -- the asset is being built for  
12      our customers, and they get all of the benefits  
13      from having the asset built for them.

14      Q.     And when you say "all the benefits," you're  
15      aware that Mr. Kelley identified that  
16      predominately those benefits consist of fuel  
17      saving; is that right?

18      A.     I know that he said there was fuel savings.  
19      Whether that was the predominate benefit or not,  
20      I don't recall, but maybe depending on these  
21      evaluated scenarios.

22      Q.     Well, what's your opinion - let's put aside  
23      Mr. Kelley -- of what the main driver, what are

1 the main drivers for those significant savings  
2 that you just referred to?

3 A. I would think they would be energy and  
4 capacity savings.

5 Q. So let's break that down. Energy savings,  
6 is that based on fuel savings?

7 A. That's right. By running this resource,  
8 you don't run other resources that are more  
9 expensive, and that savings is a benefit to our  
10 customers.

11 Q. Do you have any analysis to provide on  
12 whether those other resources are going to be  
13 remain in use to the customers as a result of  
14 adding Barry 8?

15 A. The company needs all of those resources in  
16 order to meet its capacity requirements. And so  
17 what's happening is you're adding both a  
18 capacity resource in Barry 8 and a very low-cost  
19 energy resource. So it's able to defer capacity  
20 and get that benefit and provide savings of fuel  
21 that doesn't have to be burned in other units  
22 otherwise for energy.

23 Q. But you don't have any analysis that



1 compares Barry 8 to some portfolio of low to  
2 no -- excuse me -- low to no fuel cost, low to  
3 no carbon-emitting resources, do you?

4 A. I don't. But Mr. -- again, Mr. Looney  
5 provided analysis of several scenarios of  
6 operating the unit.

7 Q. If you miss your March 2020 -- hold on for  
8 a moment, sir. Strike that.

9 Your analysis, sir, did not factor in  
10 customers' climate or clean energy commitment,  
11 did it?

12 A. No, not directly. Again, we consider those  
13 in trying to evaluate the least cost option for  
14 our customers.

15 Q. What do you mean?

16 A. I mean, when we're evaluating the different  
17 combined cycles available to us at the Barry  
18 site, we chose the best risk adjusted value for  
19 our customers.

20 Q. What do you mean by "risk adjusted  
21 value"?

22 A. I mean, you compare capital costs of one  
23 resource to another, efficiency of one resource

1 to another, technology type, historical  
2 performance of that technology. All of that is  
3 considered when you try to get the best value  
4 for your customers.

5 Q. But I think you've said, and I don't want  
6 to belabor the point, but in terms of those  
7 factors that you just described, your analysis  
8 is limited to comparing combined cycle  
9 generators at the Barry site?

10 A. That right. That's what I do.

11 Q. Sir, you didn't perform any stranded asset  
12 risk analysis other than the analysis that you  
13 refer to in your rebuttal testimony in response  
14 to Sierra Club's analysis; right?

15 A. I did not perform stranded asset analysis.

16 Q. Rather that -- just to be clear, I meant  
17 that the analysis on behalf of Sierra Club's  
18 expert witnesses?

19 A. I reviewed that. I reviewed that analysis,  
20 yes.

21 Q. Sir, you've heard of the, quote/unquote,  
22 climate crisis?

23 A. Can you be more specific?

1 Q. That term, the "climate crisis," refers to  
2 changes in global temperature, global sea level  
3 rise, other conditions associated with the  
4 earth's climate including changes in  
5 precipitation, winds, waves and storms,  
6 catastrophic weather events?

7 A. Yes, I've heard of that.

8 Q. And so far as you know, Southern Company  
9 accepts the reality of the climate crisis?

10 A. I think that the company believes that the  
11 climate change is real.

12 Q. Okay. There's no direct analysis of  
13 Barry 8 under Southern's climate goals, is  
14 there?

15 A. No. Because of its efficiency, it will  
16 contribute to lowering carbon, a utilization of  
17 the production of carbon in our fleet.

18 Q. Right. But the task at hand is to identify  
19 solutions that are least cost. So simply saying  
20 that it may be more efficient than the current  
21 less efficient system isn't actually  
22 establishing that it's the optimal solution, is  
23 it?

1 A. Not necessarily. But again, in this case,  
2 the company evaluated a series of options, and  
3 it was part of the portfolio, the least cost  
4 option.

5 Q. Okay. And we're getting to the end, sir, I  
6 want to reassure. Are you doing all right?

7 A. I'm fine.

8 Q. Would you like some more water?

9 A. I have little more left. Thank you.

10 Q. In your rebuttal testimony, you refer to  
11 carbon capture and sequestration?

12 A. I mention that, yes.

13 Q. And you don't have a cost estimate of  
14 retrofitting Barry 8 with that kind of  
15 technology, do you?

16 A. I don't.

17 Q. Just a little bit of cleanup.

18 On page 3 of your rebuttal testimony -- do  
19 you have that with you, sir?

20 A. I do. One moment, please. Yes.

21 Q. Okay. You see on lines 11 through 13 where  
22 you provide -- I'll read it for the benefit of  
23 everyone, and you tell me if I read it

1 correctly.

2 "And I expect the industry will  
3 continue" -- let me start with the question.  
4 That's on line 2 to 6.

5 "Do you agree with the witness that fossilized  
6 generation presents risk such that utilities  
7 should move away entirely from constructing new  
8 fossil generation, such as Barry Unit 8?"

9 Do you see that?

10 A. I do.

11 Q. Okay. And then, as part of your answer,  
12 and I'm going to just skip to this part for the  
13 time's sake.

14 You say, "And I expect the industry will  
15 continue to seek transition as technology  
16 evolving and the cost capabilities and  
17 scalability of those technologies improve."

18 Do you see that?

19 A. I do.

20 Q. And just to clarify, when you say  
21 "technologies" there, in your general opinion,  
22 that includes all supply side resource  
23 technologies that are within your job

1 responsibilities?

2 A. It does. Generally, I was focusing on the  
3 technologies, like the solar technology and  
4 battery technology.

5 Q. Okay.

6 A. But I think, in general, you can say that,  
7 yes.

8 Q. And then in the next paragraph, about  
9 midway through, you reference this RMI report,  
10 Rocky Mountain Institute, and you identify that  
11 that report addresses these 68 gigawatts of gas  
12 fired power plant capacity that have been  
13 announced for operation by 2025.

14 Do you see that?

15 A. I do.

16 Q. And so if -- if all of that proposed gas  
17 fired generation is built, you don't know what  
18 will happen to gas prices, for example?

19 A. I do not.

20 Q. Nor do you know what that buildout would  
21 mean for gas supply risks, such as pipeline  
22 failures?

23 A. I do not know that generally, but

1 specifically, for Barry 8, it is in a very  
2 favorable location on our system, and it's  
3 tremendous flexibility from a supply  
4 perspective, both from a transportation  
5 perspective and a supply perspective.

6 Q. What support do you have for that, sir?

7 A. What support do I have for that? Well, we  
8 have the -- in that region, where Barry 8 is,  
9 the firm transportation is available and will be  
10 used for Barry 8 today. So that's not an  
11 incremental addition that will be required, and  
12 so there is that utilization that will be able  
13 to use and be grandfathered with us through time  
14 through the life of that asset.

15 Q. Okay. But no documents besides testimony?

16 A. I don't have a specific document.

17 Q. And you're familiar with Mr. Kelley's  
18 rebuttal testimony, where he identified, sir, in  
19 transmission costs associated with adding  
20 Barry 8; right?

21 A. I heard the discussion yesterday, yes.

22 Q. Okay. And so you don't have analysis one  
23 way or another that reconciles how those costs

1     compare to benefits that you've been describing  
2     for us today?

3     A.    Again, the ongoing costs of benefits would  
4     have been evaluated by Mr. Looney.

5     Q.    Got it.   Okay.

6           And the -- your evaluation also identified  
7     the possibility of building another unit, like  
8     Barry 8, at the same site?

9     A.    We did.   We did provide an option for the  
10    company to do that.

11    Q.    Why that option?

12    A.    Because, again, the site provided some of  
13    that availability, both physical siding and  
14    infrastructure, for us to be able to do that,  
15    and the thought was the consortium would be  
16    there building, and it could be some economy  
17    scales of providing a second unit at that point  
18    in time, and so they gave us that option.

19    Q.    Do you have an opinion about whether the  
20    company should proceed with that option?

21    A.    I think the company evaluated in the  
22    process and has decided not to move forward at  
23    this time as part of the option available to the



1 company.

2 Q. So the answer is, no, you don't have an  
3 opinion?

4 A. No.

5 Q. Sir, if you could be good enough to turn to  
6 page 4 of your rebuttal testimony.

7 A. Okay.

8 Q. And I think, again, for time's sake, I  
9 don't think the question matters so much, but if  
10 you need it, take the time to review the  
11 question. But I want to direct your attention  
12 to lines 15 to 19.

13 Let me know when you're there and had a  
14 chance to review them.

15 A. Okay.

16 Q. And for everyone's benefit, I'm just going  
17 to read it and make sure that I say it  
18 correctly.

19 "My interpretation of the data shown  
20 supports the title statement indicates that  
21 advanced combined cycle technology, like Barry  
22 Unit 8, are in most instances more cost  
23 effective than solar generation and wind

1 generation in meeting a system's reliability  
2 need when evaluated appropriately."

3 Did I read that correct?

4 A. That's right.

5 Q. And what are you referring to there, what  
6 data?

7 A. The data in the EIA report.

8 Q. You also refer to that EIA or DEIA, the  
9 Energy Information Administration.

10 That's a federal agency; right?

11 A. That's right.

12 Q. You refer to that at the top of this  
13 morning in your opening statement?

14 A. I did. That's right.

15 Q. And what is -- where is the documentation  
16 of your analysis, or what's the basis, rather,  
17 for your statement?

18 A. Well, the basis would be -- and I'm  
19 specifically discussing the liability needs and  
20 renewable generation because of their inability  
21 to be fully dispatchable. Like a very flexible  
22 resource, like Barry 8, cannot provide the same  
23 reliability benefit that resources like solar

1 and/or wind provide.

2       There's benefits to solar and wind can  
3 provide, but it's just not the same kind as you  
4 can get from a dispatchable resource that's  
5 flexible, operated at night, day, anytime. That  
6 was the basis for that statement.

7 Q.    So you're not opining there about solar and  
8 wind paired with batteries, are you?

9 A.    No, not specifically.

10 Q.    Do you have a comparable analysis of such  
11 resources paired with batteries?

12 A.    I don't. But I did look at some of the  
13 work done by Ms. Wilson and would note that in  
14 all instances her portfolio was more expensive  
15 from a cost perspective than the examples of the  
16 Barry 8 portfolio cost that she had in the work  
17 papers. It's not really an appropriate way  
18 because of the LCOE to do the evaluation. But  
19 her portfolio was more expensive in all  
20 scenarios than the Barry 8 portfolio.

21 Q.    But to be clear, besides your critique of  
22 Ms. Wilson's analysis, you, yourself, did not  
23 perform such analysis, did you?

1 A. I did not.

2 Q. And LCOE stands for Levelized Cost of  
3 Energy?

4 A. Yes.

5 Q. Okay. And you criticized Ms. Wilson and  
6 other engineer witnesses for their reference to  
7 the LCOE values, do you not?

8 A. Well, in the context of trying to do a  
9 comparison, to do a comparative analysis of one  
10 technology, like a combined cycle, to another  
11 technology, like a wind or solar, LCOE would not  
12 be appropriate to do that.

13 Q. So the answer is, yes, you criticize them?

14 A. Yes, I do.

15 Q. And could you please point me to the extent  
16 that you can to where Ms. Wilson or Mr. Detsky  
17 (phonetic), Sierra Club witnesses, say that the  
18 least cost of energy should be the sole basis  
19 for a resource planning decision?

20 A. I would have to review Ms. Wilson's  
21 testimony.

22 Q. Would it surprise you if they never said  
23 that?

1 A. Well, it would surprise me if the  
2 implication of what they were saying was not  
3 that the portfolio identified in her testimony  
4 was not represented as a least cost portfolio.  
5 That would surprise me.

6 Q. Okay. So let's just assume that - we'll  
7 get into Ms. Wilson's testimony, and the  
8 testimony is what it is.

9 But you're aware that the least cost of  
10 energy, including the LCOE, is the commonly used  
11 tool for screening various technologies,  
12 economies screening?

13 A. For screening like technologies with  
14 similar lives.

15 Q. Moving onto your page 5 of your rebuttal  
16 testimony, and there you point to some large  
17 combined cycle generators that Florida Power and  
18 Light had billed.

19 Do you see that at the top of the page?

20 A. I do.

21 Q. And specifically, you refer to the  
22 Okeechobee combined cycle generator and the  
23 Dania Beach combined cycle generator, which that

1 company has a clever way of cloning clean energy  
2 efforts.

3 Do you know what year those projects,  
4 Okeechobee and Dania Beach, were approved?

5 A. I do not know.

6 Q. Subject to check, would you agree that  
7 those were before Florida Power and Light  
8 announced its large energy storage project and  
9 manatees?

10 A. I have no way of knowing without checking  
11 that, no.

12 Q. Well, subject to checking.

13 A. Sure.

14 Q. Okay. And we established earlier that  
15 technology is changing, and for the most part,  
16 improving over time and changing fairly rapidly.

17 Would you agree?

18 A. In certain areas more than others, but yes.

19 Q. So even a data point, such as a resource  
20 decision that's a couple of years older than  
21 another, may be -- may not be representative of  
22 the market conditions today?

23 A. I think that could happen particularly in

1 the solar realm.

2 Q. What about batteries?

3 A. That probably could happen with the battery  
4 realm as well.

5 Q. Okay. And you agree that the larger  
6 combined cycle generator is typically, as far as  
7 a new, a new unit, that there would be  
8 accommodating the scale?

9 A. All else equal, I would say it would  
10 accommodate the scale, yes.

11 Q. And you identified at the sweet spot or the  
12 potentially least cost combined cycle generator  
13 would be one such as the Okeechobee project  
14 that's at 1,700 megawatts; correct?

15 A. In my deposition, I did speak that those  
16 larger ones, I would generally expect them to be  
17 a little more less cost per unit. Overall,  
18 obviously, I would say total cost is more  
19 greater, but less cost per unit, if you're  
20 looking at that.

21 Q. So the answer is yes?

22 A. Yes.

23 Q. And you would also agree that those

1 resource decisions by Florida Power and Light  
2 and the Florida Commission, they also may  
3 involve different fuel supply infrastructure  
4 costs and risks, et cetera?

5 A. Yes, I think they would.

6 Q. And Barry 8 specifically?

7 A. Yes, I think they would.

8 Q. And now, sir, if you will turn to page 7 of  
9 your rebuttal testimony. And there, you  
10 identify several types of risks raised by  
11 intervenors.

12 A. That's right.

13 Q. You see all four of those?

14 A. I do.

15 Q. Okay. And do you have any documents of the  
16 company's analysis of risks, such as these, that  
17 predate the intervenor's testimony?

18 A. I believe Mr. Weathers would have some  
19 documents in his reserve margin setting related  
20 to his idea of overreliance on natural gas,  
21 winter reliability, risks caused by natural gas.  
22 Again, I'm not an expert in everything he does,  
23 but those could possibly be things he considered



1 in his reserve margin setting.

2 Q. You didn't verify that analysis?

3 A. I did not.

4 Q. And then finally, in your final page of  
5 your rebuttal testimony, sir. Please take a  
6 moment to just review the preceding question and  
7 your answer before I get you to the part that I  
8 want to clarify.

9 A. Which?

10 Q. Pages 15 and 16. I'm looking at that last  
11 question that begins on line 10 of page 15.

12 And just for the benefit of those who don't  
13 have a copy, the questions reads, "Do you  
14 believe that the gas resources in the proposed  
15 portfolio prevents extended cost risks that  
16 should preclude them from being approved by the  
17 commission?"

18 I read that correctly; right?

19 A. That's right.

20 Q. Just take a moment, sir, just to review  
21 your answer.

22 A. Okay.

23 Q. All right. Just to direct you to lines 21

1 to 22 on page 15 in that carryover sentence in  
2 your answer, I'm going to read these, and you  
3 tell me if I read them correctly.

4 For Barry Unit 8 to become a stranded  
5 asset, you say, "Conditions would have to exist  
6 where fossil fuels generation is no longer a  
7 part of the company's need of supply side  
8 resources. I do not foresee such a development  
9 during the life of Barry Unit 8."

10 What is the basis for that prediction,  
11 that's the final prediction that you made?

12 A. Sure. I think there are several things  
13 that I would say. Number one is we have  
14 performed, and Mr. Looney can talk about the  
15 analysis, looking in multiple scenarios the  
16 operation of Barry Unit 8. In every one of  
17 those scenario, the ongoing benefit exceeded the  
18 ongoing cost of Barry Unit 8, which I would  
19 think, in thinking about stranded cost, that  
20 would be part of the equation.

21 Secondly, I would just look to something as  
22 simple as the EIA report, the independent report  
23 from the federal government, that shows

1 significant growth in the utilization of gas and  
2 gas resources in the electric industry, and that  
3 gross would be an indicator that at least from  
4 their perspective, there is no -- they would not  
5 see it as a stranded asset, but see the volume  
6 of gas go up.

7 And then, finally, the RMI report itself,  
8 it talks about the addition of the evaluation --  
9 it didn't include Barry 8 -- of 63 other  
10 combined cycles. So broadly speaking, it would  
11 appear to me that other companies that felt like  
12 the combined cycle technology is a valuable and  
13 beneficial resource long term as well.

14 So those are the things that would make me  
15 think it's unlikely to be a stranded asset, and  
16 along with the fact that it will be -- I'm  
17 sorry -- that the most efficient thermal  
18 resources on our --

19 Q. And forgive me if I wasn't clear. I was  
20 actually not asking you about that.

21 I was asking you about the company's fleet  
22 no longer having fossil fire fuel generation  
23 within Barry Unit 8's lifetime.

1     A.    Right.  So the idea there was we -- again,  
2     because of the efficiency of the resource --  
3     right? -- no other resource would have that  
4     level of thermal efficiency.  So if you're  
5     thinking about stranded costs, then I'm not  
6     going to retire a unit that is the most  
7     efficient resource thermally.  I would have to  
8     retire every other resource on the fleet before  
9     I got to Barry 8, and so that's the situation  
10    that seems like it would have to exist.

11           I don't know how we would get there, but  
12    that's what would have to exist.

13    Q.    I appreciate that, sir.  I want to wrap  
14    this up quickly, and just bear with me, please.

15           What I actually driving at was this notion  
16    that there will not -- that you expect -- this  
17    reference to conditions would have consider to  
18    fossil fuel generation is no longer part of the  
19    company's fleet of supply side resources.

20           And maybe the better way to go at this is  
21    to ask, how do you reconcile this comment, which  
22    is basically that there will be gas fired  
23    generation on the rest of the system throughout

1 this 40-years, from 2023 to 2063, with the  
2 Southern Company's commitment to a low to no  
3 carbon system by 2050?

4 Do you need something like carbon  
5 sequestration and all those --

6 A. Those could all -- that could all be a  
7 possibility.

8 Q. Okay. But you don't have any cost analysis  
9 of how much that kind of environmental  
10 retrospect would be?

11 A. No. I haven't done that, no.

12 MS. CSANK: Okay. Thank you very  
13 much for your time, sir.

14 THE COURT: All right. I stand  
15 corrected on the order. I was going in the  
16 order in which I took appearances, where I had  
17 all the 18 names. I have to remember them.

18 So we did -- for purposes of cross,  
19 we have gotten a little bit out of order.  
20 Let's go ahead and get back on the established  
21 order.

22 That would be Energy Fairness. Is  
23 here any questions from Energy Fairness?

1 MR. GRIFFIN: No.

2 THE COURT: American Senior  
3 Alliance, any questions?

4 MS. HOOPER: Your Honor, we don't  
5 have any questions.

6 THE COURT: Thank you, sir.  
7 Alabama Coal Association?

8 MR. CAGLE: No, sir, Your Honor.

9 THE COURT: So Energy Alabama/GASP.

10 MR. JOHNSTON: Yes, Your Honor.

11 THE COURT: You okay, Mr. Bush?

12 THE WITNESS: I got my second water.

13 THE COURT: I got my second coffee,  
14 so I'm good.

15 CROSS-EXAMINATION

16 BY MR. JOHNSTON:

17 Q. Hello, Mr. Bush. My name is Keith  
18 Johnston. I'm here representing Alabama Energy  
19 and GASP in this matter.

20 We have been introduced previously in your  
21 deposition; is that correct?

22 A. That's right.

23 Q. You had talked a little bit about this is

1 the most efficient thermal unit resource in the  
2 fleet.

3 That's your testimony?

4 A. That's right.

5 Q. And how much experience does Alabama Power  
6 have running one of these J-plants?

7 Do I have a that correct?

8 A. That's right. No specific history with the  
9 J-combined cycle, but significant experience  
10 with the technology. And really, J is an  
11 evolution of the existing technologies. It's  
12 been around since the 1970s, and so Alabama has  
13 significant operational experience with the  
14 combined cycle facilities.

15 Q. But you haven't run this new generation at  
16 all?

17 A. Not the J-class combined cycle, no.

18 Q. Do you know how many total hours these  
19 units have been operating?

20 A. As of last fall, over 800,000 hours.

21 Q. 800,000 hours in how many units? Where are  
22 those units?

23 A. These are really global units, and as I

1 recall, there's about 39 of the J-class units  
2 running.

3 Q. Do you know if any of these units have been  
4 operated in coastal areas?

5 A. I don't know. I'm not aware of any.

6 Q. Do you know about the specific  
7 environmental characteristics of the coastal  
8 areas that may make operations of these units  
9 unique?

10 A. It depends how direct -- I am familiar with  
11 coastal operations of units and requirements for  
12 certain components of a resource, depending how  
13 close they are to, say, a saltwater source.

14 Q. So with the saltwater influence, you also  
15 have heavy rain from the coast. You also have  
16 the potential for hurricanes.

17 There's a lot of environmental factors that  
18 may affect the operation and efficiency of these  
19 units?

20 A. That right. Every site is unique, and that  
21 has to be considered in the development of  
22 the facility.

23 Q. And these model J-units, in particular, are



1 exposed to air. Partly, the combustors are air  
2 cooled?

3 A. That's right.

4 Q. And does that make them vulnerable to these  
5 weather events in the coast?

6 A. No. I wouldn't say they were -- they were  
7 more vulnerable than another unit. As a matter  
8 of fact, the design that we have in place, we  
9 try to compensate for those differences in the  
10 environmental issues that that unit might deal  
11 with. So we included that in the specification  
12 for building the facility.

13 Q. And what does that specification and  
14 inclusion include, if you will?

15 A. Well, it's a number of different things.  
16 So it would be everything from temperature  
17 requirements to the type of material used at the  
18 facility and items like that.

19 Q. Are there any of these model J-units  
20 operating in the southeast?

21 A. Not at this time. There is one scheduled  
22 to come in service just prior to Barry Unit 8.

23 Q. So we don't have any examples of these

1 units operating in the southeast?

2 A. Not in the southeast at this time, no.

3 Q. Talking about some of the environmental  
4 risks associated with operating at Barry Unit 8,  
5 we discussed some of the climatic issues.

6 On this particular site, are you aware of  
7 the coal ash issues on the site?

8 A. I'm not aware of any coal ash issues on the  
9 site.

10 Q. Is there a coal ash pond on the site?

11 A. Not where we're building the facility.

12 Q. How close is this facility to the coal ash  
13 pond of Barry?

14 A. I would just have to pull out a site survey  
15 and see. I'm not sure.

16 Q. Less than a mile?

17 A. That seems reasonable. In a mile to less  
18 than a mile, I would think.

19 Q. And there are operations right now to  
20 either cap and close or excavate this coal ash  
21 pond?

22 A. Yeah. I'm not an expert on the facility of  
23 what's going on Barry 8 from an ash pond

1 perspective.

2 Q. Understood. But there is also  
3 infrastructure that you're having to develop  
4 down at Barry 8 to get ready for this unit; is  
5 that correct?

6 A. That's right.

7 Q. And so there has to be some sort of  
8 coordination among the company about how they're  
9 going to get multiple major infrastructures  
10 projects done on this site?

11 A. That's right.

12 Q. And is there any documentation of the  
13 coordination of this or how this will be taken  
14 out?

15 A. Well, we have coordinators from Birmingham  
16 to the site itself, folks there that would focus  
17 on -- I'm sure focused on the coal ash project  
18 and focused on this project. So because you  
19 have site people, the people at the Barry site  
20 together working on the project, you should  
21 have -- should be no problem with coordination.

22 Q. So there's no problem at all with major  
23 infrastructure projects going on in this area

1 simultaneously?

2 A. No. It can all be facilitated and  
3 coordinated.

4 Q. Have you had public meetings with the  
5 residents in this area?

6 A. Not to my knowledge.

7 Q. Are the residents aware of what the plans  
8 are for this area?

9 A. I'm not sure what the residents would be  
10 aware of.

11 Q. You discussed a little bit on the  
12 environmental permitting side on this, and you  
13 said there's going to be an air permit.

14 And you're in the process in getting this  
15 air permit; correct?

16 A. That's correct.

17 Q. Do you know where you are in that process?

18 A. It's been within the last couple of weeks  
19 that we actually submitted the permit, and so we  
20 just began that process.

21 Q. Within the last couple of weeks?

22 A. That's right.

23 Q. So when do you anticipate getting this air

1 permit?

2 A. It is not a -- as far as I understand the  
3 process itself, there's a number of stages to  
4 the process, and so it's no definitive time  
5 frame, but our expectations would be early next  
6 year.

7 Q. So do you anticipate getting that in plenty  
8 of time before your proposed in-service day?

9 A. Oh, absolutely.

10 Q. And what about a Clean Water Act permit?

11 A. I don't believe there will be a Clean Water  
12 Act permit specifically needed for Barry Unit 8.

13 Q. Do you have a close cycle unit, closed loop  
14 cycle unit?

15 A. That's correct. At Barry 8.

16 Q. So there will be water withdrawals?

17 A. Well, the existing plant -- remember, we're  
18 building at this plant site, as you noted, and  
19 the water permit itself for the existing plant  
20 is expected to cover Barry Unit 8 -- will cover  
21 Barry Unit 8.

22 Q. Are there storm water permits -- are there  
23 storm water permits that are required for this

1 site?

2 A. There are, and we have received those.

3 Q. You've already received those permits?

4 A. That's right.

5 Q. And just to clarify -- I know we've covered  
6 some of this material, but I want to make sure  
7 the record is clear, and I want to make sure  
8 that I'm clear on what's happening.

9 Vendors approached Alabama Power about this  
10 turnkey proposal in 2016; is that correct?

11 A. No, that's not correct. Actually, we had a  
12 vendor approach us in 2016, and --

13 Q. Southern Company Service.

14 A. Right. They approached Southern Company  
15 Service in 2016. And then through our planning  
16 and processes, we identified the need of Alabama  
17 Power, and we then approached the vendors with a  
18 package in early 2018.

19 Q. In early 2018?

20 A. That's right.

21 Q. So then, in August of 2018, final proposals  
22 were submitted?

23 A. That's right.

1 Q. And they were submitted to Southern Company  
2 Services?

3 A. That's right.

4 Q. Were they submitted to Alabama Power  
5 simultaneously?

6 A. We work on behalf of Alabama Power, and so  
7 the service -- it's actually Southern Company  
8 Services on behalf of Alabama Power.

9 Q. So Southern Company Services were the only  
10 ones who got those proposals? Alabama Power did  
11 not get those proposals?

12 A. I mean, we have Alabama Power Company on  
13 the overall team, so Alabama Power had access to  
14 all of the proposals.

15 Q. And in that capacity, RFP was issued in the  
16 fall of 2018?

17 A. That's my recollection, yes.

18 Q. So similarly, the renewable RFP was issued  
19 in the fall of 2018?

20 A. Again, that's what I recall.

21 Q. And then your preliminary award letters for  
22 the turnkey operation was issued in November of  
23 2018?

1 A. That's right.

2 Q. And so in less than six months, it was  
3 already a decision to go forward with the  
4 turnkey project at Barry?

5 A. Not at all. That's not at all what  
6 happened. The preliminary award letter did not  
7 commit the company to anything at all. What it  
8 did, it recognized those specific manufacturing  
9 equipment and consortium that we would be using,  
10 and that's what was submitted into the process  
11 for evaluation purposes. So we had no idea  
12 whether or not the company offering would be  
13 economic or not relative to other market  
14 offerings.

15 So at that point in time, we were really  
16 just submitting and making no commitment at all  
17 with the consortium.

18 Q. But you had made a decision about this  
19 particular unit at Barry Unit 8? This  
20 particular model at Barry Unit, this turnkey  
21 proposal?

22 A. That's right.

23 Q. And that decision was made by November of



1 2018?

2 A. That's correct.

3 Q. And then you executed the EPC agreement, or  
4 the engineering procurement and construction  
5 agreement, the contract, in May?

6 A. That's correct. In May of 2019.

7 Q. And you also testified in your deposition  
8 that in March of 2020, limited notice to proceed  
9 had been given to the vendors; is that correct?

10 A. That's right. The contract has a  
11 requirement in March of '20, of this year, they  
12 need a limited notice to proceed.

13 Q. Of course, today is -- what is today?  
14 March?

15 A. 10th.

16 Q. I lost count from last night. March 10th.

17 So in light of that statement in your  
18 deposition, how does that change the schedule of  
19 this project?

20 A. We really don't expect it to change the  
21 schedule at this point in time.

22 Q. Did you anticipate having an order from the  
23 commission on this certificate at that time?

1 A. Well, obviously, we would have preferred it  
2 at this time, but the process that we lay out  
3 lays out minimal schedule of payments for us to  
4 try to -- we want to identify the minimal amount  
5 work that has to be required to ensure that we  
6 hit the commercial operation date, so that's  
7 really the process that we're in. We can stop  
8 at any time at this gated process so we can  
9 stop -- choose to at any point in time. So it  
10 really hasn't affected our ability to continue  
11 to move forward.

12 Q. I understand that. And this is a new  
13 question.

14 Was this hinged -- was that statement, was  
15 it based on getting an order from the commission  
16 by March 2020? The statement that limited  
17 notice to proceed could be given to the vendors?

18 A. No.

19 Q. Do you know when the original hearing was  
20 scheduled in this matter?

21 A. I don't recall. It seems like it was  
22 January, but I'm not positive.

23 Q. You're correct.

1 A. Okay.

2 Q. It was January of this year.

3 Have you ever been involved in a capacity  
4 increase of this magnitude?

5 A. Involved in what sense?

6 Q. Involved in the generation planning and  
7 development?

8 A. I see. If you're talking about the  
9 capacity increase relative to Barry Unit 8,  
10 which is my participation, again, what do you  
11 mean by --

12 Q. Let's back up.

13 Have you ever been involved anywhere in a  
14 capacity increase of this magnitude? 2,400  
15 megawatts, part of a package of the 2,400  
16 megawatts of new generation?

17 A. In my involvement in this case is the  
18 800 -- the 743 megawatt combined cycle Barry 8.  
19 The overall package is 2,400, Alabama is  
20 requesting certification. I don't recall being  
21 involved in a certification requirement of this  
22 magnitude, but I don't -- remember, I'm usually  
23 specifically focused on the technology, and I'm

1 not necessarily thinking in the broader terms of  
2 2,400, so I've been --

3 Q. So the short answer to that is, no, you  
4 haven't been involved in a capacity increase of  
5 this magnitude.

6 But you were involved in Barry Unit 6 and  
7 7; correct?

8 A. If I was, it would have been in possibly  
9 some commercials. It was not in planning and  
10 development of the project. At that point in  
11 time, I was working on the trading floor, and so  
12 it could have been some startup optimization  
13 work, would have been my only involvement.

14 Q. Startup optimization work, what is that?

15 A. When you place a unit in service, you  
16 actually have to test that unit, and it  
17 produces -- it needs fuel, and it produces  
18 megawatt hours. And so on the training floor,  
19 we dealt with the optimization of natural gas  
20 and electricity, and so we would work the  
21 facility to try to optimize the utilization and  
22 testing prior to actually going into full  
23 service.

1 Q. And do you know when those certificates  
2 were issued for Barry Units 6 and 7?

3 A. I do not.

4 Q. Do you know what the status of these units  
5 are?

6 A. Of Barry 6 and 7?

7 Q. Barry 6 and 7.

8 A. As far as I know, they're in service and  
9 operating fine.

10 Q. And how long have they been operating?

11 A. Again, I would be going by memory. I  
12 believe it was in either '99/2000 time frame is  
13 when they began operating.

14 Q. Do you know if those units are going to be  
15 retired soon?

16 A. I do not know.

17 Q. Do you know the nameplate capacity of those  
18 units?

19 A. I don't.

20 Q. Subject to check, Barry Unit 6 has a  
21 nameplate capacity of 535 megawatts?

22 A. That seems reasonable.

23 Q. And Barry Unit 7 has about the same?

1 A. About the same.

2 Q. So together, those two units are 1,070  
3 megawatts, thereabouts, if my math is correct?

4 A. Okay.

5 Q. So that's less than half of the power  
6 that's being proposed for this petition --  
7 correct? -- from a capacity standpoint?

8 A. Yes.

9 Q. From a megawatts standpoint.

10 The integration of those two units into the  
11 this package, how was that -- in the Barry Unit  
12 8, how was that considered, those two units?

13 A. So just to clarify to see if I understand  
14 your question, you're talking about integrating  
15 6 -- Unit 6 and 7.

16 Q. Let me just back up. Barry Units 6 and 7  
17 are still operating?

18 A. That's correct.

19 Q. And they will continue to operate for --  
20 we're unsure of the specified time.

21 A. That's right. Expected 40-year life.

22 Q. Expected 40-year life. If it was 2000, it  
23 may be 2040?

1 A. Roughly.

2 Q. How was the site choice and the generation  
3 and planning incorporated into those two units,  
4 considering those two units are in existence on  
5 this site, incorporating Barry Unit 8?

6 A. Well, first of all, those two units are  
7 natural gas facilities. And so when we evaluate  
8 sites, we look at all of the different  
9 components and requirements for adding a  
10 resource to the system, and we do consider the  
11 gas, and because the gas infrastructure in that  
12 reason is so flexible and does provide such a  
13 benefit to the resource, that's one of the  
14 reasons that Barry 8 was identified as the most  
15 economic option for the customer.

16 So we absolutely considered the gas  
17 infrastructure, and we have a plan in place that  
18 allows those units to continue to operate with  
19 no impact by adding Barry Unit 8.

20 Q. No impact. When you say "no impact," what  
21 do you mean "no impact"?

22 A. Those units should be able to continue to  
23 operate independently without regard to what's

1 going on at Barry Unit 8.

2 Q. And part of that is based on the  
3 transmission at that site?

4 A. That's correct.

5 Q. Now, the company has claimed trade secret  
6 confidential on the price, the total price of  
7 Barry Unit 8?

8 A. That's right.

9 Q. And it's going to operate for 60 years or  
10 so; correct?

11 A. Our design is expected to be 40 years.

12 Q. I'm sorry. 40 years.

13 So if it's in-service date by 2023, that  
14 means Alabama Power expects Barry Unit 8 to  
15 operate until 2063?

16 A. That's correct.

17 Q. And Alabama Power customers are going to  
18 pay for Barry Unit 8?

19 A. That's correct. And receive the benefits  
20 that it provides.

21 Q. So they'll be paying for it over the  
22 lifetime of those 40 years, until 2063?

23 A. That's correct.



1 Q. Barry Unit 8 also requires fuel for the  
2 lifetime of this project; correct?

3 A. Yes.

4 Q. Will that fuel cost as much as the total  
5 cost of the unit over the life of this unit?

6 A. Well, again, Mr. Looney performed  
7 evaluations, and he looked at several scenarios.  
8 And the way you look at it is the total cost of  
9 the facility, and I know that the net cost in  
10 some scenarios actually was a savings. The  
11 total fuel was a savings related to the cost of  
12 owning and operating a facility in some  
13 scenarios.

14 Q. But as a total cost measure, will the fuel  
15 be as expensive as the total cost of the plant  
16 over the life of the unit?

17 A. I think Mr. Looney performed that  
18 evaluation. He would be better able to answer  
19 that question. But it's not unreasonable to  
20 think that operating a fuel could be more,  
21 depending on the scenario, than the cost of the  
22 actual in-service cost.

23 Q. Who would pay for an increase in operations

1 and management at the plant over time?

2 Would that be rate payers?

3 A. That's correct.

4 Q. And fuel prices over time?

5 A. That's correct.

6 Q. Rate payers? And environmental cost over  
7 time?

8 A. Customers would pay for that.

9 Q. You stated that there has been some work  
10 completed at the site?

11 A. No, not completed. Just some preliminary  
12 work that has begun at the site, but nothing has  
13 been completed.

14 Q. So that's a road in the site access work  
15 road; is that correct?

16 A. That's what's ongoing today.

17 Q. And is that continuing today?

18 A. Well, as far as the site work specifically,  
19 we're really just beginning site work. The  
20 preliminary design of the roads, received the  
21 permits to date. So there really hasn't been  
22 much at the site done yet, but that will be  
23 beginning now.

1 Q. Understood. But there's money being spent  
2 currently?

3 A. That's right, to ensure sure we can have  
4 the unit online by November of '23.

5 Q. And you negotiated the EPC contract; is  
6 that correct?

7 A. That's right. Our team was responsible for  
8 that.

9 Q. And you stated that that was part of the  
10 draw of the value for this project, this turnkey  
11 project; is that correct? The contract itself?

12 A. That's right. The contract provides  
13 significant value, and that the consortium was  
14 willing to take certain risks associated with  
15 projects of this size. And by them taking those  
16 risks, it's valuable for our customers to have  
17 them take the risk, rather than the company.

18 Q. And consortium is who?

19 A. It would be the combination of Black &  
20 Veatch and Mitsubishi Hitachi Power Systems.

21 Q. So you negotiated various performance  
22 provisions of this contract and this allocating  
23 of the risks?

1 A. That's correct.

2 Q. And in negotiating of this, did this  
3 increase the cost of the contract?

4 A. It's all included in the cost of the  
5 contract.

6 Q. Typically, wouldn't that be something that  
7 would be in the negotiations you would have to  
8 negotiate about what the cost of the contract  
9 is, and you have to give a little to get a  
10 little; correct?

11 A. That's right. For each of the components  
12 that we might evaluate, you know, you talk  
13 through what each party is willing to do and  
14 perform, and that's how you decide who takes  
15 what risks, and that impacts the price.

16 Q. And overall, that would have impacted the  
17 total price of the contract as far as for  
18 Alabama Power?

19 A. That's right.

20 Q. If the contract is cancelled, does that  
21 increase the cost?

22 A. If a contract is cancelled?

23 Q. Would that increase the cost of the

1 contract to rate payers?

2 A. If the contract is cancelled, you would  
3 have a set of costs associated with that, but  
4 you're not finishing the project. So you only  
5 have to deal with that specific set of costs  
6 associated with cancellations.

7 Q. And between the two vendors in this  
8 project, who is in charge?

9 A. Are you talking about between Black &  
10 Veatch and Mitsubishi?

11 Q. Correct.

12 A. Well, both of those contracts -- both of  
13 those entities are responsible 100 percent for  
14 that the contract. It's what called the joint  
15 and several liability. They both pay liability  
16 together and independently for the project. So  
17 essentially, they co-lead.

18 Our main contract was through the major  
19 equipment manufacturer, through Mitsubishi.

20 Q. Have you entered into major contracts such  
21 as this with two different vendors?

22 A. I don't -- I have not. I'm not familiar  
23 with whether the company has or not.

1 Q. Does it add costs to the contract to have  
2 two different vendors as a part of it?

3 A. No. You know, we evaluated all of the  
4 costs and all of the benefits, and the best  
5 value was really to have the consortium work  
6 together. Again, there's a significant benefit  
7 by having the two vendors provide joint and  
8 several liability. That limits exposure --  
9 further limits exposure to the company of  
10 nonperformance.

11 Q. Who is responsible if something goes wrong  
12 in the contract?

13 A. Is there a particular type of something  
14 going wrong that you can --

15 Q. What happens if there is a conflict? Is  
16 there -- is it laid out in the contract?

17 A. Well, the contract lays out the results if  
18 there's a conflict.

19 Q. Is there potential for finger pointing or  
20 conflicts within the two vendors in the  
21 consortium?

22 A. Again, I think the contract very firmly  
23 lays out the responsibility of the parties and

1 the milestones that has to be performed for  
2 payment. We have people that will be evaluating  
3 and ensuring that all of that happens. And so  
4 that structure, I think, limits the risk of the  
5 company by having that big a structure.

6 Q. You had talked about the diversity of the  
7 electricity portfolio, I think, in your rebuttal  
8 testimony, generally?

9 A. Yes.

10 Q. What do you consider a diverse resource  
11 mix?

12 A. I think like Alabama Power is moving today.  
13 We will have a very diverse -- this particular  
14 portfolio has lots of diversity in it, in my  
15 opinion. You have the diversity of a self-built  
16 project with a 40-year life. You have the  
17 diversity of an acquisition of an asset that has  
18 a shorter lifetime, actually lifetime adds  
19 adversity. You have some PPAs that provide  
20 value for both the gas resources and PPAs for  
21 solar battery combination, so that's the kind of  
22 diversity.

23 Along with that, the company also has hydro

1 facilities, other solar facilities, nuclear  
2 facilities, coal facilities. All of that helps  
3 provide diversity.

4 Q. Considering Southern Company's low to no  
5 pledge on carbon, will the fossil fuel mix be  
6 considered part of that diversity analysis?

7 A. Yeah, I think any analysis of the fleet  
8 would include possible --

9 Q. So that's a yes?

10 And you were here yesterday when Mr. Kelley  
11 was giving his testimony, being crossed?

12 A. Yes, I was.

13 Q. And I think, in 2019, you had 29 percent  
14 gas and 32 percent coal mix in the fleet?

15 A. That's what I recall. I could be wrong.  
16 If you have it in front of you and want to show  
17 me.

18 Q. Certainly. In 2024, after these units  
19 allegedly will come online, you have 31 percent  
20 gas and 29 percent coal?

21 A. That's right. But you would also have  
22 more -- you would have 400 more megawatts of  
23 solar and 400 more megawatts of battery, so that



1 enhances diversity.

2 Q. So over 60 percent of the portfolio would  
3 still be in fossil fuels; is that correct?

4 A. That's correct.

5 Q. And does that comport with the goals of  
6 Southern Company's low to no carbon pledge?

7 A. I do think that it will be contributing to  
8 lower carbon production, because these  
9 particular assets will be dispatching ahead of  
10 higher costs, more carbon intensive resources  
11 like coal. So they absolutely will help  
12 contribute to lowering the carbon.

13 Q. So what are those resources of coal  
14 specifically to the Alabama Power system that  
15 these will be dispatched at?

16 A. Generally, I would think of there are coal  
17 units at Barry. There is a coal facility at  
18 Plant Gaston.

19 Q. Would you retire those coal units at Barry?

20 A. I believe the company needs all of those --  
21 the resources it has to in order to meet current  
22 obligations. So I don't see how an addition of  
23 this resource is going to cost another to retire

1 at this point.

2 Q. So your testimony is no to that?

3 A. That would be my understanding.

4 MR. JOHNSTON: That's all the  
5 questions that I have.

6 THE COURT: Thank you, Mr. Johnston.

7 That brings us to Alabama Solar  
8 Industry Association. Ms. Howard?

9 CROSS-EXAMINATION

10 BY MS. HOWARD:

11 Q. Good morning, Mr. Bush.

12 A. Good morning.

13 Q. I'm Jennifer Howard. I represent the  
14 Alabama Solar Industry Association, and we have  
15 met in your deposition; correct?

16 A. Yes.

17 Q. You acknowledge that over the lifespan of  
18 the Barry 8 plant, regulatory requirements can  
19 change; correct?

20 A. They can.

21 Q. And new regulatory requirements can impose  
22 new costs on the system; correct?

23 A. They could.

1 Q. And some analysis has been done with  
2 respect to a certain range of potential future  
3 carbon prices; right?

4 A. Yes, as well as fuel prices.

5 Q. But you have no analysis of the potential  
6 cost of complying with other potential new and  
7 environmental regulatory requirements that could  
8 apply in the future to gas burning plants;  
9 right?

10 A. I do not.

11 Q. And you do not dispute that such analysis  
12 could be done; correct?

13 A. Again, you're talking about some  
14 hypothetical that we don't -- I don't know what  
15 scenario you're talking about. It's some -- we  
16 perform analysis, but we would have to have some  
17 started by which we perform the analysis. And I  
18 don't know how you would do that without some  
19 hypothetical review of what that might be. We  
20 don't generally do hypothetical reviews like  
21 that.

22 Q. But you could propose a hypothetical view  
23 of the future environmental regulation and form

1 an analysis of what that impact would be;  
2 correct?

3 A. I assume you can set up a scenario with  
4 certain criteria and run the models around.

5 Q. And you performed no analysis comparing  
6 Barry 8 to other resource options available to  
7 the company and which ones were the lowest cost  
8 options; correct?

9 A. Mr. Looney performed those cost  
10 evaluations.

11 Q. And you did not. Mr. Looney did; correct?

12 A. That's right. Now, I did compare combined  
13 cycle options at Barry 8. That's what I did.

14 Q. And I want to make sure I correctly  
15 understand your testimony today on stranded  
16 assets.

17 You performed no analysis attempting to  
18 quantify the risk of proposed gas burning plants  
19 becoming stranded assets; correct?

20 A. That's correct. I did not.

21 Q. And you didn't talk to anyone who did;  
22 right?

23 A. That's right. As far as I know, there was

1 no stranded assets specific risks evaluation  
2 performed.

3 Q. And you have no written analysis to  
4 indicate that the gas burning assets are  
5 unlikely to become stranded assets; correct?

6 THE COURT: We've already hit on a  
7 lot of these issues, so I would like to not  
8 duplicate what's already in the record. So  
9 let's be attentive to that going forward.

10 MS. HOWARD: I understand, Your  
11 Honor. I think there's been some confusing  
12 testimony about this, and that's why I'm  
13 trying to clarify the question.

14 THE COURT: Trust me. I know if he  
15 answers yes or no. We need to do a better job  
16 in answering yes or no, but believe it or not,  
17 when I hear the answer and I read the  
18 testimony, I know whether or not he's answered  
19 yes or no.

20 So, anyway, a yes or no will be good  
21 going forward, and we wouldn't have duplicate  
22 questions. So that's something all witnesses  
23 need to understand is that I know if you're

1       answering yes or no. You're not fooling  
2       anybody. You're not fooling them. So going  
3       forward, we can stop some of the duplicative  
4       questions by getting it clear on the record.

5               MS. HOWARD: And this my last  
6       question on this.

7       BY MS. HOWARD:

8       Q.    You have no written analysis to indicate  
9       that the gas burning assets are unlikely to  
10      become stranded assets; correct?

11      A.    That is not correct.

12      Q.    Do you recall when your deposition was  
13      taken last month?

14      A.    Yes.

15      Q.    I'd like to direct you to page 115 of your  
16      deposition.

17      A.    I don't have it.

18      Q.    Mr. Bush, I'll ask you, during your  
19      deposition, do you recall this question being  
20      asked and this answer being given, page 115,  
21      line 4:

22             "So you have no written analysis to offer  
23      concerning this opinion that those units are

1 unlikely to become stranded assets during their  
2 remaining lives; correct?

3 "ANSWER: I don't have written analysis  
4 specifically."

5 Did I read that correctly?

6 A. That's correct. If I can clarify my  
7 answer, though.

8 The "you" then was me specifically. I was  
9 talking about the company. The company analysis  
10 performed by Mr. Looney does, in fact, show that  
11 Barry 8 has long-term value. Its benefits are  
12 greater than its cost throughout his evaluation.  
13 I didn't perform it, but the company does have  
14 that analysis.

15 Q. And you're talking about nothing further  
16 beyond what was offered by Mr. Looney; correct?

17 A. That's right.

18 Q. And you have no guarantee of persistently  
19 low gas prices in the future, do you?

20 A. I have no guarantee.

21 MS. HOWARD: That's all I have.

22 Thank you.

23 THE COURT: I'll take it, you want

1       this marked as an exhibit?

2               MS. HOWARD:   Yes, Your Honor.

3               THE COURT:   It will be Alabama Solar  
4       Industry Association 3.

5               Any objection to its admission?

6               MR. GROVER:   No, Your Honor.

7               THE COURT:   Document is admitted as  
8       marked.

9               MR. MCCARY:   Your Honor, one  
10       clarification.   Was the page from the  
11       deposition just offered?

12              THE COURT:   Yes, just the page.

13              MR. MCCARY:   Thank you very much  
14       than.   No objection.

15              THE COURT:   I believe that brings us  
16       the attorney general.

17              MR. WILSON:   No questions, Your  
18       Honor.

19              THE COURT:   Chad?

20              MR. MASON:   Just a couple, please,  
21       sir.

22                           CROSS-EXAMINATION

23       BY MR. MASON:



1 Q. Good morning. Thanks for being here.

2 A. Yes, sir.

3 Q. Barry Unit 8 is sometimes referred to as a  
4 configuration of a one-on-one?

5 A. Yes, sir.

6 Q. Can you describe that for us?

7 A. Certainly. Glad to. A one-on-one is where  
8 you have a single combustion turbine in a single  
9 steam turbine on the back end of it. So  
10 oftentimes, configurations like Barry Unit 6 and  
11 7, they have two combustion turbines with a heat  
12 recovering steam generator, and they go through  
13 a single steam turbine. So then the designation  
14 of one of the ones is the combustion turbine,  
15 and other one would be the steam turbine.

16 Q. So the back end is the heat recovery steam  
17 generator?

18 A. That's correct. Yes, sir.

19 Q. Can they operate independently?

20 A. They cannot.

21 Q. They cannot. And the Barry Unit 8 is due  
22 for an upgrade in a few years?

23 A. That's right.

1 Q. Is the cost of that upgrade included in  
2 this fixed price turnkey?

3 A. Yes, sir, absolutely. That's one of the  
4 benefits that this consortium provided, was  
5 agreeing to implement that upgrade in with the  
6 project.

7 Q. Okay. And you also indicated while you  
8 your were negotiating fixed price turnkey  
9 project, you also had an opportunity to  
10 negotiate a long-term service agreement?

11 A. Yes, sir.

12 Q. Did that mean you have an opportunity to  
13 negotiate favorable terms for that agreement  
14 over the life of the project, or are those costs  
15 included in the fixed price turnkey project?

16 A. Those are the favorable costs that we got  
17 for the ongoing -- this is ongoing cost, really,  
18 not included --

19 Q. The periodic type cost?

20 A. That's correct. Yes.

21 Q. So they're not in --

22 A. That's right. But they were included in  
23 the evaluation.

1 Q. Okay. And also, one of the benefits of a  
2 fixed price turnkey project, you mentioned  
3 before, is to try to mitigate risks for  
4 customers?

5 A. Yes.

6 Q. Is that correct?

7 A. That's correct.

8 Q. Okay. But then, I think, in my reading, I  
9 read where there's possibility of change orders?

10 A. There are.

11 Q. And those could be company-directed change  
12 orders?

13 A. That's correct.

14 Q. And it could also be unforeseen geological  
15 challenges?

16 A. That's correct. Yes sir.

17 Q. Can you expand on that and perhaps shed any  
18 light on what the company plans to do to  
19 mitigate those costs?

20 A. Right. Well, we're very focused on keeping  
21 costs low. But as we do some of the oversight  
22 work with the final design of the facility  
23 itself, when those engineers are putting

1 together, say, maintenance locations, what we  
2 see in the past are folks will design a door  
3 that you can't open all the way. So our guys  
4 want to make sure, hey, operation folks won't be  
5 able to get into this panel, and so you need to  
6 make a modification to that design. So we left  
7 the contract open to make sure we can -- are  
8 ongoing maintenance and operations of the  
9 facility will be as efficient as possible if we  
10 see some things like that. That's where that  
11 was intended to be able to incorporate. We hope  
12 that that won't be the case. We want to limit  
13 that as much as possible.

14 And then as far as the site conditions, you  
15 know, the site has not been worked, you know, no  
16 grading, no rubbing has been performed at the  
17 site. So it's -- if there was something there  
18 on the site that was discovered, whether it was,  
19 say, a Native American burial ground, which  
20 we've run in in other locations with the site  
21 before, those are things you have to take into  
22 account that you don't know exist until you  
23 actually get there. So.

1           We don't know of any. We don't expect  
2           anybody -- again, we included that in case there  
3           is something like that on the site.

4           Q. But there's some steps you might could  
5           take. If you were to be certificated this  
6           project and were to move forward, there would be  
7           some stops, such as board drilling and things  
8           like that, you could do to make sure you're not  
9           going to run into the some things, like we did  
10          in one of the military projects?

11          A. That's right. We actually have performed  
12          geotechnical analysis on the specific footprint  
13          of where the unit is located. So we have  
14          performed some of that analysis already, and we  
15          see no problems there.

16          Q. And I don't know if this is confidential,  
17          so you tell me if it is.

18          A. All right.

19          Q. Or just don't answer it.

20                 But I was wondering if you could tell me  
21          what the ambient temperature design is for the  
22          winter and summer? Is that something you can  
23          share with us or not?

1 A. We have --

2 Q. If you can't, it's okay.

3 A. I can share this. I think the design  
4 temperature -- the minimum design temperature is  
5 zero degrees, and the maximum design temperature  
6 is 105, which doesn't mean you can't operate  
7 beyond those. But that's the design temperature  
8 for the resources.

9 Q. And with a little bit more winterization  
10 weatherization, it might drop a little bit more  
11 than that?

12 A. Absolutely. All of that is included in the  
13 requirements for the facility.

14 MR. MASON: That's all I have.

15 Thank you.

16 THE COURT: All right. Redirect?

17 MR. GROVER: Just a few, Judge.

18 REDIRECT EXAMINATION

19 BY MR. GROVER:

20 Q. Mr. Bush, for clarification, what is the  
21 role -- I'm sorry.

22 What is the role of Black & Veatch in  
23 connection with the contemplated Barry Unit 8

1 project?

2 A. They are the entity who will be designing  
3 and constructing the facility.

4 Q. Okay. And then with respect to Mitsubishi  
5 and Hitachi Power Systems, what is their role?

6 A. Their role is to provide the major  
7 equipment, the combustion turbine and the steam  
8 turbine.

9 Q. For a large just, you know, combined cycle  
10 project like this, is it customary to have those  
11 two different vendors involved in a project?

12 A. That's correct. Yes, it is very customary.  
13 Because, generally, the vendor does not do the  
14 engineering and construction work.

15 Q. Okay. Then I feel like over the course of  
16 questioning from the Southern Environmental Law  
17 Center, maybe the question got answered.

18 Barry Units 6 and 7 are combined cycle  
19 units; correct?

20 A. That's correct.

21 Q. So, I mean, is it fair to say that the  
22 company has experienced on the coast operating  
23 combined cycle units?

1 A. Absolutely. It does have significant  
2 experience.

3 Q. Okay. With respect to the engineering  
4 procurement and construction agreement for Barry  
5 Unit 8, to your knowledge, does it speak to site  
6 coordination among vendors and contractors?

7 A. It does, absolutely.

8 Q. How does it speak to it, if you recall?

9 A. It has a special section beyond general  
10 conditions that has a section that talks about  
11 site coordination and performance there on the  
12 site.

13 Q. I really don't want to belabor this, but I  
14 just feel compelled to ask it.

15 To your knowledge, are you aware of the  
16 code of ethics policy with respect to Southern  
17 Company Services employees?

18 A. Yes.

19 Q. Do you have a general understanding of what  
20 that code of ethics policy requires of its  
21 employees?

22 A. To be truthful and honest in all that we do  
23 and to act in an ethical manner.



1 Q. Thank you. Do you know, Mr. Bush, in your  
2 experience of the years, do you know what a  
3 centralized service company is?

4 A. Generally, yes.

5 Q. Okay. Is your understanding that Southern  
6 Company Services is a centralized service  
7 company?

8 A. I don't believe that is.

9 Q. Okay. What is your understanding of what  
10 SCS is?

11 A. SCS is a company that provides consulting  
12 services and other specialized services for the  
13 operating companies on their behalf, working on  
14 their behalf.

15 Q. Okay. Do those services that are provided,  
16 do they include fuel procurement?

17 A. They do. That's correct.

18 Q. How does SCS go about procuring fuel for  
19 the operating companies?

20 A. SCS, as agent for all of the operating  
21 company, actually procures fuel as an entity for  
22 each of the resources within the footprint of  
23 operating companies, and they do it in a way

1 such that they can optimize those purchases on  
2 behalf of the operating companies.

3 Q. When SCS procures fuel for the operating  
4 companies, is that contract limited to the  
5 operating company for whom it's procured?

6 A. No, it is not. They're able to, again,  
7 optimize the available resources, whether it's  
8 an FT contract or whatever it might be, to  
9 ensure that we provide the lowest cost fuel for  
10 any customers.

11 Q. So is it your understanding that some of  
12 the existing contracts for which SCS has  
13 procured for the operating company may be  
14 utilized at Barry Unit 8?

15 A. That's correct. They'll be using existing  
16 contracts. Gulf Power, for example, transitions  
17 out of the fleet, they'll be available -- can be  
18 utilized and will be utilized for Barry Unit 8.

19 Q. And several times you mentioned the fact  
20 that there's flexibility associated with the  
21 Barry site --

22 A. That's right.

23 Q. Okay. --with respect to fuel. I'm sorry.

1 With respect to fuel?

2 A. That's right.

3 Q. Beyond sort of the flexibility maybe you  
4 were alluding to for the FT contracts, are there  
5 other sources of flexibility there?

6 A. There absolutely are.

7 Q. What are they?

8 A. Barry -- the Barry site is very unique in  
9 that it -- you have three different pipes that  
10 come to it a header as well as a storage  
11 facility that is there on site. So you have the  
12 flexibility of multiple pipe access to the site  
13 as well as connected to that a storage facility.

14 So from reliability, from an optimization  
15 and operational performance, Barry Unit 8 is  
16 really unique, I think, relative to all sites  
17 across the system in its ability to be so  
18 flexible.

19 MR. GROVER: Thank you, Mr. Bush.  
20 That's all, Your Honor.

21 THE COURT: All right. Mr. Bush,  
22 thank you for your testimony.

23 Mr. Bush's pre-filed direct and

1       rebuttal will be entered into the record as  
2       well as this exhibit.

3               MR. GROVER: Thank you, Your Honor.

4               THE COURT: Let's take a break, very  
5       short break, and we'll try to get started with  
6       the next witness.

7               (Brief recess.)

8               THE COURT: All right. Mr. McCrary,  
9       are you ready to resume the testimony of  
10      Mr. Looney?

11              MR. McCRARY: Yes, Your Honor.

12      Alabama Power calls Brandon Looney.

13              BRANDON LOONEY,  
14              the witness, having been sworn or  
15      affirmed to speak the truth, the whole truth,  
16      and nothing but the truth, testified as follows:

17              DIRECT EXAMINATION

18      BY MR. McCRARY:

19      Q.     Would you state your name for the record,  
20      please?

21      A.     Yes. My name is Brandon Looney.

22      Q.     By whom are you employed and in what  
23      capacity, Mr. Looney?

1 A. I'm employed by Southern Company Services,  
2 and I am the manager for reliability and  
3 resource procurement.

4 Q. Mr. Loony, in connection with this  
5 proceeding, did you previously cause to be filed  
6 direct testimony?

7 A. Yes.

8 Q. Along with one exhibit?

9 A. Yes.

10 Q. Did you also cause to be filed rebuttal  
11 testimony along with two exhibits?

12 A. I did.

13 Q. Do you have editions or questions to make  
14 to that testimony or to those exhibits?

15 A. No, I do not.

16 Q. Mr. Looney, if I would ask the questions  
17 set forth in your testimony here today, would  
18 your answers be the same as previously filed?

19 A. Yes, they would.

20 MR. McCRARY: Your Honor, we would  
21 offer Mr. Looney's testimony for the  
22 testimony.

23 THE COURT: Mr. Looney's pre-filed

1 testimony will be entered into the record  
2 subject to cross-examination as well as the  
3 exhibits.

4 MR. McCRARY: Yes, sir. Thank you.

5 BY MR. McCRARY:

6 Q. Mr. Looney, do you have a summary of your  
7 testimony?

8 A. I do.

9 Q. Go ahead.

10 A. "Good morning. In procuring resources to  
11 meet its projected winter need, Alabama Power  
12 identified through market solicitations numerous  
13 options, including conventional generation,  
14 renewable generation, and energy storage  
15 technologies each with various project  
16 structures.

17 "As detailed in my testimony, my team and I  
18 undertook extensive economic analysis to  
19 evaluate these options and determine the most  
20 cost effective portfolio resource editions to  
21 meet Alabama Power's obligations to its  
22 customers. We performed our analysis using  
23 industry standards, modeling tools and

1 practices, employing reasonable assumptions and  
2 restraints affecting the availability in  
3 performance of resources and accounting for all  
4 known and reasonably ascertained costs and  
5 benefits. We also utilized multiple gas pricing  
6 and carbon price forecasts in order to arrive at  
7 a robust portfolio which gives us confidence in  
8 the proposed portfolio's ability to perform in  
9 the face of future uncertainty.

10 "Our analysis was fair and sound giving  
11 each resource an opportunity to compete on its  
12 own merits while ensuring that the proposed  
13 portfolio provides the best value to customers  
14 in reliably meeting the company's resource  
15 needs."

16 Q. Thank you, Mr. Looney.

17 MR. McCRARY: Your Honor, Mr. Looney  
18 is tendered for cross-examination.

19 THE COURT: All right. Mr. Looney,  
20 and then continuing with the thing that came  
21 up earlier is when you're asked a question, if  
22 you will give us the most direct answer you  
23 can give us, a yes or a no when possible, the

1 objective, because I'll let you explain your  
2 answer, but when you don't do that and you  
3 want to tender something else, you're going to  
4 get the same question three or four times. I  
5 don't want to read all of that. We know when  
6 you've answered and when you haven't.

7 So let's just kind of cut to the  
8 chase and give a answer, and then I'll give  
9 you an opportunity to respond, and this  
10 applies to all witnesses going forward,  
11 because I think we can cut through a lot of --  
12 some of the duplication that we're getting on  
13 questions and also duplicate cross. So let's  
14 try to be mindful of that as go forward.

15 THE WITNESS: Yes, sir.

16 THE COURT: And with that, any  
17 questions from Manufacture Alabama?

18 MR. CLARK: No, sir, Your Honor.

19 THE COURT: All right. AIEC?

20 THE WITNESS: Yes, Your Honor. I  
21 have a few questions.

22 CROSS-EXAMINATION

23 BY MR. HILL:



1 Q. Mr. Looney, you testified earlier that you  
2 gave direct testimony and included one exhibit  
3 in that testimony.

4 Could you -- do you have that in front of  
5 you right now?

6 A. I do have a copy of that.

7 Q. Would you go to your Exhibit 1, please?

8 A. All right.

9 Q. Okay. Now, there was a confidential  
10 version of this, and there was a public version  
11 of this. I just want you and everyone else to  
12 know that I want to talk -- I do not want to  
13 talk about anything that's of a confidential  
14 nature, okay?

15 A. Okay.

16 Q. So I'm going to try to phrase my questions  
17 in such a way that they do not elicit a  
18 confidential answer, but also be mindful when  
19 you're answering that I'm not trying to elicit  
20 from you confidential information, all right?

21 So let's look at this exhibit real quick.  
22 There, you're stating the cost and benefits for  
23 each of the competing resources on a dollar per

1 kilowatt net present value basis; is that  
2 correct?

3 A. That is correct.

4 Q. Okay. So to determine the amounts of the  
5 dollar-per-kilowatt basis, you first have to  
6 calculate each of the dollar costs and each of  
7 the dollar benefits; is that right?

8 A. That's generally correct.

9 Q. Okay. Was anything else involved in that  
10 step?

11 A. Not that I can think of.

12 Q. Okay. And correct me if I'm wrong, but  
13 next, you then quantify the net present value of  
14 each of the dollar costs, the net present value  
15 of each of the benefits, and the net present  
16 value of the kilowatt capacity; is that correct?

17 A. Again, generally, it's correct.

18 Mechanically, the order might be a little  
19 different; mathematically, in that we might have  
20 calculated net value and then converted the  
21 dollar per KW. I actually believe we converted  
22 to dollar per KW and then converted to net  
23 present values. But the order of operation

1 doesn't matter to the end result.

2 Q. But from 10,000 feet, am I going through  
3 the analysis, generally speaking, the way that  
4 you were going through it when you came up with  
5 these numbers?

6 A. Yes, I believe so.

7 Q. Okay. All right. So would the next step  
8 be that you -- the dollar-per-kilowatt hour  
9 amount for each of the costs is derived by  
10 dividing the net present value of the dollar  
11 cost by the net present value of the kilowatt  
12 capacity?

13 Are you still with me?

14 A. I'm with you, but we don't take a net  
15 present value of kilowatt capacity. That's just  
16 a nominal number.

17 Q. Okay. Anything else that would be --

18 A. That's a fair characterization.

19 Q. Am I still generally headed in the right  
20 direction for how you got these numbers?

21 A. You seem to be, yes.

22 Q. Okay. You made the same analysis for each  
23 of the benefits, quantified the net present

1 value of each of the benefits, and you divided  
2 it by the net present value capacity; is that  
3 correct?

4 A. Again, given the same explanation I gave  
5 before, I still think you're generally correct.

6 Q. General speaking. I'm just trying to get  
7 to some of these numbers and show how we got  
8 there.

9 Alternatively, instead of expressing the  
10 cost of the benefits on the dollar-per-kilowatt  
11 net present value basis, you also expressed the  
12 cost of benefits on a dollar megawatt hour  
13 basis -- I'm sorry -- dollar-per-megawatt net  
14 present value basis?

15 A. I think if we have expressed it in  
16 dollar-per-megawatt, instead of  
17 dollar-per-kilowatt, it's just a simple order of  
18 converting by a thousand.

19 Q. I meant dollar-per-megawatt hour.

20 A. That would have been an inappropriate way  
21 to rank these resources.

22 Q. Have you made any comparison on a  
23 dollar-per-megawatt hour basis?

1 A. For the order of ranking these resources,  
2 no.

3 Q. Okay. Why not?

4 A. We were procuring capacity here, and  
5 capacity is measured in kilowatts.

6 Q. Okay.

7 A. Energy is a benefit that many of the  
8 resources bring, but it's not the requisite  
9 resource, and so it would be inappropriate to  
10 purchase capacity in terms of an energy  
11 measurement, and that's sort of the reason in my  
12 answer.

13 Q. All right. Do each of the resources that  
14 you list in your exhibit produce the same amount  
15 of the energy per kilowatt of capacity?

16 A. No, they do not.

17 Q. And I'm going to come back to that, okay?

18 Is the relationship between energy produced  
19 in a capacity known as the capacity factor?

20 A. Yes, that's true.

21 Q. For example, do you assume that the five  
22 selected solar per storage plant typically  
23 operates at an annual capacity factor below

1 30 percent?

2 A. We didn't make that assumption, but I think  
3 that's probably a correct characterization.

4 Q. What are the estimated annual capacity  
5 factors of each of the five selected solar plus  
6 storage plants?

7 A. I don't know those numbers exactly. What  
8 we were provided by the project bidders is the  
9 energy profile that each resource is expected to  
10 provide, and that was the basis for calculating  
11 the energy values. So there is embedded in that  
12 the capacity factor, but it wasn't a direct  
13 component of our analysis.

14 Q. If by using some of your numbers, people  
15 smarter than me came up with a percentage of  
16 about 26 percent, would that seem far off from  
17 what you understood your annual capacity factors  
18 to be for the solar?

19 A. It strikes me as a tad high for a PV  
20 facility, but not way out of line.

21 Q. What about solar plus battery storage?

22 A. Again, battery doesn't generate  
23 electricity. It stores electricity. So it

1 shouldn't have an impact on the capacity factor  
2 of the resource.

3 Q. So you would say the capacity factor for  
4 the solar plus storage would be probably less  
5 than 26 percent.

6 That's what you were telling me earlier?

7 A. My general understanding of the technology  
8 is that the capacity factor is to be solar  
9 resources to the low to mid 20 percent. It does  
10 depend on the resource is a fixed resource or a  
11 tracker.

12 And again, a battery -- if you want to take  
13 into account for all of the energy used, a  
14 battery is a net consumer of energy. So you can  
15 think that the overall capacity factor of that  
16 resource would be incrementally lower, but  
17 again, that depends on the operation of the  
18 battery.

19 Q. Did I understand you to say that the solar  
20 plus battery capacity factor would be the low 20  
21 to 25 percent?

22 A. You understand me to say that the solar  
23 facility would be in the low to mid 20 percent

1 generally for a solar PV facility, okay?

2 Q. What's the estimated annual capacity factor  
3 of Barry 8?

4 A. In our analysis, it varies on multiple  
5 degrees. It varies for each year of our  
6 analysis, and it also varies for each scenario  
7 that we analyze. That's just the nature of the  
8 dispatchable resource. Generally speaking, the  
9 Barry Unit 8 capacity factors were high across  
10 our analysis.

11 You want me to define how? I would say in  
12 the ballpark of 80 percent, give or take, year  
13 to year.

14 Q. Am I understanding you to say then that  
15 Barry 8 would be 80 percent, and solar would be  
16 20 percent?

17 A. Or a capacity factor, as you sort of  
18 defined it earlier, yes, sir.

19 Q. So Barry 8 produces roughly four times the  
20 amount of energy per kilowatt of capacity as the  
21 solar plus storage plant?

22 A. In our simulations, I think that's a fair  
23 characterization. Again, it's a dispatchable



1 unit, so it can produce anywhere from zero to  
2 nearly 100 percent post nameplate in economic  
3 and actual dispatch; whereas, solar is more of a  
4 fixed capacity factor. So it's a bit of an odd  
5 comparison, but I think we're okay with what you  
6 said.

7 Q. So would you agree that all other things  
8 being equal that the net benefit on a  
9 dollar-per-kilowatt basis were exactly the same  
10 between Barry 8 and a solar plus storage plant,  
11 that the net benefits of Barry 8 and solar plus  
12 storage plant were expressed on a  
13 dollar-per-megawatt power net present value  
14 basis, would Barry 8 be less than 40 percent of  
15 the cost of the solar plus storage project?

16 A. I'm not comfortable trying to do that math  
17 in my head right now.

18 Q. So let's go back to the 80/20.

19 Would you say there's a significant  
20 difference between solar and the Barry 8 annual  
21 capacity factor?

22 A. The 80 percent and 20 percent at face value  
23 seem to be significantly different numbers, yes.

1 Q. I just have a couple of questions about  
2 natural gas prices in your testimony.

3 When did you study and make your  
4 assumptions about natural gas prices?

5 A. I think it was testified yesterday that we  
6 used our budget 2019 gas forecaster analysis,  
7 and those gas forecasters are developed  
8 throughout the calender year 2018 and are  
9 generally finalized, I believe, around the  
10 midpoint of that year.

11 Q. So did you do a sensitivity analysis that  
12 reflects the current gas prices that we have  
13 now?

14 A. We did not do a sensitivity that reflects  
15 current market price. We used our long-term gas  
16 forecasts in our planning and evaluation  
17 processes.

18 Q. Can you describe for me how you came up  
19 with the high and low numbers when it came to  
20 your analysis of natural gas prices?

21 A. I can describe the gas prices that we used  
22 in the analysis.

23 Is that the question?

1 Q. Sure.

2 A. Yeah. We used a gas price that I would  
3 describe as moderately low to reflect how the  
4 portfolios would operate on an ongoing gas  
5 prices that are, you know, not extremely low,  
6 but lower than --

7 Q. How did you determine moderately low?

8 I mean, what was the benchmark for coming  
9 up with a moderately low number?

10 A. Again, we have an annual process where we  
11 develop gas price forecast. It's not my  
12 particular responsibility, but I'm familiar with  
13 the process. And I think it was mentioned  
14 yesterday we used a firm called Charles River  
15 and Associates, and they run some economic  
16 models to help develop based on different supply  
17 and demand assumptions where gas forecasts might  
18 be going forward, and they alter those supply  
19 and demand assumptions to give a variation in  
20 gas price forecasts, and then we adopt the  
21 nomenclature of low, moderate, and high. And as  
22 you might suggest, we might understand that the  
23 low is lower than moderate and moderate is lower

1     than high, the high is the highest one.

2     Q.     Does Charles River and Associates decide  
3     what's low, moderate, and high, or does Alabama  
4     Power decide that?

5     A.     Charles River and Associates, under our  
6     contractual relationship with them, produces the  
7     gas forecasts. I don't think they care what we  
8     call it.

9     Q.     Okay. And it's very possible that while  
10    we're talking past each other, and it's probably  
11    my fault, but you have three categories --  
12    okay? -- low, moderate, and high.

13           Are you using the same concept as Charles  
14    River and Associates where they have three  
15    different categories, or are you taking numbers  
16    from them and putting them in the three  
17    different batches or --

18    A.     I am using their gas forecasts directly.

19    Q.     Okay. And then using that to put three  
20    different sets of numbers from that forecast; is  
21    that correct?

22    A.     No. They produced three entirely  
23    independent gas forecasts.

1 Q. Okay.

2 A. And I used each one of those entire  
3 independent forecasts to do what's essentially  
4 an independent resource analysis, and I  
5 replicate that analysis using a totally  
6 different independent gas forecast. So there's  
7 no mixing and matching of numbers.

8 Q. Okay. That makes a lot more sense. Okay.

9 Well, I appreciate your time. Thank you.

10 A. Thank you.

11 THE COURT: Any questions from  
12 Energy Fairness.org?

13 MR. GRIFFIN: No, Your Honor.

14 THE COURT: American Senior  
15 Alliance?

16 MR. HOOPER: No questions.

17 THE COURT: Alabama Coal  
18 Association?

19 MR. CAGLE: No, sir.

20 THE COURT: All right. Brings us to  
21 Sierra Club.

22 MS. CSANK: Thank you, Your Honor.

23 THE COURT: And we may have to

1       abbreviate. I have a time constraint with  
2       shift change with security, but let's go ahead  
3       and get done what we can get done.

4               MS. CSANK: Thank you, Your Honor.

5               THE COURT: I don't mean I'm putting  
6       a time limit on you, to be clear.

7               CROSS-EXAMINATION

8       BY MS. CSANK:

9       Q. Good afternoon, sir.

10      A. Good afternoon, Ms. Csank.

11      Q. Mr. Looney, you've worked at Southern  
12      company for nearly 20 years, almost your entire  
13      career?

14      A. Yes. My entire professional career has  
15      been with Southern Company.

16      Q. And are you a shareholder, Southern  
17      shareholder?

18      A. I am a Southern company shareholder.

19      Q. And approximately how many shares do you  
20      hold or have access to?

21      A. I don't really know. I have a limited  
22      holding in my retirement plan of stock, and I  
23      also some grants of options that I got through

1 the company several years ago. It wouldn't  
2 impress anybody.

3 Q. As manager of reliability and resource  
4 procurement, do you structure requests for  
5 proposals?

6 A. That's part of the support that we give to  
7 retail operating companies is some insight into  
8 structuring RFPs, specifically such that we  
9 assure that the input that we get from the  
10 market provides the information that we need to  
11 appropriately evaluate the options.

12 Q. Okay. And so of the -- and you've been  
13 here throughout the proceedings, so we can refer  
14 to the testimony by other company witnesses, and  
15 generally you're familiar with that?

16 A. I think that's safe.

17 Q. And so we discussed at this proceeding  
18 various requests for proposals underpinning the  
19 company's petition.

20 Did you specifically participate in the  
21 development of the terms of those RFPs?

22 A. I didn't have a lot of direct participation  
23 in development of the RFPs.

1 Q. What participation did you have?

2 A. At most, maybe just some conversations.

3 Now, members of my staff were active reviewers  
4 of the documents, that sort of thing.

5 Q. Okay. And are you thinking about any  
6 particular RFP or all of them? Which one?

7 A. Really, our focus was the capacity RFP as  
8 it pertains to the structure of the RFP.

9 Q. And in your role, you advised retail  
10 operating companies, similar to Mr. Bush?

11 A. We advise. We collaborate with them, yes.

12 Q. Okay. And you undertake analysis at the  
13 direction of the retail operating companies?

14 A. Yeah. Generally, the majority of the work  
15 that we do is at the direction of the retail  
16 operating companies.

17 Q. Do you advise them of additional analysis  
18 that may be prudent or applicable to whatever  
19 issues they've identified for you?

20 A. I think one of the benefits to our shared  
21 service model is that it affords us a level of  
22 collaboration that's hard to replicate with an  
23 independent consultant, and some of that, at



1 times, might be the things that we make the  
2 operating company aware of. It doesn't dictate  
3 their actions, but it's certainly information  
4 that if we think it's valuable to them, we'll  
5 put forward.

6 Q. And were you asked to perform any analysis  
7 of -- well, strike that.

8 Essentially, you are providing analysis on  
9 the resource options on the supply side  
10 available to the company for the purposes of its  
11 claims needs in this case; correct?

12 A. That's correct.

13 Q. Okay. And so you are not providing  
14 analysis or opinions concerning demand sight  
15 options; is that right?

16 A. That is correct. We did not provide  
17 analysis to support demand side resource  
18 options.

19 Q. Nor did you seek to reconcile whether  
20 additional demand side resources would lead to a  
21 lower cost solution for customers, did you?

22 A. That's correct. That was outside of the  
23 scope of our participation in this analysis.

1 Q. And you're not providing opinions about the  
2 company's claims needs in this case; correct?

3 A. I didn't testify to any particular opinion  
4 on that.

5 Q. Okay. So in terms of those two showings we  
6 talked about yesterday that the company must  
7 make in this case, you're specifically offering  
8 opinions and analysis that relate to cost  
9 effectiveness?

10 A. I think that's a fair characterization of  
11 the evidence that I have to present to the  
12 commission, yes, ma'am.

13 Q. Okay. And as part of the testimony and  
14 exhibits that you're offering, did you review  
15 whether there may be existing resources on the  
16 Southern System that are available to the  
17 company to meet on a temporary basis at least  
18 its claims needs?

19 A. We didn't specifically look at that. It's  
20 not a task that is as simple as what some of the  
21 questions you make it sound like.

22 Each operating company has the full claim  
23 to their resources, and it would be

1 inappropriate for me to go expect them to hand  
2 over some portion of that resource for me to  
3 then hand it to another operating company. And  
4 so it's just not part of the way our affiliates  
5 interact.

6 Q. Okay. But that's a pretty broad statement,  
7 and I think that throughout this hearing, we've  
8 been discussing how there's an important timing  
9 element to the claim needs during certain hours  
10 during the winter, which may not line up with  
11 the load shapes for the other sister company; is  
12 that right?

13 A. I'm not sure I recall that specific  
14 dialogue yesterday or today regarding load  
15 shapes and timing. I mean, there's  
16 diversification in our reserve margin study that  
17 Mr. Weathers spoke to, takes into account  
18 diversification, and certainly, our realtime  
19 operations takes into account diversification.

20 I'm not sure that that speaks to the  
21 allotment of resources that one company has had  
22 certified by their commission, then being  
23 allowed to just be taken by another company and

1       duplicatively certified by that commission.

2       It's a bizarre line of thought for me.

3       Q.     Okay.  So the short of it is that as part  
4       of your scope of work for the purposes of this  
5       case, you were not asked to look at the  
6       availability or the cost effectiveness of such  
7       resources, existing resources, on the Southern  
8       regulated system?

9       A.     No, ma'am, I was not.

10      Q.     Thank you.  And just to be clear, we are  
11      talking about cost effectiveness.

12             And do you have a directive either from  
13      Mr. Kelley and his colleagues at the company or  
14      elsewhere in Southern to quantify or otherwise  
15      incorporate environmental justice impacts of  
16      your resource selection?

17      A.     I don't believe we have a direct request to  
18      include, as you described it, environmental  
19      justice components.  Through our collaboration  
20      with Alabama Power, we felt it was prudent to  
21      consider carbon constraints of some form, and so  
22      I testified we adopted a carbon price to reflect  
23      that pressure on our fleet.

1 Q. Okay. I certainly don't want to belabor  
2 this point, so bear with me. I'm going to try  
3 to make this quick.

4 What's your understanding of the  
5 environmental justice?

6 A. I think, through our previous discussions,  
7 we did speak to the social cost of carbon. So  
8 in context of this line of questionings, that's  
9 what's coming to mind.

10 Q. Anything else?

11 A. Nothing else particular.

12 Q. And you're familiar with the pre-filed  
13 testimony of Sierra Club witnesses in this case,  
14 are you not, sir?

15 A. I'm familiar with them, yes, ma'am.

16 Q. And I know we haven't gotten into the  
17 witnesses yet.

18 But besides the expert witnesses,  
19 Ms. Wilson and Mr. Detsky, Sierra Club also  
20 pre-filed the testimonies of several individuals  
21 who are for the purposes of standing.

22 Did you happen to review those witnesses'  
23 pre-filed testimony?

1 A. I want to say that I saw those and did take  
2 some time to read them. I don't claim to have  
3 spent as much time with those as some of the  
4 others.

5 Q. Understood, sir. But again, I'll keep this  
6 brief.

7 In particular, there was an individual who  
8 is from the Africatown community, Mr. Womack.  
9 Do you happen to recall this testimony?

10 A. Not in particularity.

11 Q. All right. Let me represent to you then,  
12 Mr. Womack aside, that environmental justice  
13 encompasses not just climate impacts, but a  
14 variety of environmental impacts that tend to  
15 disproportionately burden communities of color  
16 and low income communities.

17 Does that resonate with you? Can we agree  
18 to that definition of environmental justice?

19 A. It sounds like a functional definition.

20 Q. And more specifically, environmental  
21 justice is this principle or this concept of in  
22 evaluation, in resource decision or decisions at  
23 large, to try to on going forward bases

1 eliminate or void those disproportionate burdens  
2 on those communities.

3 Can we have that understanding, sir, for  
4 the purposes of this brief line?

5 A. I think I can follow that.

6 Q. Okay. And so at Southern, you don't have  
7 any sort of protocol or guidance on  
8 incorporating environmental justice into your  
9 resource decisions, do you?

10 A. I don't think we have any particulars.  
11 Again, what we rest on is that low cost energy  
12 provides benefits to people in general, and  
13 maybe specifically low cost energy uplifts the  
14 economically challenged disproportionately to  
15 those that are more fluent and could afford  
16 higher costs of electricity.

17 Q. Okay. And in terms of -- again, these  
18 environmental impacts.

19 As we sit here today, are you familiar with  
20 environmental impacts beyond greenhouse gas  
21 emissions from supply side resources, such as  
22 the proposed gas burning units in the petition?

23 A. Our analysis includes impacts of criteria

1 pollutants if they're quantifiable. I don't  
2 think there was any real quantifiable impacts  
3 for those based on the regulatory allowances and  
4 stuff that are afforded these resources.

5 Q. You just said a lot. Okay.

6 Criteria pollutants. For the record, those  
7 are air pollutants?

8 A. That is correct.

9 Q. Under the National Clean Air Act?

10 A. I believe that's correct.

11 Q. And those are the -- those are pollutants  
12 that have been identified by the Federal  
13 Environmental Agency that the Environmental  
14 Protection Agency is having certain human health  
15 and environmental significance?

16 A. Yes. And they're regulated.

17 Q. And you testified that the impact of that  
18 kind of air pollution from those kind of  
19 pollutants may be quantified?

20 A. Well, to the extent that they cost us to  
21 operate our facilities. And this isn't my  
22 particular expertise, but there's been trading  
23 programs over time, there's allowance



1 allocations and reconciliation. All of those  
2 things are built into our production cost, and  
3 so they would be accounted for in that manner.

4 Q. But you don't know or any event think that  
5 if there were any criteria air pollutant impacts  
6 that were quantified that those would be  
7 relatively small for the purpose of the --

8 A. For the purpose of production costing,  
9 they're relatively small.

10 Q. Okay. And do you know the permitting  
11 for -- strike that.

12 Besides criteria pollutants, sir, are you  
13 aware of any other forms of environmental  
14 impacts from the gas burning units in the  
15 petition?

16 A. I'm not aware of particularly. They  
17 certainly didn't impact our analysis.

18 Q. Okay. So to expedite this, would you agree  
19 that gas burning units have environmental  
20 impacts on land, water, and air?

21 A. I don't know about water and air in  
22 particular. I think we've discussed air to some  
23 degree. The other seem to be much more site

1 specific in nature and maybe a little harder for  
2 me to represent in general terms.

3 Q. Okay. And so at a minimum, we know that  
4 those were in a limited fashion in your  
5 so-called production cost analysis?

6 A. I would say they were dealt with in the  
7 appropriate fashion, and I would also say that  
8 we rest in the knowledge that each of these  
9 facilities is operating in accordance with, you  
10 know, all the legally enforceable permits or  
11 expected to do so for the full term of our  
12 analysis.

13 Q. Okay. But you don't have any documents  
14 about their continued ability to comply with  
15 environment regulations on the books today or  
16 potential incremental changes to those  
17 regulations?

18 A. I mean, two of these facilities have a long  
19 track record of operating in that manner, and so  
20 we do take some confidence in the track record.  
21 And I think our contracts, particularly with the  
22 Hog Bayou facility, ensures that the  
23 owner/operator of that facility will maintain

1 the appropriate permits and operate in  
2 accordance.

3 There's a lot of due diligence done for the  
4 Central Alabama facility to ensure that the  
5 company could hold that same level of compliance  
6 in that facility.

7 Q. Sir, may I just stop you. The call of my  
8 question was to documents.

9 Do you have documents?

10 A. I think the contracts themselves are really  
11 good documents for that, and those were filed --

12 Q. Yes, sir.

13 A. -- within this proceeding. So I would  
14 check there.

15 Q. Okay. Anything else?

16 A. Those are the documents that come to mind.

17 Q. Okay. And in terms of -- just bear with me  
18 for another moment.

19 In terms of gas -- right? -- those three  
20 gas burning units, we talked a lot about how  
21 they will be burning gas for decades.

22 Are you aware of any analysis of the  
23 pollution upstream of the stacks? So in other

1 words, the pollution associated with distracting  
2 that fuel and transporting it to the sites of  
3 these gas units?

4 A. I believe there's literature on that with  
5 probably some level of contention. It's not an  
6 area that I study. I think my analysis rests in  
7 that policymakers will probably account for all  
8 of those types of emissions when they set a  
9 carbon policy, and so it affords me the ability  
10 to sort of handle it all in one package and  
11 trust that the policymakers will make the right  
12 choice, and so that's what my testimony  
13 represents.

14 THE COURT: We're going to need to  
15 take a recess for lunch at this point in time.

16 You can resume when we come back.

17 (Lunch recess.)

18 THE COURT: All right. Let's go  
19 back on the record and resume the  
20 cross-examination of Mr. Looney.

21 And, Mr. Looney, you are under oath,  
22 and so we will resume with Ms. Csank's  
23 cross-examination on behalf of Sierra Club.

1 MS. CSANK: Thank you, Your Honor.

2 BY MS. CSANK:

3 Q. Mr. Looney, thanks again for being here.

4 And just for review from before, as part of  
5 your scope of work for the purposes of this  
6 case, you did not communicate with Alabama Power  
7 customers?

8 A. I did not communicate with any Alabama  
9 Power customer.

10 Q. Nor did you take into consideration their  
11 evaluation of various resources that were under  
12 consideration, did you?

13 A. I'm sorry. Could you repeat that? I was  
14 trying to fix the mic.

15 Q. Absolutely, sir.

16 Do you have everything you need in terms of  
17 water?

18 A. Yes.

19 MS. CSANK: Madam Reporter, could  
20 you read it back?

21 (Whereupon, the court reporter  
22 read the requested portion of the  
23 record.)

1           THE WITNESS: No. We did not take  
2           any individual customers' specific evaluation  
3           of resources into consideration.

4       BY MS. CSANK:

5       Q. And to put a finer point on it, not only  
6       did you not directly communicate with customers  
7       and get information from them as input for  
8       analysis, but it wasn't indirectly provided to  
9       you; correct?

10      A. That's correct. It was not.

11      Q. Otherwise provided?

12      A. Right.

13      Q. But you are aware that there's this -- I'll  
14      call it a trend. You can tell me if you  
15      disagree -- of corporations, including very  
16      large corporations like Delta Airlines,  
17      Microsoft, Amazon, to name a few, that have made  
18      climate and clean energy commitments?

19      A. I'm aware of some of those things, and I'm  
20      also aware that the company has established and  
21      the commission has approved the RTC programs  
22      specifically for those companies to pursue their  
23      goal. And so it was unnecessary to embed that

1 into this general capacity solicitation.

2 Q. Okay. And so the answer was yes? No? I  
3 think it was no.

4 A. No. We didn't receive any specific  
5 information with regard to our evaluation in  
6 this proceeding.

7 Q. Okay. You know that there's a number of  
8 large customers that are intervenors in this  
9 case; correct?

10 A. Yes. I heard the role call of all the  
11 intervenors. There seem to be several that  
12 represent large customers.

13 Q. Are you aware of any outreach conducted by  
14 the company to ensure that all potentially  
15 interested existing or perspective large  
16 businesses who would be customers, large  
17 customers, were informed of this proceeding?

18 A. I would not expect to have been made aware  
19 of communications between Alabama Power and  
20 their various customer groups.

21 Q. So it was not within your purview?

22 A. It's not part of my normal --

23 Q. Job responsibilities?

1 A. -- job responsibilities. To the extent  
2 that I was asked to participate, I would have,  
3 but it's not something that, you know, just I  
4 would automatically be exposed to.

5 Q. And so, again, I'm particularly interested  
6 in the analysis you're presenting to this  
7 commission.

8 So it doesn't at all reflect analysis of  
9 prospective large customers who might want to  
10 move to Alabama, for example, and their resource  
11 valuation or commitment?

12 A. I think that's not a fair characterization.  
13 Again, I think most large customers have a  
14 myriad of goals, and while some of those goals  
15 might be for clean energy that can be met  
16 through the RBG program, those goals also have a  
17 measure of economic sensitivity. And so to the  
18 extent that our analysis might have showed a low  
19 cost portfolio, I think that would be  
20 interesting and attractive to the customers of  
21 all sizes and sorts.

22 Q. But there was no attempt to directly  
23 communicate and verify whether your analysis



1 was, in fact, satisfactory to those prospective  
2 customers, including large businesses?

3 A. If I understand your question, I think that  
4 this very proceeding accomplishes that goal  
5 through the allowance of intervenors, a number  
6 of which have taken their right and opportunity  
7 to participate. And so I think we've -- we have  
8 a regulatory structure that allows that kind of  
9 interaction with customers.

10 Q. Okay.

11 THE COURT: I need an answer,  
12 Mr. Looney, more direct, please, and then you  
13 can explain, okay?

14 When you're asked a question, give a  
15 more direct answer to the question as much as  
16 possible, and then I'll let you explain it.

17 MS. CSANK: Thank you, Your Honor.

18 THE WITNESS: I don't know if there  
19 was a direct question to answer.

20 MS. CSANK: Madam Reporter, if you  
21 would read back that question.

22 (Whereupon, the court reporter  
23 read the requested portion of the

1 record.)

2 BY MS. CSANK:

3 Q. Yes? No? Don't know?

4 A. Yes. I think that's what we're here doing  
5 in part today.

6 Q. And to the extent that your answer is a  
7 yes, the basis is limited to the fact that there  
8 is this proceeding?

9 A. I think that's the most obvious element to  
10 that. The company may have also reached out to  
11 customers directly, as I've testified to. I'm  
12 just not necessarily privy to those actions.

13 Q. So you didn't specifically provide analysis  
14 to those outward facing employees of Southern,  
15 nor did you receive information or feedback from  
16 those types of employees?

17 A. My interaction with the company was through  
18 Mr. Kelley's organization. Nothing beyond that.

19 Q. Right. And in terms of the specific  
20 qualifying question, did those communications  
21 encompass any outreach to or feedback from  
22 prospective customers, including large  
23 businesses?

1 A. I seem to recall some conversations with --  
2 with the group that Mr. Hill represents at some  
3 point there. I don't know about others.

4 Q. Okay. Thank you. And earlier, we were  
5 talking about some environmental impacts  
6 specifically associated with the gas units that  
7 are in the petition that are part of your  
8 analysis.

9 Do you recall that?

10 A. Yes.

11 Q. Okay. And I think a good starting point  
12 may be just to ask, do you, sir, live close to  
13 any of those plants?

14 A. I do not live close to any of the plants  
15 included in the portfolio.

16 Q. Would you move your family next to any of  
17 those plants?

18 A. Considering where I'm employed, it would  
19 make no practical sense for me to move to those  
20 locations, so probably not.

21 Q. But specifically in light of the pollution  
22 from those plants, would you move your family  
23 next to one of those plants?

1 A. I haven't given that much thought.

2 Q. And in terms of this line on environmental  
3 justice, I think just to review, we identified  
4 that there are land, air, and water  
5 environmental adverse effects from the gas units  
6 in the petition.

7 Yes? No? Don't know?

8 A. I think we identified there potentially  
9 could be those impacts. I'm not sure that I was  
10 presented with a specific land environmental  
11 impact from a gas plant to speak to.

12 Q. And just to be able to leave this line, in  
13 no way did those types of environmental impacts  
14 get analyzed in terms of their magnitude or  
15 assigned the dollar value to them to go into  
16 your economic analysis?

17 A. I think that's incorrect.

18 Q. Besides the carbon price that we've  
19 discussed already.

20 A. Well, the cost to -- I mean, to comply  
21 with, you know, the legal requirements, it's  
22 embedded in the cost of resources, which is  
23 absolutely included in our analysis. We

1     couldn't ascertain and apply additional costs,  
2     because they didn't seem to be present. Direct  
3     cost to our customers. Maybe I should clarify.

4     Q.    Okay. So the short of it is, your analysis  
5     is limited to your expectations under those  
6     agreements of what environmental compliance cost  
7     would be?

8     A.    Yes.

9     Q.    But not additional environmental  
10    compliance, like life cycle, emissions analysis,  
11    for any of those units?

12    A.    We did life cycle production cost modeling,  
13    which I mentioned earlier, includes an element  
14    of the emissions. So again, I don't think I  
15    agree with the characterization of your  
16    question.

17    Q.    And which emissions are those? Greenhouse  
18    gas emissions or criteria air pollutant  
19    emissions?

20    A.    Air emissions in general.

21    Q.    Can you identify them?

22    A.    CO<sub>2</sub>, obviously. I believe we attempted to  
23    the model the cost for SO<sub>2</sub> omissions. I don't

1     thing there's anything beyond that that's  
2     monetized through our production cost. The rest  
3     is sort of making sure that you're in  
4     compliance.

5     Q.     So CO2 and SO2 were the ones you attempted  
6     to quantify?

7     A.     I think there's an element of NOx as well.

8     Q.     Were there any documents in your analysis  
9     of those air pollutants besides the CO2 and SO2  
10    and NOx?

11    A.     Any production cost impacts associated with  
12    those would be included in the file provided in  
13    discovery, as they were part of our production  
14    model simulations.

15    Q.     Do you recall the Tampa Specific Solar  
16    Analysis that is Sierra Club Exhibit 1 that was  
17    discussed yesterday?

18    A.     I saw it getting handed out. I don't think  
19    there was actually many specific questions to  
20    it, but I was familiar with it being provided.

21    Q.     Did you have a chance to review that  
22    document?

23    A.     I didn't get a chance to review that

1 document here, and I actually haven't seen it  
2 face-to-face.

3 Q. Okay. And have you -- are you aware that  
4 analyses like that Tampa analysis exists where  
5 facilities seek to identify and evaluate how  
6 much supply side renewables can economically be  
7 added to their system?

8 A. If that analysis is indeed what is often  
9 referred to as a penetration study, which I'm  
10 not sure that it is, I think it might have been  
11 more of a sort of research look on dispatchable  
12 solar. But if we're talking about  
13 penetration-type studies, I'm aware of those  
14 types of analyses being conducted.

15 Q. Are you presenting a solar penetration  
16 analysis for Alabama Power Company in this case?

17 A. No, I am not.

18 Q. Did that factor into your economic  
19 evaluations for this case?

20 A. No, it did not.

21 Q. Okay. What are the industry standards  
22 modeling tool, sir?

23 A. There's a number. I'm familiar with a few

1 of those tools. Particularly, we use the  
2 STRATIS Production Cost Model. We use the  
3 AURORA Production Cost Model as well. We use  
4 SEER-SEM as was mentioned yesterday by  
5 Mr. Weathers and Mr. Carden. I know there are  
6 some others that provide similar functionality,  
7 but I can't provide an all-inclusive list.

8 Q. Do you know if any retail operating  
9 companies are phasing out their use of  
10 production cost models?

11 A. I know that we are in the late stages of  
12 evaluating using the AURORA model in place of  
13 the STRATIS, and it seems to be a promising  
14 opportunity. I don't know if any operating  
15 company has made a final commitment to that  
16 transition.

17 Q. Promising how?

18 A. Well, any transition, there's some pros and  
19 cons. We feel that the AURORA model has some  
20 advantages in modeling some resources,  
21 particularly renewables. We're hopeful that  
22 they may model energy storage in a way that  
23 STRATIS struggles with. Their run times over



1 AURORA appear to be significantly longer, so  
2 that's an issue we need to manage in our work  
3 flow. That's, I guess, my 90-second spiel of  
4 that.

5 Q. Thank you, sir. Appreciate it.

6 And can we step back for a moment and just  
7 identify the type of resource economic  
8 evaluations that you're performing that result  
9 in output; right? That's a pretty basic  
10 question.

11 A. Yes.

12 Q. Okay. And the quality or the accuracy of  
13 those outputs depends on, number one, the input;  
14 correct?

15 A. Yes.

16 Q. And then in addition to the precision and  
17 accurateness of those inputs, the methodology  
18 evaluation also influences the outcome; correct?

19 A. Yes.

20 Q. And so if there are flaws in the inputs,  
21 they can lead to less accurate, less reliable  
22 outputs; correct?

23 A. That seems to be a logical line of thought.

1 Q. And if there are likewise flaws in the  
2 methodology of evaluation, those may get less  
3 accurate, less reliable results; correct?

4 A. I would tend to agree with that.

5 Q. And so in pursuit of the least cost of  
6 resources for your customers, what kind of  
7 analysis do you have documented to verify the  
8 accuracy and correctness of your inputs?

9 A. The documents were largely provided in  
10 discovery, where I think you could follow the  
11 paper trail from inputs as they were provided by  
12 bidders or by the self-build team, and then they  
13 naturally flowed into the outputs, be that our  
14 Excel kind of tools or the STRATIS inputs, and  
15 then the STRATIS outputs flowed into the Excel  
16 tools, and then they, you know, were computed to  
17 the output, as you said.

18 So I think there's a clear data trail in  
19 our discovery files that we were responsive to  
20 in this proceeding.

21 THE COURT: Ms. Csank, will you  
22 slide that microphone a little bit closer to  
23 you, please, ma'am?

1 MS. CSANK: Thank you, sir.

2 THE COURT: Thank you.

3 BY MS. CSANK:

4 Q. And, Mr. Looney, in terms of that paper  
5 trail that you just identified in discovery,  
6 that paper trail isn't part of your pre-filed  
7 exhibits, is it?

8 A. The entire paper trail is not. The  
9 exhibits, I think, summarize the results and  
10 conclusions of that process.

11 Q. And have you provided that paper trail to  
12 commission staff?

13 A. My understanding is that commission staff  
14 has access to all the discovery documents. So I  
15 believe that it's, in essence, been provided,  
16 yes.

17 Q. Okay. And in terms of the inputs, those  
18 are coming from the company; correct?

19 A. Well, the inputs came from a variety of  
20 places. Most of them were established through  
21 the RFP, so they came from the marketplace  
22 participants through bid forms that were  
23 presented to the company and made accessible to

1     our team. I believe there were some oversight  
2     in the bid process as well, and then we did  
3     receive the inputs for the Barry 8 opportunity  
4     from Mr. Bush's team to be incorporated in our  
5     analysis as well.

6     Q.    Okay. And did you verify the input that  
7     you've identified for us so far, the  
8     reasonableness and accuracy? Did you do some  
9     kind of independent check on those?

10    A.    Yeah. Our team, as they would take inputs  
11    and begin the analysis with them, certainly  
12    would review those for what appears to be  
13    reasonableness, and accuracy, I would say more  
14    consistency is probably what we looked for, you  
15    know, to try to determine if an input is  
16    accurate. It is what it is. If it's  
17    consistent, I think that satisfies a sound  
18    review.

19    Q.    So what kind of criteria did you use to  
20    verify the accuracy and consistency of these  
21    inputs you were being given from the company or  
22    from Mr. Bush?

23    A.    Sure. I mean, these type of inputs, just

1 to make sure we understand what type of things  
2 we're talking about, performance metrics.

3 Q. When are they used?

4 A. Like a units heat rate, variable OEM costs,  
5 all these thing should be expected to fit into  
6 some range of numbers that are dictated by  
7 thermodynamics and sort of normal industry  
8 costing. And if you saw something that was way  
9 out of line, it should raise a question, and I  
10 think we would pursue that.

11 Q. May I pause you there, sir?

12 A. You may.

13 Q. What's your reference case for -- you know,  
14 what's the reasonable range for these values,  
15 heat rate, et cetera? Is there like specific  
16 documents or Southern Company kind of guidance  
17 on that?

18 A. We operate a fleet of close to 40 gigawatts  
19 of resources, and they all have heat rates, and  
20 they have all have variable OEM rates, so we  
21 have access to a very large volume of these  
22 types of data points.

23 There's no reason to expect that the

1 resources that are bid into RFP would exist in a  
2 separate universe of the data set. So we use  
3 those sanity checks to assure that what we're  
4 getting is reasonable and consistent with, you  
5 know, the industry norms based on our  
6 experience.

7 Q. And are you presenting that for the  
8 commission in this case in document form?

9 A. Again, all of those inputs are available  
10 through discovery.

11 Q. And in terms of your choice of the  
12 evaluation methodologies -- actually, before we  
13 leave inputs, anything else besides those inputs  
14 from the RFPs we've been talking about? The  
15 renewable RFP and the capacity RFP and the  
16 turnkey fixed price RFP?

17 A. I think that covers the resources that we  
18 considered, those three sources.

19 Q. And did you do any verification of whether  
20 the size and quality of the bid received, how  
21 they compare to other contemporaneous  
22 procurements in the market in the region or in  
23 the nation?

1 A. We didn't do any direct comparisons to  
2 other RFPs.

3 Q. So the answer is no?

4 A. No.

5 Q. Okay. And in terms of the -- your choice  
6 of -- it sounded like it was a pretty  
7 complicated process, so bear with me.

8 You said you started with STRATIS?

9 A. STRATIS was used in our evaluation to  
10 determine the production cost impacts of the  
11 resources we were evaluating.

12 Q. And with Mr. Kelley, we referred to the  
13 benchmark case.

14 Did you review or verify the results of the  
15 benchmark case?

16 A. Yes, we did review that.

17 Q. Did you verify its reasonableness and  
18 consistency with other similar analyses  
19 performed by Southern or another utility?

20 A. Yes.

21 Q. And where is that documented?

22 A. I don't know that it's documented. The  
23 benchmark case largely looks like our fleet. So

1 if you look at it and go, look, that looks like  
2 our fleet with a few expansion units in it, it's  
3 not a difficult task to review the  
4 reasonableness of the benchmark case.

5 Q. Okay. And you're familiar with  
6 Mr. Kelley's Exhibit 1, are you not? The 2019  
7 Alabama Power Company Integrated Resource Plan?

8 A. I'm familiar with it, yes, ma'am.

9 Q. Okay. And you know that it -- and I can  
10 paraphrase here. It describes the benchmark  
11 case as an analysis of potential resources to  
12 meet the company's identified projected needs.

13 A. Right. On top of the systematic it is  
14 today.

15 Q. Right. And you're aware that there are  
16 certain incremental generic resources that we've  
17 been talking about that are in that benchmark  
18 case?

19 A. Right. We commonly refer to that as the  
20 expansion plan.

21 Q. As opposed to the proposed expansion in  
22 this case? The terminology that we're --

23 A. Correct.



1 Q. Okay. Can we just keep referring to it as  
2 the benchmark case?

3 A. If that's your preference, I'll go with it.

4 Q. That's what the document seems to use.

5 And so do you agree that that was a  
6 reasonable benchmark case to use for the  
7 purposes of this proceeding?

8 A. I do agree with that.

9 Q. Because it, on top of existing resources,  
10 provides timely and appropriate resource  
11 additions for the company to satisfy its claimed  
12 reliability needs; is that right?

13 A. Yes.

14 Q. Okay. And you're aware that that benchmark  
15 plan does not bring 2,400 megawatts of capacity  
16 online by the year 2024; correct?

17 A. That's probably true.

18 Q. And you also know that that benchmark plan  
19 was used as the yardstick for screening for the  
20 early screening of a lot of these bids that were  
21 coming in through the procurements; correct?

22 A. That's not clear to me if that's true or  
23 not.

1 Q. Why not? Because you didn't verify that  
2 part of the analysis?

3 A. I would need more specifics about the  
4 process that you described as a yardstick  
5 screening. We didn't -- we didn't -- in my  
6 participation, we received what I think was 55  
7 bids through the capacity RFP. We didn't  
8 yardstick screen any of them out. We evaluated  
9 each one of them through the detailed process  
10 that I described to create an initial ranking  
11 list.

12 So your question seems to suggest there was  
13 some less analytical screening that we've done,  
14 and that was not my experience.

15 Q. And that's helpful. Thank you, sir.  
16 Because I think what you just described where  
17 the capacity RFP results, there are a lot of  
18 different procurements in this case.

19 So you verified and evaluated those; right?  
20 But you didn't perform a similar verification or  
21 analysis for the bids to the 2018 renewable RFP,  
22 did you?

23 A. We did not directly do that screening. I'm

1 familiar with how that operates at Alabama Power  
2 Company.

3 Q. But you're not in a position to offer  
4 opinions about the accuracy and consistency of  
5 those bids, are you?

6 A. I feel very comfortable offering opinions  
7 about the ones that made their way into this  
8 portfolio. The ones at Alabama Power dealt with  
9 specifically for RTC. I don't think I would be  
10 the right person to speak to those.

11 Q. So you were given inputs, you accepted them  
12 on their face, and you plugged them into your  
13 analysis, and you can speak to us today about  
14 the accuracy of that analysis.

15 Is that what we should understand?

16 A. I don't agree that we accepted them at  
17 their face. Again, we look at things for  
18 consistency. I have a lot of exposure to market  
19 prices for renewables.

20 So, you know, I can easily look at these  
21 bids and say they're inline with the bids that  
22 we see in other solicitations if the performance  
23 of these units meet the expectation of protocol

1 A performance. And so I just again think the  
2 characterization of accepting them at face value  
3 is a misapplied term. We do do a fair amount of  
4 diligence with the data that we handle in our  
5 analysis.

6 Q. And the renewable specific due diligence  
7 that you did in a document that you're  
8 presenting to the commission?

9 A. The document -- the detailed analysis for  
10 the solar projects, which was authored in John  
11 Kelley's organization and reviewed by my team  
12 and I, was provided in whole as part of the  
13 discovery of this case.

14 Q. And in that analysis that you provided in  
15 discovery, did you seek to specifically verify  
16 this application of the benchmark case to the  
17 evaluation of the incoming renewable RFP bids?

18 A. If I understand the question, let me say,  
19 yes, first of all. The evaluation that was done  
20 by Alabama Power is consistent with the  
21 evaluation that's been done for what I believe  
22 to be every megawatt of renewable that's been  
23 procured at the Southern Company retail level,

1 including Mississippi Power, Gulf Power, Georgia  
2 Power, and so that's a lot of precedent that we  
3 rely on for the foundation of the analysis that  
4 was done. So I do think that there was, you  
5 know, reasonable oversight of that.

6 MS. CSANK: Your Honor, I'm clearly  
7 struggling. I think I can expedite and  
8 truncate this line if I clear the room and  
9 make reference to some confidential  
10 information.

11 THE COURT: Okay.

12 All right. Let's clear the room.  
13 Only those who have executed the proprietary  
14 agreements may stay in the room while this  
15 line of cross goes forward.

16 And, Madam Court Reporter, this  
17 portion of the transcript will be under seal.  
18 I will give a moment for the room to clear  
19 out. Then we'll turn the microphones off.

20 All right. Does this look to be  
21 individuals who are covered and permissible to  
22 be here?

23 MR. GROVER: Judge, I apologize.

1       There are two folks who I don't recognize, and  
2       it's probably my own fault for not knowing.  
3       But the sir next to Mr. Clark. I'm not sure  
4       who they are.

5               MR. CLARK: I'm here.

6               MR. GROVER: I knew you were here.  
7       The fellow next to you.

8               AUDIENCE MEMBER: That's Shane.  
9       That's fine. He's with me.

10              MR. GROVER: And then same question.  
11       Lady next to Mr. Hooper. I apologize.

12              MS. PAM: Pam. Commission staff.

13              MR. GROVER: Thank you so much.

14              THE COURT: All right. Are we good?

15              I'm about to turn the microphones  
16       off. All right.

17              Proceed with your cross.

18                   (Whereupon, the following  
19                   testimony is confidential and is  
20                   under seal.)

21       BY MS. CSANK:

22       Q.     Okay. I think we established earlier that  
23       you're familiar with the Exhibit JBK1, which

1     you're about to be handed a copy of. I hope the  
2     confidential version.

3             But in the meantime, just to get a jump on  
4     it, you're aware, sir, that in the benchmark  
5     case, there are 300 megawatts of combustion  
6     turbine coming in before 2024?

7     A. I would need to see the document to speak  
8     to specifics.

9     Q. We'll get it to you in a moment.

10            And so once you get your document, and for  
11     your counsel's benefit, this references pages 11  
12     and 12 of Mr. Kelley's testimony, his direct  
13     testimony, but those are essentially excerpts  
14     from the IRP Figure. 3D2 and Figure 3F1 are the  
15     relevant tables.

16            MR. McCRARY: What were those again?

17     I'm sorry.

18            MS. CSANK: So the first one is  
19     Figure 3D2 on page 27 of Alabama Power  
20     projected capacity needs.

21            MR. McCRARY: Okay.

22     BY MS. CSANK:

23     Q. So those are the identified needs in this

1 case, and if you turn to figure 3F1, and there's  
2 a table there called 2019 winter benchmark case.

3 Are you there, sir?

4 A. Yes.

5 Q. And would you help us with the page number?

6 A. It looks like page 32.

7 Q. Thank you, sir. Okay.

8 And so do you see there on the left-hand  
9 side, there's a column with the year running  
10 from 2020 down or up, and then the next column  
11 is APC CT, and there are 300 coming in in '23  
12 and 600 coming in in '27.

13 Do you see that, sir?

14 A. Yes.

15 Q. And likewise, in the next column, one over  
16 to the right, it says APC CC.

17 And do you know that CT and CC stand for  
18 combustion turbine and combined cycle?

19 A. I do.

20 Q. And so you do see that, that there are 25  
21 900 megawatts of CCs coming in in this benchmark  
22 base case?

23 A. Yes.



1 Q. Okay. And so there's a timing element --  
2 right? -- of when these recourses are coming in  
3 in this benchmark case, and my -- I guess my  
4 first question to you is, you were just  
5 representing to us or testifying to us that you  
6 verified the renewable RFP results and how the  
7 company got from the initial bid to the projects  
8 that were passed onto you; is that correct?

9 A. Yes.

10 Q. Okay. And are you familiar with how the  
11 benchmark base case plays a role in that process  
12 the company used to dwindle down the initial  
13 bids to the ones that were passed along?

14 A. Yeah. The benchmark case, as I refer to as  
15 the expansion plan, becomes part of the  
16 company's energy budget production cost  
17 modeling. That's a mouthful. But annually, we  
18 produce from that a long-term projection of  
19 avoided energy costs, and that long-term  
20 projection of avoided energy costs is then used  
21 to evaluate a solar resource against.

22 So every solar resource would essentially  
23 be evaluated against that -- it's literally

1 every hour of every year for 30-plus years has a  
2 dollar figure, and every megawatt hour of solar  
3 generation avoids that dollar figure, and the  
4 math adds up to provide the energy benefit of  
5 the renewable resource. That long-term  
6 projection has this or a version of this type of  
7 expansion plan underlying the production of  
8 those avoided energy costs.

9 Q. And in terms of all of those variables that  
10 you just described to us, the timing of when a  
11 unit comes in impacts those variables and the  
12 outputs; right?

13 A. Yes. That's one of the many moving parts  
14 of the analysis.

15 Q. And you know that the company did not go  
16 out to market to see what the market would offer  
17 in terms of solar project or solar panel battery  
18 even coming in in 2025; right?

19 A. I believe that that was not done.

20 Q. Okay.

21 A. My understanding is that the renewable RFP  
22 asked for projects to come online well prior to  
23 2025.

1 Q. And because of that fact, you don't have  
2 analysis one way or another to ensure this  
3 commission that if the company were to do what  
4 it's suggesting would be a reasonable course in  
5 the expansion, which is to add, you know, 900  
6 megawatts in the year 2025.

7 You have no analysis of the head-to-head  
8 comparison of what adding a similar amount of  
9 solar in '25 would do the economics of the  
10 customers, do you?

11 A. I don't have that evaluation. I can tell  
12 you that if the generic model had built a bunch  
13 of solar out in the future, it would reduce the  
14 value of the solar that we analyze in this  
15 proceeding. You have solar competing with  
16 solar, which it's well-established in the  
17 industry that every increment of solar is  
18 slightly less valuable in the increment for an  
19 energy basis.

20 And so actually, an expansion plan that is  
21 absent of solar provides the solar that we're  
22 evaluating, sort of it's first-in-line value.  
23 And so while you can argue that, you know, the

1 future will play out slightly different, if  
2 anything, it gives a slight benefit to the  
3 evaluation of renewables.

4 Q. I appreciate that opinion, sir.

5 But in terms of this trend line that we're  
6 seeing of the cost of solar coming down, you  
7 know, the actual in-service date of solar  
8 tacking on all of these things, there's lots of  
9 variables that go into what the economics of any  
10 particular resource might be; right?

11 A. Yes.

12 Q. And so not having performed the analysis,  
13 you can't really verify or present analysis for  
14 the commission to independently verify how  
15 changing this benchmark case would have  
16 influenced the entire paper trail and included  
17 the results that you're presenting to the  
18 commission.

19 You just didn't perform that analysis, so  
20 you don't know; right?

21 A. It is not the analysis we performed.

22 MS. CSANK: Your Honor, I think we  
23 can bring everyone back in.

1 THE COURT: Okay. All right.

2 Everything can come back in now.

3 BY MS. CSANK:

4 Q. So earlier we were discussing that standard  
5 of modeling tools used in the industry, and you  
6 were identifying some potential pros and cons to  
7 AURORA over STRATIS.

8 Do you recall that?

9 A. I do.

10 Q. And I think you were talking about how you  
11 feel that there may be advantages, et cetera.

12 Is there documentation of the evaluation of  
13 the pros and cons of AURORA over STRATIS that  
14 you're presenting to this commission?

15 A. I'm not presenting any of that, no.

16 Q. Okay. In terms of generically, though,  
17 specific modeling tool aside, what are the  
18 benefits of modeling over spreadsheet analysis,  
19 if you know?

20 A. Sure. I think the general benefit is when  
21 you're looking at dispatchable resources. It's  
22 very hard to spreadsheet your way into a proper  
23 solution, because the dispatch of every unit

1 affects every other unit. And so it becomes a  
2 very difficult sort of brute force solution, and  
3 so production cost models were designed to  
4 accomplish those simulations very efficiently.

5 Q. And so here, you did use spreadsheet  
6 analysis?

7 A. We did not use spreadsheet analysis to  
8 determine the energy for production cost impacts  
9 of dispatchable resources, so no. We used  
10 spreadsheet models but not to the degree of what  
11 I just explained the benefit of production cost  
12 models work.

13 Q. What did you use the spreadsheet models for  
14 or spreadsheet analysis for?

15 A. So the spreadsheet analysis was used to  
16 determine the energy benefit of the solar  
17 consistent with how I described that several  
18 moments ago. And then we also used spreadsheet  
19 just to sort of tabulate various results and do,  
20 you know, math.

21 Q. Would you agree that modeling for that  
22 purpose that you just described or renewables is  
23 possible?

1 A. Yeah. Production cost models can  
2 analyze -- must take resources, and some of  
3 them, to my understanding, do it more  
4 efficiently and maybe to a higher degree of  
5 specificity than others do.

6 Q. But you didn't use that kind of evaluation  
7 methodology?

8 A. We did not use a production cost model to  
9 develop the energy benefits of the renewable  
10 resources that's in this analysis.

11 Q. And because you don't know it, you can't  
12 tell the commission one way or another how that  
13 would have influenced the outcome?

14 Yes? No? Is that --

15 A. I am going to testify to this commission  
16 that it would not have made an appreciable  
17 difference, and that opinion is based on the  
18 extensive work we've done for Alabama Power and  
19 our other affiliates over the last six years in  
20 procuring what's over 3,000 megawatts of  
21 renewable generation in our system.

22 Q. So trust you?

23 A. You can trust me. You can trust the

1 oversight that we have in other jurisdictions.

2 I think there's a lot of reputable people that  
3 you can trust on this one.

4 Q. Okay. You also use spreadsheets to rank  
5 order the thermal resources, did you not?

6 A. Yes. We used a spreadsheet tool to take  
7 all of the various cost components and produce a  
8 ranking.

9 Q. Does that have anything to do with the  
10 limitations of STRATIS?

11 A. I don't think it has anything to do  
12 particularly with the limitation of STRATIS. It  
13 certainly has to do with the way we choose to  
14 use STRATIS in our evaluations.

15 Q. You refer to a portfolio analysis. What  
16 does that mean?

17 A. Can you help me, where I refer to that?

18 Q. I think you referred to it in your opening  
19 statements, sir.

20 A. Yeah. We mention a portfolio, and I think  
21 we used that nomenclature to describe the set of  
22 resources that we proposed to the portfolio  
23 resources. I don't think we particularly claim



1 to have done a portfolio analysis, if that term  
2 is important to anyone.

3 Q. It is, sir.

4 In terms of a portfolio analysis that you  
5 didn't do or don't claim to have done, can you  
6 please explain what that would be?

7 A. Yeah. Detailed in my direct testimony the  
8 analysis that we did, which was to look at each  
9 resource --

10 Q. Before you go on, because it is already in  
11 your direct testimony, if you could just answer  
12 the question.

13 A. Okay. I think the question was what did we  
14 not do. There's a lot of things that we did not  
15 do, so it's hard for me to describe everything  
16 that we did not do.

17 Q. Okay. It wasn't that open ended. I was  
18 asking what a portfolio analysis is since you  
19 had just referred to that term.

20 A. Generically speaking, I would think the  
21 portfolio analysis would take resources opposed  
22 to how we look at them one at a time and sort of  
23 shake them up in a bag and look at them in

1 little groups.

2 Q. And just so that we don't take things  
3 literally, you wouldn't put them in a bag, would  
4 you?

5 Can you just be a little more technical in  
6 describing the portfolio analysis?

7 A. I think our expansion plan would fall into  
8 that category of a portfolio analysis. The  
9 model looks at some resources it can choose  
10 from, and it chooses some, and sometimes it will  
11 pick one of these and one of those, and  
12 sometimes it will pick one of each of these, and  
13 it builds a portfolio. So that's an example of  
14 what I would interpret portfolio analysis.

15 Q. And as applied here, the petition in this  
16 case, the proposed resource editions are often  
17 referred to as a portfolio; right?

18 A. Yeah. I think that's just a definitional  
19 kind of semantic. It's a group of resources.

20 Q. Okay. So that group wasn't compared in  
21 your analysis to other potential groups?

22 A. No, it was not. Every resource was  
23 compared to the other resources, and then the

1 best resources were ranked in order. And the  
2 portfolio was made up of the top individually  
3 ranked resources.

4 Q. Okay. And I think we're almost done with  
5 this.

6 But you agree that it's possible to analyze  
7 different groups of resources against each  
8 other. Indeed, that's what you said the  
9 benchmark base case is a product of?

10 A. It is possible, yes. I mean, every choice  
11 of analytical approach again has pros and cons,  
12 and we weigh those as we select how we want to  
13 approach the analysis.

14 Q. Have you done such portfolio analysis for  
15 other retail companies?

16 A. I'm not aware of an RFP analysis being done  
17 in that particular sense.

18 Q. Okay. And I just want to quickly touch on  
19 this. You heard discussions this morning about  
20 a Southern ethics policy.

21 Do you have any documents of how that  
22 policy is implemented?

23 A. I don't have on hand any of those

1 documents. I'm going to venture that our ethics  
2 and compliance groups maintain documents around  
3 the training and exposure that we all get  
4 through our ethics policy. I don't think they  
5 were requested in discovery, so I doubt they  
6 were provided.

7 Q. Was that ethics policy implementation group  
8 that you just referenced directly involved in  
9 development of this case?

10 A. I don't know the answer to that.

11 Q. Part of your analysis was measuring the  
12 so-called ICE factors of various generation  
13 resources as illustrated in your Exhibit 2 to  
14 your deposition, but we don't need to go there.

15 Can you tell us what an ICE factor is?

16 A. I can. An ICE factor, it stands for  
17 Incremental Capacity Equivalence, and it's a  
18 measure of the reliability contributions of a  
19 resource.

20 Q. What do you mean by "reliability"?

21 A. We had some discussion yesterday about  
22 reliability modeling. One of the outputs of a  
23 reliability assessment is an amount of expected

1 unserved energy that's a metric of reliability.  
2 In an ideal world, that would be zero, but it's  
3 not what we get in our analysis. And so a  
4 resource's ability to decrease that uncertain  
5 energy in analysis is what drives the ICE  
6 factor.

7 Q. Southern Company has not previously used  
8 that type of analysis in seeking other resources  
9 initially; is that right?

10 A. That's not right.

11 Q. Okay. Explain.

12 A. The ICE factor calculation is a component  
13 of the renewable analysis that have -- or the  
14 renewable solicitations that have taken place in  
15 Georgia. It's also a component of the  
16 calculation for a lot of demands of resources so  
17 that those are properly accounted for as those  
18 programs are implemented.

19 So there's an reasonable amount of  
20 regulatory adoption of this approach.

21 Q. Okay. But specifically, in your  
22 deposition, we were discussing the ICE factor  
23 analysis that you performed for the purposes of

1     this case, and that hasn't been relied on  
2     elsewhere?

3     A.     Specifically for batteries, this is the  
4     first opportunity Southern Company has had to  
5     the bring forth a battery project for a capacity  
6     need, yes, ma'am.

7     Q.     So by exception, none of those other  
8     regulated commissions have reviewed an ICE  
9     factor analysis like this one for batteries,  
10    have they?

11    A.     They have not, at least not presented by  
12    our company. They may have other companies they  
13    that regulate. I'm not privy to what they have  
14    seen from them.

15    Q.     Just bear with me one moment. I'm going to  
16    attempt to streamline my questions.

17            So earlier, we were discussing this carbon  
18    price sensitivity analysis.

19            Do you recall that?

20    A.     I do recall us talking about the carbon  
21    price that we included in two of our four  
22    scenarios.

23    Q.     And specifically, you chose to use a \$20

1 carbon price?

2 A. The company has chosen one of its scenarios  
3 to be a \$20 carbon price, so that's what we used  
4 for our analysis.

5 Q. And you agree that the prior administration  
6 used a higher cost of carbon than \$20?

7 A. I'm not familiar with the specifics of what  
8 was used by any particular administration. I  
9 assume we're talking about federal government  
10 for the administration.

11 Q. Yes, sir.

12 A. I'm not -- I'm not familiar with the  
13 specifics there. I am familiar and even  
14 reviewed some various carbon price forecasts. I  
15 do want to mention and be clear for the record  
16 why we picked a \$20 price. It does escalate.  
17 And so does it stay at 20? In fact, it grows to  
18 exceed \$100 per ton throughout our evaluation  
19 period.

20 So just trying to give a little context of  
21 what we call carbon price is really referring to  
22 the starting point in some \$900.

23 Q. Okay. Well, in any event, the conversation

1     that we had earlier at your deposition, you  
2     acknowledge that the prior federal government  
3     administration had a carbon price of at least  
4     \$37 per ton in 2015?

5     A.    Yeah.  I don't recall acknowledging that  
6     specifically, but --

7     Q.    Subject to check.

8     A.    Sure.

9     Q.    And you didn't run an analysis of a carbon  
10    price that high, did you?

11    A.    Again, to just say the carbon price is 20  
12    or 30 totally ignores the trajectory.  So what I  
13    can say is we ran a carbon price that started at  
14    \$20 and escalated above inflation, so it grew in  
15    real terms.  And to take a little context, that  
16    growth is not insignificant.

17    Q.    Okay.  And, sir, if you would turn now to  
18    your Exhibit 1 to your direct testimony.  
19    Forgive me.  I've lost the paper.  Let me just  
20    locate it.

21           And so like Mr. Hill, I'm not looking for  
22    you to verbalize any confidential information.  
23    I'm just looking to ask you a few questions



1 hopefully without doing so.

2 So this short list economic analysis  
3 summary, can you just briefly remind us what  
4 this is?

5 A. Yes. This is a list of the projects, and  
6 it includes what we call short lists, which were  
7 the projects that have been proposed, plus the  
8 other projects that had persisted through our  
9 analysis the farthest. So they were sort of  
10 next tier that didn't make the proposal, so  
11 those are listed in A generic sense. And it  
12 just shows their relative rankings on a dollar  
13 per KW, and it shows the sort of total cost  
14 analysis for the four different scenarios as  
15 well as the average across those four scenarios.  
16 That's all summarized on the table.

17 Q. Okay. And there's some green shading in  
18 this table, and then there's font that's gray  
19 that has a white background.

20 Can you just explain what the distinction  
21 is between the green-shaded area and the  
22 white-shaded rea?

23 A. Yeah. The green-shaded area encompasses

1     what we're seeking certification for. The ones  
2     that appear to be a shaded font and aren't green  
3     are the additional projects that made the short  
4     list, but didn't make the final certification  
5     request.

6             Generally, you should realize or observe  
7     they're ranked in least cost to greatest cost,  
8     according to the average network of value  
9     column.

10    Q.     Right. And in terms of the top five least  
11    cost resources, there again, the solar and  
12    battery projects in your petition?

13    A.     Yes, that is -- that is true.

14    Q.     And again, without identifying the actual  
15    dollar amounts of these NPV values, again,  
16    that's net present value, what does that mean?

17    A.     The net present value is just a way to take  
18    a long stream of values and take one present  
19    value that accounts for the time value of the  
20    money in a comparable sense. So you can compare  
21    one value to another in sort of today's buying  
22    power.

23    Q.     So in plain language, is this attempting to

1 compare the totality of costs associated with  
2 one resource versus another?

3 Is that what it's trying to do?

4 A. Yes.

5 Q. Maybe that wasn't such plain English.

6 A. It worked.

7 Q. And there's a pretty big range; right?

8 The top ranked solar project has a sort of  
9 negative value, and remind us what the negative  
10 value would mean?

11 A. In this case, a negative value would just  
12 indicate that the values that we quantified were  
13 greater than the costs that we quantified. And  
14 so it ends up making the resource rank very well  
15 comparable to the other resources.

16 Q. So in the scenarios that you thought were  
17 reasonable and should be presented to the  
18 commission, on average these projects were  
19 potentially saving customers money is basically  
20 your finding; yes?

21 A. Yeah. If you look at the value -- let me  
22 just answer the question. Yes, they're high  
23 value projects saving customers money, and we

1 think that by bringing forth the lowest cost  
2 where it's saving customers money, none of these  
3 resources are free. I think it's important to  
4 understand.

5 As I think Mr. Kelley referenced, sometimes  
6 the resource can provide enough energy benefit  
7 to offset its cost. That's observed. Some  
8 resources, that's observed in certain cases.  
9 There is no resource where that's observed in  
10 every case. And so there's a lot to sort of  
11 maneuver through in the numbers. So generally,  
12 a negative number is a good thing in this  
13 evaluation.

14 Q. So can you at least agree that you're  
15 generally finding that these solar battery  
16 projects in the petition put downward pressure  
17 on the overall system cost and customer costs  
18 that would be passed on?

19 A. Yeah. Relative to alternative resources,  
20 this analysis would say those projects will put  
21 downward pressure on cost.

22 Q. And remind us what alternative resources  
23 are you referring to there?

1 A. Well, on the page, there's a list of  
2 project A through I. So if you were to drop any  
3 one of 1 through 8 and replace it with A through  
4 I, the net impact will be a costlier portfolio  
5 resource.

6 Q. So your statements were to be understood  
7 within the confines of this document and this  
8 analysis; right?

9 A. This analysis is intended to compare the  
10 resources that we identified through the  
11 solicitations with one another and show us ones  
12 that make up the most cost effective portfolio  
13 resources.

14 Q. Okay. And, sir, now, if you would look at  
15 the eighth ranked resource, which is Central  
16 Alabama.

17 A. Yes.

18 Q. And that has a positive average NPV;  
19 correct?

20 A. It does.

21 Q. And I think I'm allowed to say that it's  
22 multiple times larger and positive as compared  
23 to the first ranked resource?

1 A. Yes. That's why it's in eighth place.

2 Q. Right. And there's a big range there  
3 between the top rank and the eighth rank;  
4 correct? The numbers are what they are, and the  
5 rank --

6 A. Yeah. They are what they are and you  
7 can -- there's a difference.

8 Q. Okay. And so putting aside projects 9 to  
9 17 on your list, do you have any other analysis  
10 of whether there are other options within this  
11 range between the first rank and the eighth rank  
12 resource available to the company in the market?  
13 I mean, that's a big range.

14 A. We don't have any evidence that there is a  
15 resource out there that's in that range that is  
16 available to us and is not on this list.

17 Q. But you, yourself, were not tasked with  
18 doing that verification and due diligence to  
19 make sure you weren't missing something in this  
20 big range available on the market?

21 A. No, I wasn't tasked. I think the premise  
22 of an RFP is you task the market with bringing  
23 their best resources, and that's what we

1 analyzed.

2 Q. And as I'm sure you heard in my  
3 conversation with Mr. Kelley yesterday, beyond  
4 the initial end point of the RFP in the sense --  
5 let me strike that.

6 After the bids were received, there were  
7 subsequent discussions and negotiations with  
8 various market entities. Those are  
9 undocumented. They're not here before the  
10 commission.

11 And so I'm just trying to understand, as  
12 part of that process, were you engaged to ensure  
13 that those negotiations properly identified  
14 potential least cost solutions that fall within  
15 this range or maybe even better than this range?

16 A. I recall the conversation yesterday. I  
17 don't know if Mr. Kelley specifically said, so  
18 I'll add a clarification that those  
19 conversations were with the people that bid. We  
20 didn't go initiate conversations with  
21 non-bidders to beg them to come add something  
22 that wasn't bid. That seems to undermine the  
23 integrity of an RFP.

1           So to the extent that someone bid, and as  
2       we evaluated the resource and talked to that  
3       counter party, we thought there was maybe some  
4       mutual benefit in them reducing their price or  
5       alternating a term to some extent. We did that,  
6       because it was in the confines of the RFP. But  
7       we did want to respect that process as it had  
8       identified the bids, bidders, and projects that,  
9       you know, we requested from the market.

10       Q.    And thank you for that clarification about  
11       the integrity of the RFP and the protocols to  
12       the bidders bidding.

13           Was there any contemplation of a subsequent  
14       RFP to make sure that the competitive market was  
15       aware of these additional considerations that  
16       the company wanted responses to?

17           Yes? No? Then you can explain, sir.

18       A.    No, we didn't contemplate running a second  
19       RFP. That would seem to deviate from a normal  
20       practice.

21       Q.    But you would have done it?

22       A.    I'm not aware of anything that would have  
23       just been prohibited from doing it other than it



1 would be timely. I mean, it would take a lot of  
2 time, and the processes we got to today, it's  
3 already a pretty lengthy process, to just impede  
4 progress when we had some good resources to  
5 consider. I don't think it was ever  
6 contemplated as the right thing to do.

7 Q. But isn't this whole exercise about  
8 optimization, not just it's good enough, but  
9 actually making sure you're getting the best for  
10 your customers?

11 A. Yeah. I think there's a balance in  
12 optimization pragmatism, where you mentioned you  
13 have to move forward and make a decision. It's  
14 one of the great concepts in life; right?

15 At some point, I have to put the pen down  
16 and move forward and make a decision. And I  
17 think Alabama Power did a really good job of  
18 balancing working hard to get these counter  
19 parties to provide as competitive a price as  
20 possible, but in due time saying this is what we  
21 have. We're going to move forward. We believe  
22 it's valuable to our customers, and, you know,  
23 in making a decision.

1 Q. Do you disagree with Sierra Club witness  
2 Detsky's recommendation that additional resource  
3 procurement is still feasible and would be  
4 timely in terms of the company's identified  
5 needs?

6 A. I believe I do disagree with that based on  
7 how I've observed this process play out in  
8 understanding and believing that Alabama Power  
9 has an imminent need to respond to their  
10 capacity deficit.

11 Q. But you have no analysis that says an RFP  
12 wouldn't be timely, like the one Mr. Detsky  
13 recommends?

14 A. I can only speak to the timeline that we've  
15 observed. I believe it's been documented and  
16 provided in discovery that this process has now  
17 taken somewhere close to a year and a half. And  
18 so I project another year and a half seems to be  
19 getting very close to a period in which many of  
20 the people that are concerned with the  
21 reliability of the system would have great  
22 ability to serve our customers. So that's the  
23 only evidence and documentation that I can

1 provide.

2 Q. And just to be clear, you were not tasked,  
3 I think, as we established at the outset, to  
4 analyze or verify the analysis around the  
5 claims.

6 That was Mr. Weathers' team?

7 A. Yes. No, I was not asked to make the need  
8 determination. That is a different group within  
9 Mr. Weathers' organization.

10 Q. Okay. And you're aware of Mr. Kelley's  
11 testimony that the company still plans to go to  
12 the market in the fall to procure renewables?

13 A. I did hear Mr. Kelley say that yesterday.

14 Q. And you haven't performed any analysis or  
15 know how that would impact the results of your  
16 analysis and whether it would identify  
17 additional resources that might be better than  
18 the ones that you studied?

19 A. The only analysis I have is that over the  
20 last several years, every renewable solicitation  
21 tends to produce lower prices than the one  
22 before it. Now, that presents a very  
23 interesting dilemma for planners. You can argue

1 we should never do any renewal projects, because  
2 I can always wait and get a cheaper one later.  
3 But again, we have to pragmatically balance, you  
4 know, taking forth the opportunity in front of  
5 us or perpetually foregoing opportunities in  
6 hopes of a better win tomorrow.

7 Q. Sir, I think you went beyond the extent.

8 If you recall my question, if you could  
9 just answer it, and then we can wrap up pretty  
10 quickly.

11 A. I think I did answer it.

12 Q. No.

13 A. I -- I think the question was have we -- it  
14 always seem to be have we done analysis of it.  
15 I'm going to assume that was the leading.

16 What was beyond that.

17 MS. CSANK: Madam Reporter, if you  
18 could read it back.

19 (Whereupon, the court reporter  
20 read the requested portion of the  
21 record.)

22 THE WITNESS: No. I think we  
23 established that I don't do the analysis for

1 the renewable RFPs that Alabama Power runs.

2 BY MS. CSANK:

3 Q. Thank you, sir.

4 Just one final thing. We were talking  
5 earlier about environmental justice.

6 Do you recall that?

7 A. I do recall that.

8 Q. And I think one of the ways you said that  
9 you reassure this commission that the petition  
10 would address environmental justice is because  
11 of your opinion that the resources identified  
12 are cost effective.

13 Is that what you said, something along  
14 those lines?

15 A. I think it's a slight mischaracterization  
16 of what I said. I don't think I made any  
17 particular statement to addressing the  
18 environmental justice. I believe what I said  
19 was it's intended or a belief of ours that  
20 supplying low cost reliable electricity to our  
21 constituents is valuable to them. And I might  
22 have gone as far as saying it could be  
23 considered more valuable to those that are in

1 positions of need than for those that are in a  
2 position of abundance.

3 Q. Thank you for refreshing my recollection.

4 So I think your testimony was that a low  
5 cost electric service would be a benefit to  
6 particularly low income customers, for example.  
7 Is that something you agree with?

8 A. Yes.

9 Q. But you don't have a cost benefit analysis  
10 of what the pollution costs are, particularly to  
11 those fence line communities who bear the brunt  
12 of the pollution of the gas units in the  
13 petition, versus whatever costs savings you're  
14 claiming; correct?

15 A. Not entirely correct. I think I have tried  
16 to describe that we trust the policymakers to  
17 help us quantify those, and then we analyze the  
18 policies that we are mandated to operate within.  
19 And that's the way we deal with those impacts in  
20 a way that's practical for our business.

21 Q. Okay. But in terms of low income customers  
22 who also may be living, working, or recreating  
23 near these gas units, you don't have any sort of

1 analysis specifically honing in on how they fair  
2 under this petition?

3 A. At an individual level, no, we do not.

4 Q. But even as a constituent, you don't have  
5 analysis of that constituency?

6 A. It's not part of my analysis, no.

7 MS. CSANK: Thank you, sir, for your  
8 time.

9 THE COURT: Brings us to Energy  
10 Alabama/GASP. And if you'll make sure that  
11 microphone is fairly close to you,  
12 Mr. Johnston. You project pretty well, but  
13 just be mindful of that.

14 MR. JOHNSTON: Gotcha.

15 CROSS-EXAMINATION

16 BY MR. JOHNSTON:

17 Q. Good afternoon, Mr. Looney.

18 A. Good afternoon.

19 Q. How are you?

20 A. Doing well.

21 Q. I'm Keith Johnston. I'm with the Southern  
22 Environmental Law Center, and I'm here  
23 representing Energy Alabama and GASP. And we

1 have met during a prior deposition.

2 I guess, to start, I just want to make sure  
3 that we've covered all of this, and I think we  
4 pretty much have, but a yes or no answer will  
5 suffice. Then we can quickly get through this.

6 You didn't participate directly in any  
7 benchmark analysis; correct?

8 A. Correct.

9 Q. And you didn't directly participate in the  
10 development of the IRP; correct?

11 A. Correct.

12 Q. And Alabama Power performed the first  
13 initial screening of the projects; correct?

14 A. I don't think that the characterization or  
15 that they reviewed the bids for conformance with  
16 the IRP requirements, they didn't do an  
17 analytical screen. The analytical evaluation,  
18 we performed.

19 Q. Alabama Power handed you the battery repair  
20 storage projects; correct? The analysis?

21 A. Yeah. But substantial portions of the  
22 analysis was done by Alabama Power and then  
23 provided to us for review and inclusion in our



1 overall ranking.

2 Q. And SCS transmission did the transmission  
3 analysis; correct?

4 A. Yes.

5 Q. And you testified that you have very  
6 limited involvement with the renewable RFP;  
7 correct?

8 A. Yeah.

9 Q. And you weren't involved with the Barry  
10 turnkey?

11 A. Not the development of Barry turnkey.  
12 Again, all of the economic analysis was ours,  
13 the evaluation of the resource.

14 Q. And, of course, you couldn't have been  
15 involved with the 200 megawatts of management,  
16 because that hasn't been chosen; correct?

17 A. Correct. We're not involved with that.

18 Q. I want to turn to the solar storage  
19 proposal.

20 And as you have stated, and you stated in  
21 your deposition, the batteries and solar prices  
22 have declined pretty significantly in the last  
23 several years; is that correct?

1 A. I don't remember the exact manner in which  
2 I characterized it, but there are meaningful  
3 declines, I think, might have been my term.

4 Q. Meaningful declines.

5 And you limited your analysis of the  
6 battery repair storage to two-hour batteries?

7 A. That's not entirely correct. In the  
8 original capacity RFP, we received bids for  
9 standalone batteries. I believe there were some  
10 four- and eight-hour batteries. Those were  
11 evaluated. Unfortunately, those projects were  
12 not found to be cost competitive with the  
13 majority of the other resources, and so we moved  
14 on from those projects and found an opportunity  
15 to evaluate some two-hour batteries under the  
16 very particular use case that appear to be  
17 valuable.

18 Q. But that took place in a renewable RFP --  
19 correct? -- which you had limited involvement?

20 A. I think the solar projects were identified  
21 in the renewable RFP, and then Alabama Power,  
22 through a process that we were involved with,  
23 determined that it might be possible to pair

1 some of those more valuable solar projects with  
2 some short duration batteries; thus, there were  
3 some conversations with those bidders, inviting  
4 them an opportunity to bid such a project in  
5 which they did, and then it was evaluated  
6 through the due process that's been discussed  
7 here ad nauseam to -- it found its way in our  
8 ranked portfolio.

9 Q. But again, you weren't involved in the  
10 renewable RFP?

11 A. In its original form, I was not involved.

12 Q. Is that a yes?

13 A. Yes. Yes, I was not involved in the  
14 renewable RFP as so long as it was in its  
15 original contemplated form, which was renewable  
16 only projects.

17 Q. So you stated that there's currently -- you  
18 testified that there's currently zero megawatts  
19 of batteries in the current Southern system?

20 A. I probably did say that. I should probably  
21 clarify that my intent of that statement was  
22 there's none that's really providing a  
23 capacity-based resource. I do think we have

1 some little projects that are research  
2 development type functions. So I don't want to  
3 mislead the record there. There are some small  
4 projects here and there, but nothing that's  
5 serving a real capacity-based need.

6 Q. On your deposition on page 41, 7 through 9,  
7 lines 7 through 9, the question was, "How many  
8 two-hour battery capacity currently is on the  
9 Southern sytem?"

10 You said, "Zero."

11 A. Yeah, I think that's fair. Two-hour  
12 batteries.

13 Q. You didn't seek any additional battery  
14 projects beyond the 400 megawatts of this  
15 portfolio?

16 A. Again, as I just mentioned, there were a  
17 number of longer duration batteries that were  
18 openly authored by the market. We did evaluate  
19 those. I think Mr. Kelley testified that there  
20 were an additional -- I don't remember --  
21 several hundred megawatts more. I can't  
22 remember the exact number. I want to say maybe  
23 560 megawatts more of projects that they

1 identified, and through their process of which I  
2 described we cooperate with and partake of, they  
3 screen those projects out based on economics.

4 Q. Was that screened out because of the ICE  
5 factor or the incremental capacity equivalency  
6 factor?

7 A. I think they're screened out in combination  
8 of reasons. A decline in capacity equivalence  
9 certainly contributes to that, but also projects  
10 were found to have some site specific  
11 transmission constraints that would have  
12 presented additional costs.

13 Q. You testified a number of times that the  
14 battery repair storage was the most cost  
15 efficient project in your analysis; correct?

16 A. Yes.

17 Q. And that those projects provided energy  
18 benefits hourly across all seasons in the  
19 capacity benefits in all seasons; is that  
20 correct?

21 A. Yes.

22 Q. And from your analysis and from what we  
23 have seen at 500 megawatts, the battery ICE, or

1 the incremental capacity equivalency, you claim  
2 starts to decline; is that correct?

3 A. Yeah. And that's specifically for a  
4 two-hour battery. So the ICE factor for a  
5 battery is a function of its duration. So the  
6 way the capacity equivalence of a 12-hour  
7 battery would behave very differently than a  
8 two-hour battery even relative to penetration.

9 So what we found in the market solicitation  
10 is that the four- and eight-hour batteries  
11 aren't competitive with the other resource. The  
12 two-hour batteries were; however, our system has  
13 a limited appetite for two-hour batteries at a  
14 high capacity equivalence, and that 400  
15 megawatts comes close to satisfying that  
16 appetite.

17 Q. And first, explain -- this is my  
18 terminology, and we can explain it better, but  
19 the 85 percent cutoff of the ICE factor.

20 A. Yes. I attempted to explain the way we  
21 calculate ICE factors before in that you do a  
22 reliability and evaluation, and you see how much  
23 expected and uncertain energy can be mitigated

1 with a reference resource. We use a dual fuel  
2 CT for a reference resource. Just think of that  
3 as a nonenergy limited dispatchable resource,  
4 and then you run a similar analysis with a  
5 resource that might be partially dispatchable,  
6 non-dispatchable, or limited, and use the number  
7 of reasons, and you get a relative improvement  
8 in reliability.

9 What we found is the two-hour battery  
10 mitigated somewhere between 85 and 92 percent of  
11 the expected uncertain energy was mitigated by  
12 the CT, so that establishes the ICE factor.

13 Q. So is the ICE factor in a sense almost like  
14 a capacity factor or the equivalency thereof?

15 A. Right. I mean, I use the term capacity  
16 equivalence interchangeably with ICE factor.  
17 Capacity factor has other meanings than we  
18 talked about that earlier. It could be a  
19 measure of how much a unit runs. So you got to  
20 be careful about some of these terms that can  
21 mean a lot to certain people in the industry. I  
22 try to define them well.

23 Q. And so when you applied the 85 percent ICE

1 factor, does that apply before or after  
2 selection of the battery plus storage, BSS  
3 projects?

4 A. I think, as I recall what happened, I think  
5 you could appreciate that energy storage is a  
6 topic that a utility, such as ourself, would  
7 spend a lot of time thinking about and analyzing  
8 right now, and so we were doing this type of  
9 analysis. And we found in the course of these  
10 last eight months some period that it appears  
11 that a two-hour duration battery as a high  
12 capacity equivalence for some amount of  
13 megawatts, and we discussed that with Alabama  
14 Power, and their response was, well, we ought to  
15 go and see if that's a product that the market  
16 could provide.

17 So really, the 85 percent drove the request  
18 for two-hour batteries, and then the process  
19 worked out that we found certain projects,  
20 evaluated them, and brought forth 400 megawatts  
21 of energy storage.

22 Q. So the choice of the 85 percent at ICE  
23 factor drove how you guys analyzed those BSS



1 projects that made the short list?

2 A. I think that's a fair characterization.

3 Q. And for the first 500 megawatts, the  
4 equivalency was greater than 85 percent?

5 A. Yeah. We ran an analysis several times,  
6 and just based on the type of analysis, the  
7 numbers, they bounce around. You might bet a  
8 92, you might get an 89. They seem to sort of  
9 coalesce around 85 to 90. There are some  
10 constraints in the contracts, and so we took a  
11 little bit of a conservative approach in saying,  
12 you know, we got this range of the ICE factors,  
13 the contracts have some discharge constraints.  
14 We don't think that the constraints are  
15 meaningful from a reliability standpoint, but it  
16 was a measure to be a little conservative about.  
17 That conservatism didn't hinder the economic  
18 standing of the projects. So in all, we felt  
19 good about the application of the 85 percent ICE  
20 factor.

21 Q. So you added these -- in your analysis, you  
22 added these batteries to the first tranche, 250  
23 megawatts; correct?

1 A. I think the analysis that you're referring  
2 to, we looked at different tranches. So we  
3 looked at a 250 megawatt tranche. Not in  
4 addition to that but just in place of that, we  
5 looked at a 500 megawatt tranche. Again, not in  
6 addition but in place of that, we looked at a  
7 750 megawatt tranche and on and on.

8 And as you describe what we saw is after  
9 that -- the 500 megawatt tranche had a high  
10 capacity coolant, the 750 megawatt tranche had a  
11 diminished, and then we did some math to kind of  
12 estimate the incremental impact of going from 5-  
13 to 750, to think about what would that next 250  
14 be, and it was greatly diminished from the 85  
15 percent.

16 Q. So in both of those initial tranches, the  
17 250 megawatts, the 500 megawatts, both of those  
18 were north of 90 percent ICE factors?

19 A. In that particular analysis, yes.

20 Q. So very high?

21 A. That's right, capacity factor.

22 Q. And then you state that there was a  
23 significant fault after that in the 750 tranche?

1 A. Yes.

2 Q. In your deposition, you stated that it  
3 would have been closer to 50 percent in the 750  
4 megawatt tranche?

5 A. Yes. I recall saying that and still  
6 believe that that's an accurate --

7 Q. It was a 30 to 40 percent reduction from  
8 the 500 megawatt tranche to the 750 megawatt  
9 tranche?

10 A. Yeah, that sounds right.

11 MR. JOHNSTON: Your Honor, may I  
12 approach the witness? And may I approach  
13 counsel, Your Honor?

14 THE COURT: Yes.

15 MR. JOHNSTON: We had agreed that  
16 there was -- you're going to waive  
17 confidentiality on this document? I just want  
18 to make sure.

19 MR. GROVER: Which one was this?

20 MR. JOHNSTON: This was his work  
21 papers, the Exhibit 2 to the deposition.

22 MR. GROVER: Yes, we agree to that.

23 MR. JOHNSTON: Yeah, for that

1 particular tab of the work copy.

2 MR. GROVER: That's fine.

3 BY MR. JOHNSTON:

4 Q. I'm going to give you a copy. I printed  
5 this out on an Excel worksheet, so I did the  
6 best I could.

7 A. That was a challenge, to print Excel.

8 THE COURT: You want this marked as  
9 Alabama GASP 4?

10 MR. JOHNSTON: That's right.

11 THE COURT: Document will be so  
12 marked.

13 BY MR. JOHNSTON:

14 Q. Okay. Help me walk through this document,  
15 please.

16 A. Where do you want to start?

17 Q. So you recognize this work; correct?

18 A. Yes.

19 Q. And is this your work?

20 A. It is work from my -- from the team that I  
21 manage.

22 Q. And who was on that team?

23 A. The individual that performed this

1 analysis, his name is Dean Moncrieff.

2 Q. And this is data that has been analyzed and  
3 displayed in a chart in graph form?

4 A. That's correct.

5 Q. And this is the results of y'all's  
6 analysis; correct?

7 A. That is correct.

8 Q. And this shows the ICE factors for those  
9 various tranches that we were just discussing;  
10 is that correct?

11 A. Yes.

12 Q. So looking at the first line under annual  
13 of the 250 megawatt tranche, we see a base case,  
14 we see tranche one CT. I assume that's combined  
15 combustion turbine.

16 A. That's right.

17 Q. And tranche one battery. That's 250  
18 megawatts of battery; is that correct?

19 A. Yes.

20 Q. So the ICE factor or capacity factor of  
21 these batteries at 250 megawatts, you guys found  
22 would be 92 percent; is that correct?

23 A. That's right.

1 Q. And then moving down to the 500 megawatt  
2 tranche, that would be 94 percent?

3 A. Yes.

4 Q. So those are very high percentages as far  
5 as the efficacy of these batteries to provide  
6 capacity factor; correct?

7 A. Yes.

8 Q. In looking at tranche three, 750 megawatts,  
9 it shows 79.66 percent or almost 80 percent?

10 A. Yes.

11 Q. So in your deposition, you stated that it  
12 would have averaged close to 50 percent.

13 Can you explain that discrepancy?

14 A. I can. This is where you have to be  
15 careful with the numbers. So the first 500  
16 megawatts are giving you in this case 94 percent  
17 contribution. All 750 of the next analysis,  
18 which, again, is not in addition to 500, it's a  
19 750 megawatt tranche, instead of 500. All 750  
20 of that, on average, giving you 80 percent. But  
21 the first 500 of that 750, you already know is  
22 giving you 94 percent. The next 250 has to be  
23 giving you something much less than 80 percent

1 to drag the average down from 94 to 79.

2 And if you sort of run that math through,  
3 that 250 is giving you something close to 50  
4 percent in order to drag the average down from  
5 94 to 79. And so it was a way to take this  
6 tranche, look, and then think about the  
7 incremental impact of that 250 that took you  
8 from 500 to 750.

9 Q. So you're saying that the 750 megawatt  
10 tranche does not, in fact, give you results in a  
11 capacity factor of 80 percent?

12 A. Well, if at one time you blindly got 750,  
13 so all I'm going to analyze is 750, you would  
14 leave saying I'm getting 80 percent contribution  
15 from that 750. We happen to know that we  
16 already would have gotten 94 percent from the  
17 first five, so that gives us an insight into  
18 what's just that incremental 250 doing. Just  
19 that incremental 250 is giving me something  
20 closer to 50 percent, because we have insight in  
21 the analysis on what the first 500 was giving  
22 you.

23 Q. So let me make sure I follow you. The

1 first tranche, we have 92 percent, and that's 92  
2 percent capacity factor. The second tranche, we  
3 have 94.3 percent, almost 95 percent, capacity  
4 factor.

5 You're saying the decline in that capacity  
6 factor in the next tranche is not as valued as  
7 the first two tranches?

8 A. I don't know if that's exactly what I'm  
9 saying, so I'll try to answer the question. The  
10 first 250 has high equivalence. The 500 has  
11 equally high equivalence. So that should say  
12 the second 250 behaved very similarly to the  
13 first 250, because the equivalence was very  
14 similar, okay?

15 The next 250 did not behave like the first  
16 or second 250, because the 750 tranche did not  
17 look like the 250 or the 500 tranche. So did we  
18 step back and say, well, what was the  
19 incremental impact of going from 5- to 700, and  
20 you have to work with the numbers a little bit,  
21 but it derives the 50 percent number.

22 Q. It looks like you have to work with the  
23 numbers a lot?



1 A. You don't really. You take the 500, you  
2 multiply it times the ICE factor, you take the  
3 750, and you multiply it times the ICE factor,  
4 you do some differences, and you divide some  
5 things out. It sounds more complicated than it  
6 is, and that's just the nature of analyses at  
7 times.

8 Q. Let me ask you this. If the ICE factor was  
9 75 percent, would tranche three fit in your  
10 analysis as an economic alternative?

11 A. If the incremental ICE factor of the next  
12 250 was 75 percent, I don't know with any  
13 certainty. Because that's not what it was, so  
14 we didn't analyze it. I don't know any  
15 certain --

16 Q. I'm saying if your ICE factor was not  
17 85 percent but 75 percent.

18 Do you see what I'm saying?

19 A. I kind of see what you're saying, but all I  
20 can say is we didn't run those numbers.

21 Q. Okay. But there is the possibility that  
22 that next tranche would have made a cost  
23 effective --

1 A. Well, I think there's some --

2 Q. Is that a yes or a no?

3 A. No, I don't -- I don't think so.

4 Q. I think you testified earlier, and maybe  
5 Mr. Kelley testified to this as well, where you  
6 say it wouldn't be appropriate to look at the  
7 cost of the energy, because this is a petition  
8 about capacity, about needs?

9 A. I think particularly what I said is the  
10 right metric to compare resources on is a dollar  
11 per KW of capacity, not a dollar kilowatt hour  
12 or megawatt hour. We certainly look at the  
13 value of the energy delivered by the resources.

14 So I would not -- I certainly didn't say I  
15 don't believe Mr. Kelley said or would say you  
16 should ignore that. It's just not the right  
17 metric to normalize the comparison against in  
18 our evaluation.

19 Q. So in some of the choices in the portfolio,  
20 you are certainly looking at the energy savings  
21 of those choices; for instance, Barry Unit 8?

22 A. Yeah. Every -- if you look at my exhibits  
23 in my direct testimony, every resource was given

1 due consideration to the energy savings that it  
2 provides. Every resource was afforded that  
3 opportunity, and that was what drove the  
4 analysis.

5 Q. So that makes -- part of the attraction of  
6 Barry Unit 8 is the energy savings that it  
7 provides; is that correct?

8 A. That's a big component, which is an  
9 unexpected given what we've heard discussed here  
10 about the offering characteristics of that  
11 particular resource.

12 Q. And shouldn't you compare the energy  
13 benefit between all the resources?

14 A. We did. If you look at the analysis that I  
15 have provided, there's a column that says  
16 "Energy Savings," and every resource clearly  
17 listed there, energy savings and dollar per KW,  
18 that's as direct a comparison as I know to  
19 provide on the energy savings of each resource.

20 Q. And you're referring back to your MPL 1  
21 exhibit; is that correct?

22 A. I am, yes.

23 Q. Do you know what the capacity factor of

1 Barry Unit 8 is?

2 A. Yeah. I believe we discussed this a little  
3 bit before. It varies year to year, scenario to  
4 scenario. Because of its efficiency relative  
5 to -- let me just say the average of our fleet,  
6 it runs at a very high capacity factor. I've  
7 seen the numbers. I believe many of them to be  
8 in the 80 percent range, some at higher than  
9 90 -- at times, it just ran out of availability.

10 Q. Ran at 100 percent?

11 A. Well, no dispatchable resource in our model  
12 runs at a 100 percent, because we model the  
13 forced outages. So even if you called it every  
14 hour of the year, because we're modeling forced  
15 outages, it's going to trip offline several  
16 percentage points of the year, and you'll get  
17 something less than 100 percent.

18 Q. And I think you testified at one point that  
19 it could be anywhere from 20 to 80 percent  
20 capacity factor for Barry Unit 8?

21 A. I think, technically, it could be anywhere  
22 from zero close to 100. That's the nature of a  
23 fully dispatchable resource. You can run it

1 none or you can run it a lot, and it's all about  
2 moment to moment economic dispatch of the fleet,  
3 and that differentiates the dispatchable  
4 resources from the non-dispatchable resources,  
5 and, you know, that's characterized and  
6 reflected in our analysis.

7 Q. So it varies across that percentage of what  
8 it is?

9 A. Yeah. It just so happens that because  
10 Barry is very efficient, there's not a list of  
11 variation in its capacity factor that is very  
12 high, somewhere around 80 percent, throughout  
13 the duration of that analysis.

14 Q. But that wouldn't be the average of  
15 capacity factor in Barry Unit 8?

16 A. I don't have the average available. It is  
17 available. I just don't have it with me. My  
18 recollection is that's close to the average,  
19 give or take, you know, 5 percentage points.

20 Q. So if we had batteries, if we have 750  
21 megawatts of batteries that had a capacity  
22 factor of 85 percent, would that be included in  
23 this list of alternatives?

1     A.     Describing a battery with a capacity factor  
2     is probably misleading. I mentioned earlier, a  
3     battery doesn't generate electricity. It stores  
4     it. And so we really think about it in terms of  
5     discharge cycles.

6           Now, you can get production cost savings  
7     from charging a battery in one period of time  
8     and discharging it in a different period of  
9     time, but I don't know if the capacity factor is  
10    the right way to describe what's often referred  
11    to as an arbitrage of value of batteries.

12           I would feel remiss to not mention that the  
13    two-hour batteries are not intended to cycle a  
14    whole lot. Our case of the two-hour batteries,  
15    think of it more as an emergency generator given  
16    the fact that batteries, they don't actually  
17    generate, but they would -- they would discharge  
18    in more emergency situations, so their cycles  
19    are going to be relatively limited. But they --  
20    but by playing that role, they can have a very  
21    high benefit to reliability, because we're going  
22    to withhold it until that moment where they're  
23    needed most.

1           And again, you can't build a whole fleet of  
2 resources like that; thus, the falloff of the  
3 ICE factor that we see. It just appears to be a  
4 nice niche opportunity for our company that  
5 we're able to take advantage of here in this  
6 portfolio.

7       Q.    Did that capacity allow you flexibility?  
8       Yes or no?

9       A.    Yeah, the battery capacity allows us to  
10   increase flexibility in our system.

11   Q.    Does that help you at peak periods?

12   A.    Yeah. That's why we see a capacity of --  
13 high capacity equivalence, because it helps us  
14 in -- you said peak period. We think about  
15 reliability in extreme periods. They're  
16 somewhat correlated, but yeah.

17   Q.    In the solar renewable RGC that we've  
18 discussed, those projects were capped at 80  
19 megawatts; is that correct?

20   A.    That's my understanding. I think I was  
21 even shown the RGC filing in my deposition, had  
22 the opportunity to read that line and verify it.  
23 So, yes, that's cap exists.

1 Q. Do you know if the commission recommended  
2 that cap, or was that the company that  
3 recommended that cap?

4 A. I don't know the answer to that.

5 Q. Do you know if Alabama Power could request  
6 a higher cap, petition for a new RFP there?

7 A. I'm going to assume they could. I don't  
8 know if they're motivated to. Again, I don't  
9 know the origin of that cap, so I'm not sure how  
10 you're speculating how successful they would be  
11 in such a petition, if they were to draw one.

12 Q. Do you know if there's an expiration date  
13 on the renewable RGC?

14 A. I believe that there is, but I don't  
15 exactly know. I thought -- again, I'm not  
16 intimately day-to-day affiliated with that. I  
17 believe it was a certification that covered a  
18 certain period of time, but I don't remember the  
19 specifics.

20 Q. Does five years sound correct?

21 A. I don't remember the specifics.

22 Q. You discussed earlier some of the high gas  
23 scenarios of your group or the lack of high gas



1 scenarios that you ran.

2 You ran a low gas scenario, and you ran a  
3 moderate gas scenario; correct?

4 A. Yeah. I did mention that we ran one in our  
5 nomenclature as a low gas scenario when our  
6 nomenclature is a moderate gas scenario. I  
7 think, to be clear for the record, our moderate  
8 gas scenario actually escalates over \$15 per  
9 MBtu over our evaluation period, which is over  
10 600 percent increase from today's gas prices.

11 So I don't want the record to state that  
12 we're not contemplating increasing gas prices.  
13 That's still what I consider to be a significant  
14 increase. It just happens to be what's  
15 considered the moderate gas forecast in our  
16 nomenclature.

17 Q. Is it your testimony that y'all ran a high  
18 gas scenario?

19 A. I considered the prices in our moderate gas  
20 scenario to be relatively high. So I think I  
21 would answer the question, at face value, yes.  
22 I want to be clear that we have a gas scenario  
23 that's called high gas that we did not run, but

1     these are a bit of nomenclature semantics things  
2     that I want the record to be clear on that.

3     Q.    Barry Unit 8 is going to operate for 40  
4     years; correct?

5     A.    Our analysis assumed that Barry Unit 8  
6     would operate for 40 years.

7     Q.    And the forecast for the field service  
8     group is just that, a forecast; right?

9     A.    Again, our forecast is really from Charles  
10    River and Associates. I think it comes with the  
11    blessing of our fuel group, but it is just a  
12    forecast, yes. And actually, we have two  
13    different forecasts.

14    Q.    Who bears the burden of a high-risk  
15    scenario as far as prices are concerned?

16    A.    Can you define the "high-risk scenario"?

17    Q.    Will customers bear that burden?

18    A.    Generally speaking, under the regulatory  
19    contract, customers bear the costs of most, if  
20    not all, of the cost to provide the service.

21    Q.    Will the company recover those costs?

22    A.    The company would expect to recover all  
23    fuel costs that are prudently extended to serve

1 the customers' needs.

2 Q. Fuel is a significant driver in your  
3 analysis; correct?

4 A. I think we find that the fuel is a very  
5 important factor in making resource decisions,  
6 and I don't think that that is any different in  
7 the analysis that we did.

8 Q. So in your deposition, the question was,  
9 "So fuel is a significant cost driver in this  
10 analysis; do you agree?"

11 And your response was, "Yes. I think it's  
12 a meaningful component of the evaluation."

13 A. That sounds like something I would say.

14 Q. So over the life of Barry Unit 8, would the  
15 fuel cost compare to the magnitude of the  
16 capital cost of that unit?

17 A. Yeah. According to way we expect the unit  
18 to be dispatched, it will. I think it's  
19 important to understand that there is no  
20 incremental fuel cost because we build Barry 8.  
21 There's a shifting of fuel cost from one  
22 resource to another. The result of Barry 8 is  
23 that the overall fuel cost is decreased, so

1     there's no addition -- our customers aren't  
2     going to be paying for one extra molecule of  
3     fuel. They'll be paying for fewer molecules of  
4     fuel. Which resource that that commodity goes  
5     to, you know, is irrelevant in the overall cost  
6     to operate the system as long as you capture a  
7     cost going up or cost going down.

8     Q.     In your deposition, on page 76, lines 15  
9     through 17, and I quote, "Over the life of the  
10    unit, I would expect the bill cost to compare to  
11    the magnitude of capital cost."

12           Do you still agree with that statement?

13    A.     Based on how we expect the unit to run,  
14    yes, and I would further say that's a good  
15    indication that the utilization of the resource  
16    will be high. If the fuel cost for Barry was  
17    significantly close to zero, that means the  
18    utilization of the resource would be very poor,  
19    and we'd be making an imprudent decision to  
20    build a resource that was hardly ever going to  
21    run.

22           So, you know, you got to consider both  
23    sides of this equation that high fuel cost means

1 high utilization, which means high value to  
2 customers, and so I think by presenting fuel  
3 savings, we give the commission the appropriate  
4 metric by which to gauge their decision.

5 Q. On the debt equity ratio, which is  
6 something that you included in your analysis of  
7 these projects, you assumed the cost per PPA  
8 units.

9 That would change the debt equity ration;  
10 is that correct?

11 A. We assumed the cost for the gas PPAs. We  
12 did not assume an equity cost for renewable  
13 PPAs. So there were several projects that based  
14 on our collaborative interaction with our  
15 accounting and finance group, we evaluated an  
16 equity cost on several projects.

17 Q. Do you do that for every analysis that you  
18 do?

19 A. I would say every analysis that includes a  
20 contract, the contract goes through a financial  
21 review, and then we're given guidance on if the  
22 contract's financial review is going to result  
23 in an impact to the company's capital structure.

1 Q. Do you personally know of any rating  
2 agencies that have cited PPA or this proposal  
3 that would have adverse impacts on capital  
4 structure?

5 A. It's not something I personally follow.

6 Q. Would PPAs of shorter duration, would that  
7 change that number in your analysis?

8 A. My understanding is that contract duration  
9 may be one of the things that drives the  
10 accounting review of the contract, and so I  
11 would only say that it's considered.

12 Q. In your consideration, you considered a  
13 second unit at Barry; correct?

14 A. There was a second unit at Barry that was  
15 considered, and we did run some analysis on that  
16 in some of our early resource screenings.

17 MR. JOHNSTON: Your Honor, is this a  
18 good time to take a break real quick?

19 THE COURT: I'm good.

20 MR. JOHNSTON: It would be a good  
21 time for me to take a break.

22 THE COURT: All right.

23 MR. JOHNSTON: I only have a few. I

1 can get through this really quickly.

2 THE COURT: All right. Let's take  
3 about a five-min break.

4 (Recess taken.)

5 THE COURT: All right. Let's go  
6 ahead and get back on the record and resume  
7 the cross-examination of Mr. Looney by GASP  
8 and Energy Alabama.

9 BY MR. JOHNSTON:

10 Q. Okay. Mr. Looney, we were just discussing  
11 the second unit at Barry, and that unit was  
12 ultimately rejected by the company; is that  
13 correct?

14 A. The unit was not. It was decided not to  
15 pursue a second unit at Barry.

16 Q. And what was the reason for that?

17 A. My recollection is that there were some  
18 relatively high transmission costs to  
19 interconnect and deliver output from the second  
20 Barry Unit. And that while the unit would have  
21 provided a tremendous amount of additional  
22 energy benefit, it wasn't -- a cross fit  
23 consideration of the whole portfolio decided

1     that, you know, it was the right economic  
2     decision to pursue.

3     Q.    And you had discussed previously with the  
4     Alabama Industrial Energy Consumers, you had a  
5     discussion with them about capacity values; do  
6     you remember?

7     A.    I do remember some discussions around  
8     capacity values.

9     Q.    Earlier today?

10    A.    Yes.

11    Q.    And I think the testimony there -- and this  
12    is, we should say, distinct from capacity  
13    factor. This is capacity value.

14    A.    Yeah. Maybe we can clean that up a little  
15    bit with your question, so...

16    Q.    So what's your definition of capacity  
17    value?

18    A.    My definition of capacity value, which is  
19    more similar to capacity, is a dollar value of  
20    the capacity contribution of a resource;  
21    whereas, capacity equivalent is a percentage or  
22    maybe a megawatt. Capacity value is often a  
23    dollar value. Capacity factor is a metric of



1     how often the unit runs.

2     Q.     So the capacity -- the capacity factor  
3     influences the capacity value; is that correct?

4     A.     No.   The capacity factor would more  
5     directly influence the energy value.

6     Q.     So the battery paired with storage, you  
7     said the solar project, the capacity values were  
8     around 25 percent.

9             Was that your testimony?

10    A.     Yeah.   Let me clarify in case I  
11    mischaracterized these terms.   Most solar  
12    projects have a capacity factor in the low to  
13    mid 25 percent.   Now, they have a capacity  
14    equivalence that can range -- it can have a  
15    broad range based on the reliability situation  
16    of a particular utility.   I think we've seen  
17    them over time range between nearly zero to, you  
18    know, numbers that approach 50 percent.

19    Q.     And you were talking about without  
20    batteries?

21    A.     Without batteries; correct.

22    Q.     So solar paired with storage, obviously,  
23    adds another value, a significant value?

1 A. Right. The solar paired with storage sort  
2 of defaults to the capacity equivalence of the  
3 battery, which is more likely 85 percent  
4 capacity equivalent that we spoke about several  
5 moments ago.

6 Q. And that's why Alabama Power in part found  
7 these projects so valuable, was because those  
8 types of projects can help with reliability  
9 issues?

10 A. And the battery part of the project has the  
11 reliability contribution, which is really what  
12 we sought through these proceedings. For a  
13 number of reasons, the resources paired with  
14 solar, which brings an additional energy benefit  
15 to the resource, and so our analysis accounted  
16 for both of those value strings.

17 Q. You have an energy benefit and a capacity  
18 benefit in that example?

19 A. Yeah. And simplistically, you can think  
20 the batteries providing the capacity benefit,  
21 and the solar resource part of it is providing  
22 the energy benefit.

23 Q. And so we've looked at two-hour batteries

1 here, and your extensive analysis looked at  
2 those two-hours batteries.

3 Do you know what the cost of four-hour  
4 battery is now; yes or no?

5 A. No.

6 Q. Do you know if the costs are coming down?

7 A. You know, my general understanding is that  
8 battery costs have been declining.

9 Q. What is the nameplate capacity of Barry  
10 Unit 8?

11 A. I believe the nameplate capacity of Barry 8  
12 is 685 megawatts based on its summer -- summer  
13 rating, and I believe that's after -- that's  
14 just a long-term capacity. As Mr. Bush  
15 mentioned, that's built into the contract with  
16 the consortium is a turbine upgrade that will  
17 happen several years in operation. I think it's  
18 a long-term nameplate capacity, at 685  
19 megawatts, based on its summer temperature rate.

20 Q. What's the winter?

21 A. I have that listed at 743.

22 Q. Is that the nameplate capacity of the Barry  
23 Unit 8?

1 A. That's just winter capacity rating, as we  
2 evaluated it.

3 Q. Are you distinguishing between winter  
4 capacity rating and nameplate capacity?

5 A. You know, nameplate capacity is not a  
6 highly meaningful term to my evaluation. I  
7 really want to know what can the unit provide in  
8 each season. I don't know what number will be  
9 stamped on the nameplates that the OEM attaches  
10 to the side of the turbine.

11 Q. So you don't know the nameplate capacity  
12 for the Barry unit?

13 A. Right. I have represented the capacity  
14 that we can rely on from the unit in each season  
15 as its rating.

16 Q. Referring to your Exhibit MBL-1, and some  
17 of that information is confidential throughout  
18 that exhibit. I want to stay away from that  
19 confidential information, so do not answer any  
20 question that would use confidential.

21 It appears Barry is particularly sensitive  
22 to gas prices. Is that a fair statement in your  
23 scenarios?

1 A. I don't observe that it's more sensitive  
2 than the other gas-fired resources. It's --

3 Q. Well, within the gas-fired resources, there  
4 are -- they are more similar, yes, than the  
5 battery, solar paired with battery --

6 A. Yes.

7 Q. -- than the BES project.

8 But as a whole, in your chart, is it fair  
9 to say that as those gas scenarios change,  
10 moderate and low gas, it changes the values, net  
11 present value, of Barry Unit 8 pretty  
12 significantly?

13 A. It does change the values.

14 Q. So that -- is that a fair characterization  
15 to say that it's sensitive to those price  
16 scenarios, those gas scenarios?

17 A. I think what we actually observed is that  
18 the operations of the unit is pretty steady  
19 across the scenarios. There's a lot of other  
20 things moving in the system, coal units  
21 dispatching relative to gas units as gas price  
22 goes up and down, and so the total production  
23 cost impact has, you know, a meaningful

1 difference, but that's not directly correlated  
2 to the operation of Barry.

3 It's accounting for the entire dynamics of  
4 the system, because we do a full production cost  
5 evaluation.

6 Q. So in a moderate gas scenario, according to  
7 your analysis, what are the least cost  
8 beneficial projects? And that would be with  
9 zero carbon pricing.

10 A. Yeah. I mean, according to the chart, the  
11 solar battery projects are the least cost under  
12 the moderate gas zero dollar carbon scenarios,  
13 and as I mentioned, our moderate price does have  
14 some relatively high prices, and it's gas price  
15 increase that enhances the value of a solar  
16 facility.

17 Q. So once gas prices rise, and if there is a  
18 gas placed on carbon, which is scenarios that  
19 you run, renewable resources have far more  
20 value, according to your comparisons; correct?

21 A. Yes.

22 Q. You stated that there were multiple tiers  
23 in your short list of economic analysis summary,

1 and you ranked the first eight projects that are  
2 part of this petition, and then you have 9  
3 through 17 of the second tier that didn't make  
4 the short list; is that correct?

5 A. Well, they made the short list. They  
6 didn't make the long list --

7 Q. The long list?

8 A. -- of the proposed portfolio.

9 Q. So they made the short list, and that's  
10 different from the portfolio that you spoke  
11 before the commission today?

12 A. Correct. In the nomenclature we adopted  
13 internally to discuss the evaluation, I think I  
14 mentioned earlier, I think, there were 55  
15 projects product originally bid in, and  
16 eventually, we came up with a short list, which  
17 is the 17 projects, and then from the short  
18 list, Alabama Power selected eight of those to  
19 seek certification.

20 Q. Okay. I see. And I think you and I were  
21 just talking over one another.

22 And then you had -- you said earlier that  
23 tier one was the top eight projects that made

1 the short list; correct?

2 A. I don't know if I said tier one. But  
3 certainly, those eight projects are what the  
4 company selected to seek certification for. And  
5 by the exhibit and the analysis, they were the  
6 most cost competitive projects that we  
7 evaluated.

8 Q. Were there other -- you said there were 55  
9 projects.

10 Did you divide those projects into multiple  
11 tiers?

12 A. No. They were just ranked 1 through 55,  
13 and then we sort of proceeded from there.

14 Q. And on your -- the projects in the second  
15 tier on 9 through 17 of the short list, all  
16 those projects are combined cycle or combustion  
17 turbine?

18 A. That's correct.

19 MR. JOHNSTON: I don't have any  
20 other questions, Your Honor.

21 THE COURT: All right.

22 Alabama Solar Industry Association?

23 Ms. Howard.



1 MS. HOWARD: Yes, Your Honor.

2 CROSS-EXAMINATION

3 BY MS. HOWARD:

4 Q. Good afternoon, Mr. Looney. My name is  
5 Jennifer Howard. I represent Alabama Solar  
6 Industry Association, and we met during your  
7 deposition; correct?

8 A. Yes, ma'am.

9 Q. Your analysis shows that the solar plus  
10 battery project will provide a reduction in the  
11 energy cost for customers; correct?

12 A. Yes, ma'am.

13 Q. And we talked a minute ago about the fact  
14 that in your modeling, you ran different  
15 scenarios comparing proposals under different  
16 possible gas prices; right?

17 A. Yes, ma'am.

18 Q. And I understand you just placed some  
19 qualifications on the nomenclature that we're  
20 using on that.

21 But in your deposition, you characterized  
22 it as running models with low and moderate gas  
23 prices; right?

1 A. Yes.

2 Q. And again, I understand you now to say that  
3 the moderate price scenario might be considered  
4 moderately high.

5 But in your deposition, you told us that  
6 you did not include a model that assumed high  
7 gas prices; correct?

8 A. In the deposition, I accurately stated that  
9 we didn't run the high gas forecast that we have  
10 labeled high gas for this evaluation.

11 Q. And that was because Alabama Power asked  
12 you not to; correct?

13 A. Sort of the inverse of that. They didn't  
14 ask us not to. They just didn't ask us to.

15 Q. Other Southern Company affiliates do  
16 sometimes ask you to run modeling for a high gas  
17 price scenario; correct?

18 A. Yes. Other affiliates as well as Alabama  
19 Power Company at times utilize the high gas  
20 forecast for certain analyses.

21 Q. And your modeling of potential future gas  
22 prices was not intended to capture a worst case  
23 scenario for gas prices, was it?

1 A. I don't think we intended to capture an  
2 extreme high nor an extreme low, just two  
3 reasonably possible gas forecasts.

4 Q. And you're modeling for the cost of the  
5 proposed gas resource editions does not include  
6 any potential costs retrofitting them with  
7 carbon capturing and sequestration equipment;  
8 correct?

9 A. That's correct. Our analysis contemplated  
10 carbon constraints through a carbon price, not a  
11 retrofit of controlled technologies.

12 Q. Yes, sir. And we touched on this earlier.  
13 We talked about the \$20 figure.

14 I just wanted to clarify, you're modeling  
15 did not include an analysis of the possibility  
16 of a carbon tax higher than a starting point of  
17 \$20; correct?

18 A. That's correct. The modeling, as I've  
19 testified to, included a carbon price that  
20 started at 20 percent and arose at a degree  
21 above inflation throughout the evaluation  
22 period.

23 Q. You meant \$20, not 20 percent; right?

1 A. Yes, ma'am. I'm sorry.

2 Q. And we also touched on the decline in price  
3 of the solar project, but I just wanted to  
4 clarify the time period.

5 You would agree that the price of solar  
6 projects has declined in a meaningful manner  
7 over the last several years; correct?

8 A. Yes.

9 Q. In your economic analyses, you did not  
10 evaluate whether a combination of solar plus  
11 battery projects and demand side measures, like  
12 distributed resources, would be a lower cost  
13 option as compared to gas generators, did you?

14 A. We did not. I mean, my view, instead of a  
15 demand resource, could accompany any other  
16 resource, and so if it approves the economic of  
17 the solar battery, it might also improve the  
18 economics of the CT or CC, instead of Southern  
19 Company just pursuing the cost effective demand  
20 side opportunities to benefit whatever portfolio  
21 is certified by the commission.

22 Q. Sir, you're familiar with the term "value  
23 of solar"; correct?

1 A. I am, yes.

2 Q. And that term basically refers to the full  
3 gamut of the value stream that a solar facility  
4 might provide to the grid; correct?

5 A. That's the general use of that term, as I  
6 understand it.

7 Q. And some of those value streams could  
8 include avoided energy costs, deferred capacity  
9 investment, avoided transmission investment, and  
10 distribution line loss avoidant; correct?

11 A. Those are common components that are  
12 considered in that analysis.

13 Q. And you're generally familiar with the fact  
14 that the Georgia Public Service Commission has  
15 approved a renewable cost benefit framework for  
16 use by your affiliate, Georgia Power; correct?

17 A. I am familiar with that, yes.

18 MS. HOWARD: May I approach, Your  
19 Honor?

20 THE COURT: You may.

21 And while you're approaching,  
22 Mr. Johnston, I assume you want to move for  
23 the admission of your Exhibit 4?

1 MR. JOHNSTON: Thank you, Your  
2 Honor. Yes, please.

3 THE COURT: Okay. Any objections?

4 MR. McCRARY: Well, one thing, Your  
5 Honor. I think it may perhaps might be the  
6 errata version of that exhibit. I'm not  
7 totally certain, but I have a -- I think it is  
8 not. That was one of the replaced or the  
9 errata versions in Mr. Kelley's testimony.

10 MR. JOHNSTON: Was there an errata  
11 for the -- sorry.

12 MR. McCRARY: I'm sorry. I thought  
13 you were talking about the Figure 3F1. We not  
14 offering that?

15 MR. JOHNSTON: No.

16 THE COURT: No.

17 MR. McCRARY: Never mind. Sorry.

18 THE COURT: Just the work paper.

19 MR. McCRARY: Sorry.

20 THE COURT: No objection?

21 MR. McCRARY: No, we're fine with  
22 that. No objection to that one. I'm sorry.

23 THE COURT: It's admitted.

1 I'm sorry. Go ahead, Ms. Howard.

2 MS. HOWARD: I would like to mark  
3 what was previously marked as Exhibit 4 to  
4 Mr. Looney's deposition.

5 THE COURT: Okay.

6 BY MS. HOWARD:

7 Q. Sir, does that appear to be a copy of the  
8 framework adopted by Georgia Power?

9 A. Yeah. I think we reviewed this in the  
10 deposition, so if it's the same document, I  
11 believe it was a version of that document.

12 THE COURT: That will be marked for  
13 purposes of this proceeding as Alabama Solar  
14 Industry Associations Exhibit 4.

15 MS. HOWARD: Thank you, sir.

16 BY MS. HOWARD:

17 Q. And that framework in Georgia describes how  
18 to determine the different value components that  
19 solar offers; correct?

20 A. It does set forth a list of components that  
21 should be considered and some methodology by  
22 which you calculate the cost or benefits.

23 Q. And to your knowledge, Alabama Power has

1 not done a study or formed a framework like  
2 that, has it?

3 A. I think Mr. Kelley spoke to this some  
4 yesterday, that Alabama Power as part of  
5 Southern Company follows a very similar and  
6 consistent method for evaluating solar projects.  
7 I don't believe that they had a regulatory  
8 adoption of this framework.

9 Q. I understand Mr. Kelley provided some  
10 testimony about how the company goes about  
11 value -- putting a value to solar on a  
12 project-by-project basis.

13 But has Alabama Power company, to your  
14 knowledge, conducted any study of all of the  
15 benefits to the grid that are offered by solar  
16 in documenting that?

17 A. I think it's meaningful to clarify that  
18 this document was actually prepared by Southern  
19 Company Services, so really, it's Southern  
20 Company system. Georgia then adopted for a  
21 regulatory purpose. I don't think Alabama has  
22 had the occasion or need to make that adoption.  
23 The document, the methodologies are available to



1 Alabama Power to use at their discretion, and it  
2 generally would represent cost and benefits that  
3 apply to the Southern System as a whole.

4 Q. And if I may, sir, I don't think that  
5 answered my question.

6 My question was, has Alabama Power Company  
7 conducted any study of all of the benefits to  
8 the grid that are offered by the solar and  
9 documented that?

10 A. Southern Company Services, as an agent of  
11 Alabama Power, Georgia Power, and Mississippi  
12 Power, prepared this study, and so they have  
13 this study at their availability. And as I  
14 mentioned, and I think Mr. Kelley also  
15 mentioned, they follow the general practices  
16 laid out here in their evaluation of renewables.  
17 They haven't done different studies, nor would  
18 they need to.

19 Q. And in your deposition, do you recall  
20 testifying, "I'm not aware that Alabama Power  
21 themselves have done a study like that"?

22 A. I believe I would have said that.

23 Q. And to your knowledge, this commission has

1 not approved a framework like that, has it?

2 A. To my knowledge, this commission has not  
3 been asked to take a position on this framework.

4 Q. And for the solar project being proposed in  
5 this document, your department did not do the  
6 evaluation of the relative costs of the solar  
7 projects; correct?

8 A. Right. I think I previously testified that  
9 we didn't directly do that work, but that we did  
10 provide some oversight in review through our  
11 collaborative efforts.

12 Q. You did not perform any economic analysis  
13 of two-hour battery solar projects and how they  
14 would compare to other resources beyond the 400  
15 megawatts of solar capacity proposed in this  
16 petition; correct?

17 A. I did not. That's correct.

18 Q. And you have testified in this case that  
19 your natural gas price modeling presents the,  
20 quote, "reasonably expected future impact to gas  
21 prices"; correct?

22 A. I think that's a fair characterization to  
23 our gas forecasts.

1 Q. But you don't know what the potential  
2 future impacts were considered in that modeling,  
3 do you?

4 A. I know that those models consider different  
5 supply and demand assumptions, and so the higher  
6 gas forecasts could reasonably assume to have  
7 maybe some more aggressive demands and less  
8 aggressive supply assumptions. Inversely, the  
9 lower gas, you know, would maybe have some less  
10 aggressive demand and more aggressive supply  
11 assumptions, and those things drive the forecast  
12 to have the deviation that we seek so that we  
13 can evaluate a range of gas prices in the  
14 future.

15 Q. And you're not completely aware of what  
16 drives the underlying gas forecast; correct?

17 A. Not completely. That information is  
18 prepared by Charles River and Associates.  
19 There's folks in our organization that review it  
20 a little more closely than I do.

21 Q. And you don't know whether that modeling  
22 considered the possibility of future limitations  
23 on fracking, do you?

1 A. I'm fairly certain that it does not include  
2 significant fracking limitations.

3 Q. And when I asked for the basis for that  
4 testimony that the modeling presents the  
5 reasonably expected future impact to gas prices,  
6 what you told us is that the basis you have for  
7 that testimony is essentially your confidence in  
8 the people that put together those forecasts;  
9 correct?

10 A. Yes. That is correct. And additionally,  
11 the fact that our forecasts are very consistent  
12 with other forecasts that are available in the  
13 gas market.

14 Q. And it's fair to say there have been  
15 periods of time where natural gas prices have  
16 been relatively volatile?

17 A. Yes, that's fair to say. I think it's also  
18 fair to say that during the midst of the period  
19 where they've been much less volatile and at a  
20 very low price.

21 Q. We referred earlier to the 2015 RGC  
22 proceeding.

23 Does it sound -- does it sound right to you

1     that the 2020 RFP would be the last RFP issued  
2     under the authority of that proceeding?

3     A.    I think I previously answered a question  
4     that I don't recall the specifics of the  
5     duration of the order.  So I don't know if the  
6     2020 would be the last RFP without some renewal  
7     of the order or not.

8     Q.    And your analysis that you've offered in  
9     this docket is not a stranded asset analysis, is  
10    it?

11    A.    It's not specifically a stranded asset  
12    analysis.  I believe the information to make an  
13    informed decision about stranded asset risks are  
14    easily ascertained through examination of the  
15    analysis that I performed.

16    Q.    Well, isn't it true that you did not  
17    attempt to forecast future solar prices and then  
18    determine when it may be cheaper to build new  
19    solar plants than to operate these natural gas  
20    assets; correct?

21    A.    I don't think the price of future solar is  
22    a considerable driver in the stranded risks --  
23    as stranded risk components of a gas plant.

1 Q. And you did not attempt to do that?

2 A. Right. I don't think that will be an  
3 appropriate analysis to perform.

4 MS. HOWARD: Thank you, Mr. Looney.

5 I have no other questions.

6 THE COURT: Mr. Wilson?

7 CROSS-EXAMINATION

8 BY MR. WILSON:

9 Q. My name is Zack Wilson. I'm with the  
10 attorney general's Office, and I have a couple  
11 of questions for you.

12 Are you aware of any discussions about  
13 further staggering, when these projects might  
14 come online potentially past 2025?

15 A. I'm aware of no such discussion.

16 Q. And some of the projects that are posed  
17 here, some of them would perform better during  
18 extreme winter events than others -- correct? --  
19 in terms of their reliability or the amount of  
20 time they spend offline?

21 A. I think that's a hard connection to make.  
22 I think we believe these units will all reliably  
23 perform under extreme weather, so I don't

1 think -- I don't know how to draw a general  
2 conclusion.

3 Q. So that wouldn't be any type of factor in  
4 your analysis of deciding, you know, which one  
5 is best and most cost effective of how it would  
6 perform during, you know, what it's being  
7 requested for in the winter peak period?

8 A. Yeah. I mean, our analysis assumes that  
9 the units are available except for their base  
10 sort of forced outage rates. Anything beyond  
11 that is really covered in reserve margin study,  
12 and it's why we have reserves. So it's not a  
13 specific component of our analysis.

14 MR. WILSON: Okay. That's all I  
15 have.

16 THE COURT: Thank you, sir.  
17 Staff?

18 MR. MASON: Yes, sir. Just a couple  
19 of questions.

20 MS. HOWARD: And, Your Honor, while  
21 we're in transition, I think I neglected to  
22 ask for the admission of the exhibits we  
23 marked.

1 THE COURT: Any objections?

2 MR. GROVER: No, sir.

3 THE COURT: The document is  
4 admitted. Thank you.

5 CROSS-EXAMINATION

6 BY MR. FREE:

7 Q. Good afternoon, Mr. Looney. I'm John Free  
8 with the commission staff. I hope you don't  
9 mind a few more questions on natural gas.

10 A. Certainly don't.

11 Q. You have covered quite a few this  
12 afternoon, but I got, real quick, just a couple,  
13 and it's your first exhibit from your original  
14 testimony.

15 You agree -- I agree with Mr. Johnson that  
16 the energy saving is an important aspect of that  
17 evaluation; is that correct?

18 A. Yes.

19 Q. And in that energy savings column, there's  
20 a save cost based on the four scenarios that you  
21 have run, which are low gas, zero carbon; low  
22 gas, clean carbon; or moderate gas, zero carbon;  
23 moderate gas, clean carbon, and the projected



1 natural gas were produced by Charles River,  
2 projected natural gas prices were produced by  
3 Charles River and Associates with the input from  
4 Alabama Power Company?

5 A. Correct.

6 Q. And it's my understanding from past  
7 analysis that the short term of the first three  
8 years generally come from a NIMEX market, and  
9 then Charles River does the long-term market.

10 Is that correct still?

11 A. That is still the process we follow.

12 Q. Okay. So now, we've talked about this just  
13 a few minutes ago. Over the last ten years or  
14 so, gas prices have decreased significantly.

15 Now, we're somewhere around \$2, if not  
16 below \$2 today; is that correct?

17 A. I think I saw the price today. It was  
18 \$1.97 on the stock market.

19 Q. So how does Charles River and Associates  
20 forecast, long-term forecast, moving forward  
21 their low gas and high gas compared to where  
22 we've been and where you think it's going over  
23 this cycle that we're in right now?

1 A. That's a good question.

2 Q. Without confidential information.

3 A. Yeah. I think what we observed in our own  
4 work as well as the work across the industry is  
5 that gas forecasts year to year have decreased,  
6 which suggests in the forecasting world, there's  
7 a little bit of lag in catching up with the  
8 actual performances of the production.

9 So we're diligent in trying to make sure  
10 that we don't have a high lag. We recognize  
11 that long-term market futures may still be below  
12 some of our lower forecasts, but there's a  
13 limited liquidity in some of those futures, and  
14 it also might be considered to be the extreme.  
15 And I kind of mentioned earlier, we try not to  
16 make decisions based on the extremes, but  
17 instead make decisions that are formed on, you  
18 know, a reasonable spread.

19 It may be that Alabama Power decision to  
20 not pursue a high gas price in this is somewhat  
21 influenced by the fact that our projections have  
22 been decreasing year after year. John probably  
23 had been able to speak to that, or Mr. Kelley.

1 I'm sorry. But I would have shared that opinion  
2 if he expressed it.

3 So those are some elements about the way  
4 we're thinking about gas forecast, and  
5 particularly how we have tried to put together a  
6 robust portfolio here that balances benefits in  
7 what we think are two reasonable on gas  
8 forecasts.

9 Q. After your forecasts are complete,  
10 traditionally, you have tried to find other  
11 forecasts through available data or other data  
12 that you can purchase to balance your benchmark  
13 forecast from Charles River against those and  
14 see if you're within reason.

15 Do you still continue to do that?

16 A. We still do that. The AEO produces a  
17 handful of forecasts, and every year, I see a  
18 slide with our forecasts compared to those. And  
19 I think over the last several planning cycles,  
20 we've done a really good job of being within the  
21 spread of those other forecasts, which I think  
22 gives us increasing confidence that while no one  
23 gets this perfect, we're at least approaching it

1 consistent with the industry at large.

2 Q. Okay. And one other question is, in going  
3 through your evaluation in your first exhibit,  
4 if you just look at the first page, which is the  
5 low gas zero, and you lay out your lists of your  
6 top tier units, you got five of these that are  
7 solar systems with battery energy storage  
8 systems, and then you got three that are  
9 combined cycle units. And it just appears to me  
10 that they both have so many different  
11 characteristics.

12 You know, combined cycle units can do  
13 certain things well and are flexible 24/7. You  
14 flip the switch, you cut them on. And solar has  
15 it's benefits as well.

16 How do you equalize that or reconcile those  
17 differences in performance qualifications,  
18 features, whatever you want to call them? How  
19 do you reconcile that in your evaluation?

20 A. What we attempted to do was first make sure  
21 that the reliability contribution that we needed  
22 was met. And so for the solar batteries, we  
23 implemented that 85 percent incremental capacity

1 equivalent that was mentioned earlier. Because  
2 first and foremost, we're here to make sure that  
3 we can reliably serve our customers,  
4 particularly in winter events, as we've  
5 experienced even in the last several years.  
6 Secondly, we try to quantify every one of those  
7 differences that we can.

8       So a resource that brings a lot of energy  
9 benefit, we want to make sure that's  
10 appropriately accounted for. A resource that  
11 might not bring a lot of energy but has a lower  
12 capacity cost, you want to account for those.  
13 PPAs that everything is kind of rolled into a  
14 fixed payment and doesn't have OEM costs. You  
15 know, all of these differences, we try to set  
16 out as many different categories as possible;  
17 such as, category by category, you can kind of  
18 look at it, and say these were the valued costs  
19 for this resource resides, here's where the  
20 others reside.

21       So not only can you make an informed  
22 decision about just total project cost, but  
23 you're not blindly believing the ranking. You

1 can look and say have you struck the right  
2 balance, because again, it's been a long-term,  
3 well before I was employed, view of Southern  
4 Company that diversity is important to  
5 reliability. And so I think that, you know, our  
6 analysis provides that visibility into the  
7 resource evaluation.

8 Q. So the term dispatchability, reliability,  
9 flexibility, fast-ramp rate, backing off,  
10 regulations, all of these type of services, you  
11 think you can capture from a combined cycle unit  
12 when you're comparing them to the solar with  
13 battery unit?

14 A. Those things are captured in our -- when  
15 we -- when we calculate that ICE factor, the  
16 model that we use when we serve them, we spoke  
17 about it, it does attempt to capture which units  
18 provide regulated service, which units has  
19 fast-start capability, you know, which units can  
20 be dispatched 24 hours a day versus a battery  
21 that can only be -- serves two hours a day.

22 Q. Right.

23 A. And so all of those components to the

1 degree that the inputs are correct, that the  
2 model does account for those, and so the overall  
3 ICE factor should represent the capacity of the  
4 reliability contribution that those services  
5 provide, you know, by each resource.

6 I mean, a resource that provides all of  
7 that all of the time is sort of the golden  
8 standard; right? And then you -- you measure  
9 everything against a resource that provides all  
10 of that anytime you need it.

11 Q. So if I were to look at this and look at  
12 the lowest cost in the far right column, the  
13 unit that's ranked first, and said why didn't we  
14 do all units that way, can that unit replace  
15 like Central Alabama or replace Barry Unit 8 or  
16 replace --

17 A. Yeah. We're looking at the LG0, one of the  
18 solar -- the SS projects is the lowest cost. I  
19 addressed this in my rebuttal testimony. The  
20 question is could we have done all of that.

21 Q. Right.

22 A. And I think the -- I don't think. The  
23 answer is a resounding no; particularly, a solar

1 project with a two-hour battery cannot make up  
2 your entire portfolio, and I don't think it's a  
3 stretch to make that suggestion.

4 There is a line of questioning about how  
5 long your winter peak is yesterday. Again, I  
6 mentioned earlier, we don't think about things  
7 necessarily peak. We think about things in  
8 reliability constraints. We normally see the  
9 winter reliability constraint persist for five  
10 to six hours on a winter morning.

11 So a two-hour project can help at the tail  
12 end of that or some portion of that. But if  
13 that's all you have, then you're going to find  
14 some problems; right? So that's why we  
15 mentioned that, you know, several hundred  
16 megawatts is valuable, and beyond that, it's  
17 just not an adequate duration of battery.

18 So we need these dispatchable resources in  
19 our system to meet those sometimes long duration  
20 of events, or we would need very long battery  
21 durations, which just have not proven economic  
22 in our resource selections.

23 MR. FREE: Okay. Thank you very



1 much. I'm sorry for being repetitive. I know  
2 a lot of that stuff you had already mentioned  
3 before, but I just didn't quite understand it.

4 So thank you.

5 THE COURT: Redirect?

6 MR. McCRARY: Yes, sir. Your Honor,  
7 just a little bit.

8 REDIRECT EXAMINATION

9 BY MR. McCRARY:

10 Q. Mr. Looney, in response to some questions  
11 from Ms. Csank, you indicated that your group  
12 was consulted in connection with the structure  
13 of the capacity RFP.

14 Do you recall that?

15 A. Yes.

16 Q. What was the purpose of that consultation?

17 A. The purpose of our involvement was to help  
18 Alabama Power structure essentially the bid  
19 form, which is where the bidder would provide  
20 all of their performance and cost data, so that  
21 the data they received would be the meaningful  
22 data that we needed to evaluate each resource on  
23 its merits so that a fair evaluation in

1 comparison can be constructed.

2 Q. And she also asked you some questions about  
3 a so-called portfolio analysis.

4 Do you recall those questions?

5 A. I do.

6 Q. Now, how did you rank the various projects  
7 in your analysis?

8 A. As we described in our testimony, in my  
9 testimony, we evaluate each resource  
10 individually on its on merits and then rank  
11 them, and then the portfolio was just a  
12 selection of the top ranked units based on their  
13 individual value.

14 Q. In your judgment, would the portfolio  
15 analysis like that sheet was describing, would  
16 that have yielded a different portfolio of  
17 resources from the ones you derived in your  
18 opinion?

19 A. I don't foresee a situation where that  
20 would arise.

21 Q. Now, in response to some questions from  
22 Mr. Johnston, there was a lot of discussion  
23 about the incremental ICE factor determination

1 in the tranches.

2 Do you recall that?

3 A. Yes.

4 Q. So let me give you a sort of a  
5 man-on-the-street example and see if this is  
6 accurate in terms of what you were trying to  
7 describe.

8 If I had a basketball team that a had a  
9 free throw average of 95 percent, and I had a  
10 new player join the team, and now my team  
11 average for free throws is 80 percent, what  
12 would that suggest about the free throw shooting  
13 ability of my new player?

14 A. Right. It would automatically suggest that  
15 not only was your new player less than 95  
16 percent, he was well less than 80 percent,  
17 because he brought down the whole team average.

18 Q. And in the same way as that, would the  
19 third tranche seem to suggest in terms of the  
20 value of that capacity or value of that third  
21 tranche from a capacity standpoint?

22 A. Yes. That's a very clever way of  
23 illustrating that dynamic.

1 Q. Incremental ICE factor aside, is it your  
2 understanding there were other reasons why the  
3 remaining 560 megawatts of solar battery  
4 projects were not selected?

5 A. Yes. The remaining projects had some local  
6 transmission issues that had costly solutions.  
7 So when we included the cost of Alabama Power  
8 included the cost in their analysis, those  
9 projects were found to not be economic relative  
10 to the units that we had already established in  
11 our ranking.

12 Q. Also, I believe it was determined that  
13 there had been some confusion in the exchange  
14 between you and Mr. Johnston regarding capacity  
15 value as opposed to capacity factor.

16 And y'all tried to straighten that out, did  
17 you not?

18 A. I believe we tried.

19 Q. All right. At least in the context of  
20 Barry 8, could you please discuss the difference  
21 between capacity equivalence and capacity factor  
22 for the Barry 8 unit?

23 A. Sure. The capacity factor, again, is how

1 much we expect the unit to run, and so we  
2 mentioned that we expect through our simulations  
3 that that unit will run somewhere around 80  
4 percent of the time based on its economic  
5 discharge in the system.

6 Its capacity equivalence, because it's a  
7 fully dispatchable unit, it gets full capacity  
8 equivalence. It's megawatt for megawatt. So we  
9 don't normally speak in these terms, but I think  
10 it's fair to think about that as a 100 percent  
11 ICE factor.

12 Q. And finally, Mr. Looney, in response to  
13 some questions from Mrs. Howard, she asked you  
14 about the Georgia cost benefit framework  
15 document that's Alabama Solar Exhibit 4.

16 Do you recall that?

17 A. I do.

18 Q. Is it your testimony that the relevant cost  
19 and benefits streams discussed there are  
20 effectively captured in the analysis reflected  
21 in your ranking?

22 A. That is my testimony.

23 MR. McCRARY: No further questions,

1 Your Honor.

2 THE COURT: All right. Thank you,  
3 Mr. Looney. You're excused.

4 Mr. Looney's pre-filed testimony and  
5 his exhibits will be admitted into the record.

6 All right. That leaves you with  
7 Ms. Baker. You know how I am. I like to  
8 drive on through, but let me evaluate the  
9 amount of time you think Ms. Baker is going to  
10 take, and it's going to be driven on  
11 cross-examination, so...

12 MR. HILL: I have no questions.

13 THE COURT: No questions.

14 MS. CSANK: Your Honor, Sierra Club  
15 will have limited questions, and it will help  
16 if we were to start with her in the morning.  
17 They could even be more limited, because I can  
18 streamline based on what we heard today.

19 MR. GROVER: Put that in writing.

20 THE COURT: My experience, it  
21 unusually doesn't streamline overnight.

22 MR. HILL: My expert cancelled his  
23 plane for tonight and is flying out tomorrow

1       afternoon. It would be great if he could make  
2       that flight.

3               MS. CSANK: In comparison to the  
4       other witnesses, I have far fewer questions  
5       for Ms. Baker.

6               THE COURT: What about the other  
7       parties?

8               MR. JOHNSTON: Energy Alabama/GASP  
9       will have questions.

10              THE COURT: How many? Just an  
11       estimate compared to the other witnesses.

12              MR. JOHNSTON: Probably not as much  
13       as Mr. Looney.

14              THE COURT: It's not going to be  
15       nine o'clock, but let's go.

16                      CHRISTINE BAKER,  
17       the witness, having been sworn or  
18       affirmed to speak the truth, the whole truth,  
19       and nothing but the truth, testified as follows:

20                      DIRECT EXAMINATION

21       BY MR. GROVER:

22       Q.     Can you state your name for the record?

23       A.     Christine Baker.

1 Q. Ms. Baker, by whom are you employed?

2 A. Alabama Power Company.

3 Q. And what is your business address?

4 A. 600 North 18th Street, Birmingham, Alabama.

5 Q. Did you cause direct testimony to be filed  
6 in this proceeding?

7 A. I did.

8 Q. And do you have or have you submitted any  
9 corrections to that testimony?

10 A. I have not.

11 Q. Okay. So if I asked you the questions that  
12 are set forth in your direct testimony, would  
13 your answers be the same?

14 A. They would.

15 Q. All right. Did you also cause rebuttal  
16 testimony to be filed in this proceeding?

17 A. I did.

18 Q. And likewise, did you have any changes or  
19 modifications to that testimony?

20 A. I did not.

21 Q. All right. And similarly, if I asked you  
22 those questions that are set forth in your  
23 rebuttal testimony, would your answers be the



1 same?

2 A. They would.

3 MR. GROVER: All right. Judge, we  
4 would move to have Ms. Baker's testimony  
5 submitted into the record.

6 THE COURT: Her testimony and  
7 exhibits will be admitted subject to  
8 cross-examination.

9 BY MR. GROVER:

10 Q. And, Ms. Baker, do you have an opening  
11 statement?

12 A. I do.

13 Q. Please.

14 A. Good afternoon. Under the proposed  
15 resource portfolio, the generating resources  
16 will be brought in service over the course of  
17 the next four years with all expected to be  
18 serving customers by January of 2024. As each  
19 resource begins to provide electric service to  
20 our customers, there will be associated costs  
21 and savings that will become part of our cost of  
22 service, and therefore, incorporated into our  
23 rate.

1           As I've describe in my testimony, existing  
2   rate mechanisms will operate under the oversight  
3   of this commission. In the year 2024, the net  
4   pressure of the supply side resources to retail  
5   rate is expected to be approximately 2 percent.  
6   For a typical residential customer, using 1,000  
7   kilowatt hours per month, the net effect would  
8   add about \$4 to their monthly bill. While any  
9   resulting increase in rates is certainly  
10   considered impactful to our customers, this  
11   portfolio is the most cost effective way to  
12   ensure reliability for our customers during peak  
13   times when they count on us to be available to  
14   serve them.

15           I would also point out that effective this  
16   year, our retail rates were lowered by  
17   3 percent, which resulted in a \$4.50 per month  
18   savings to the same typical residential  
19   customer. I hope this savings will help to  
20   dampen the future impact to our customers  
21   associated with this generation portfolio which,  
22   is necessary to continue to reliably meet their  
23   electric service needs. I look forward to

1     answering any questions you have.

2     Q.     Thank you, Ms. Baker.

3             MR. GROVER:   Your Honor, the witness  
4     is available for cross-examination.

5             THE COURT:   All right.   And I  
6     believe Mr. Clark is not in attendance at the  
7     moment.

8             Mr. Hill, you have no questions?  
9             Energy Fairness.org?

10            MR. GRIFFEN:   No questions.

11            THE COURT:   American Senior  
12   Alliance?

13            MR. HOOPER:   No questions for  
14   Ms. Baker.

15            THE COURT:   Alabama Coal  
16   Association?

17            MR. CAGLE:   No, sir, Your Honor.

18            THE COURT:   All right.   Ms. Csank?

19            MS. CSANK:   Yes, Your Honor.   If I  
20   may just ask to follow Energy Alabama and  
21   GASP.

22            THE COURT:   Sure.

23    ///

1 CROSS-EXAMINATION

2 BY MR. JOHNSTON:

3 Q. Hello, Ms. Baker.

4 A. Good afternoon. Good evening.

5 Q. Ms. Baker, my name is Keith Johnston. I'm  
6 representing Energy Alabama and GASP in this  
7 matter.

8 A. Yes.

9 Q. I think we met briefly before your  
10 deposition?

11 A. We did.

12 Q. You're the director of regulatory pricing  
13 and cost of services for Alabama Power; correct?

14 A. That is correct.

15 Q. And you spent your whole career, at least  
16 since college, at Alabama Power; is that  
17 correct?

18 A. That is correct.

19 Q. And you've worked for Alabama Power for  
20 approximately 26 years; is that correct?

21 A. That is correct.

22 Q. And to get into a little bit of your  
23 testimony, we don't know the true cost of this

1 petition, but we do know that it's over \$1.1  
2 billion; is that correct?

3 A. I believe we do know the total cost. I  
4 believe it's been presented by Mr. Looney.

5 Q. Is that total cost confidential?

6 A. Yes, I do believe the total cost is  
7 confidential.

8 Q. But it has been stated in public that it's  
9 at least \$1.1 billion; correct?

10 A. The investment has been stated in the  
11 public as \$1.1 billion.

12 Q. How are these costs of this petition by  
13 Alabama Power recovered?

14 A. Cost to serve customers are covered through  
15 the rates to provide that service.

16 Q. And so these -- what are the mechanisms to  
17 recover through those rates, the rates that you  
18 have in place to recover these costs?

19 A. You're asking what are the names of the  
20 rates that are in place?

21 Q. Correct. For example, Barry Unit 8 will be  
22 recovered through rate CNP Part A; correct?

23 A. The adjustment will occur pursuant to CNP

1 Part A.

2 Q. And the adjustment will be for that cost of  
3 Barry Unit 8; correct?

4 A. That's correct.

5 Q. And so take me through each of the  
6 projects.

7 How are they going to be recovered through  
8 your rate recovery?

9 A. Okay. I think that's all laid out in my  
10 testimony, so I may pull that out in front of me  
11 to make sure I follow in order.

12 MR. GROVER: Your Honor, I mean,  
13 I'll be happy to hear Mr. Johnston, but I do  
14 actually believe that question is precisely  
15 what she just said laid out entirely in her  
16 testimony. So just for purposes of  
17 efficiency, I'll throw that out there.

18 THE COURT: If she can just give us  
19 a summary of her testimony, I think that will  
20 be a good response to his question.

21 THE WITNESS: Okay.

22 THE COURT: Just walk us through the  
23 basics.

1           THE WITNESS: So we will begin with  
2       Barry Unit 8, as you suggested. Barry Unit 8,  
3       the adjustment would occur for the non-fuel  
4       and non-environmental costs under the PNV  
5       planning factor, the costs that are associated  
6       with environment compliance with coming in  
7       through the CNP compliance factor, and the  
8       fuel costs will come in through the EPR  
9       factor.

10      Q. And so is that CNP Part C for the --

11      A. That is the compliance part.

12      Q. And that was Barry Unit 8?

13      A. That was all for Barry Unit 8 those three  
14      will operate.

15      Q. And then what about the PPAs?

16      A. So as we move, I think the next one I  
17      covered was Central Alabama, which would be very  
18      similar as that's an acquisition, just like a  
19      purchase, so it would act just like this Barry  
20      Unit 8. The purchase power agreement has a  
21      little difference between the agreement. The  
22      Hog Bayou agreement has a capacity cost that's  
23      negotiated out in the contract, so that capacity

1 cost would come in through the CNP plan factor,  
2 and the energy-related cost would come in  
3 through ECR.

4 For the solar battery storage projects,  
5 they have one payment. So we have suggested  
6 that the commission direct us to take 38 percent  
7 of that payment, which would be the portion of  
8 the payment that would equate to what the cost  
9 of the battery was, the payments to the battery,  
10 which provides capacity benefit, and put that  
11 through the CNP plan factor with the remainder  
12 of the payment going as energy to ECR factor. I  
13 believe that covers all of them.

14 Q. In light of these recovery mechanisms, is  
15 it fair to say the ratepayers bear the risk  
16 associated with this petition?

17 A. Ratepayers will receive the benefit, and to  
18 the extent there are any risks, I don't mean --  
19 there are born in that.

20 Q. They're subject to those risks?

21 A. They are subject to the rewards and the  
22 risks associated with it, I would say.

23 Q. Now, I want to introduce Exhibit 2 to your



1 deposition. This was an Excel spreadsheet with  
2 a couple of tabs.

3 MR. JOHNSTON: May I approach, Your  
4 Honor?

5 THE COURT: You may.

6 This will be Energy Alabama and GASP  
7 5.

8 MR. JOHNSTON: 5 and 6, Your Honor.  
9 There's another tab to that spreadsheet.

10 THE COURT: 5 and 6.

11 MR. JOHNSTON: We've discussed this  
12 as well.

13 MR. GROVER: Yes, absolutely.

14 BY MR. JOHNSTON:

15 Q. Are you familiar with those worksheets?

16 A. I am familiar with the worksheets.

17 Q. Can you --

18 A. I want to point out right off the bat that  
19 the Exhibit 1 to my rebuttal is the updated  
20 version of these spreadsheets, so I don't know.  
21 Do we want to work from the first version or the  
22 updated version.

23 Q. Yeah. And what are you specifically

1 referring to?

2 A. When I did the initial impact analysis in  
3 preparation for my direct testimony, we used the  
4 costs that were available at that point in time.  
5 They were not all finalized. So as we got ready  
6 to make the filing, the numbers were finalized,  
7 but the difference was not significant enough to  
8 actually change the impact that was stated in my  
9 direct testimony, so we did not update the  
10 numbers at that time.

11 But later on, we decided to go ahead and  
12 update those numbers so that they're consistent  
13 with what was provided by the other witnesses.  
14 So the \$4 impact is still the impact, but the  
15 numbers slightly change.

16 Q. And first, tell me which numbers change and  
17 how those numbers changed, at least the final,  
18 the final number. You don't have to go through  
19 the whole spreadsheet.

20 A. All right. So the retail revenue  
21 requirements went up by \$3 million.

22 Q. May I stop you right there?

23 A. Yes.

1 Q. Explain which document you're looking at  
2 right now.

3 A. So I am looking at the first page that you  
4 gave me.

5 THE COURT: That's 5.

6 BY MS. JOHNSTON:

7 Q. And that's -- the title of that document is  
8 "Estimated Supply Side Resource Impacts"; is  
9 that correct?

10 A. That is correct.

11 Q. Okay. Proceed, please.

12 A. The retail revenue requirement went up by  
13 \$3 million, the energy benefit in both scenarios  
14 decreased by about \$2 million, so the net  
15 pressure was different by about \$5 million.  
16 That difference is what drove a slight  
17 difference in the percentages percent impact and  
18 the dollar bill impacts to residential.

19 Q. So your net pressure which is --

20 A. Increased.

21 Q. Increased?

22 A. It did.

23 Q. Which is your retail revenue requirement,

1 plus your energy cost impact, and that increased  
2 your percent impact on that spreadsheet; is that  
3 correct?

4 A. Yes, by just a very, very small amount. So  
5 the 2 percent is still valid in both scenarios.

6 Q. Okay. But you created these spreadsheets;  
7 is that correct?

8 A. My department did under my direction.

9 Q. And you just went through the estimated  
10 supply side resource impact at the top line of  
11 that spreadsheet.

12 The other spreadsheet is the typical FD  
13 residential bill calculations for 1,000 kilowatt  
14 hours; is that correct?

15 A. That is correct.

16 Q. Okay. And FD residential bill refers to  
17 what?

18 A. Rate FD is the standard rate by which we  
19 serve our residential customers.

20 Q. And back to your changes, as far as the  
21 estimated supply side resource impacts  
22 spreadsheet for your 2019 typical bill, which is  
23 the bottom of that spreadsheet, what did it

1 change those numbers to?

2 A. The original numbers were \$3.60 to \$4.37,  
3 and the -- I'm sorry. Those were the final  
4 numbers.

5 Q. Right. We're looking at the 2019 typical  
6 bill.

7 Did that change?

8 A. The -- I'm sorry. The typical bill itself,  
9 147.60, did not change.

10 Q. Okay.

11 A. I'm sorry.

12 Q. Okay. And then tell me what changed in  
13 that.

14 A. So the base by which we were comparing it  
15 to stays the same, but the new bill, which would  
16 represent the bill with the increase in it,  
17 changed slightly. So the part that we're really  
18 looking at is the differentials.

19 Q. Right.

20 A. The differential originally started at 3.48  
21 and went up to 4.24. Now it goes from \$3.60 to  
22 \$4.37.

23 Q. Okay.

1 A. So I think the average there is about 3.80,  
2 and I quoted \$4.

3 Q. Okay. Thank you for your explanation.

4 Are these documents the same that you  
5 reviewed during your deposition on February the  
6 14th, 2020?

7 A. They are.

8 Q. So looking back at the typical FD  
9 residential bill calculation for 1,000  
10 kilowatts, you and your team created this  
11 worksheet.

12 You had a hand in creating this worksheet;  
13 is that correct?

14 A. That's correct.

15 Q. So these calculations on the typical bill  
16 worksheet led to your final calculation in your  
17 estimated supply side resource impacts  
18 worksheet; is that correct?

19 A. That's correct.

20 Q. Okay. So in your typical residential bill,  
21 you went through an analysis of what your  
22 typical residential bill is and included  
23 multiple steps along the way.

1 Can you just sort of describe that  
2 generally, please?

3 A. Yes. It's an actual process by which a  
4 bill would be calculated using a customer's  
5 usage and the approved rate FD. It starts with  
6 the base charge, which would be applied each  
7 month. Then you have your kilowatt hours that  
8 will fall into different buckets. We have the  
9 first and second step for our winter months, and  
10 then we have a first and second step for our  
11 summer months, and then we have a charge for  
12 NDR, a charge for ETR, utility license tax  
13 that's applied, and a gross receipt tax that  
14 gets applied.

15 Q. Thank you. And then you apply those across  
16 all the months of the year, and you ultimately  
17 end up with your typical 2019 bill; is that  
18 correct?

19 A. That's correct.

20 Q. And then in your second set of analysis on  
21 that same worksheet, it's entitled, "NGO  
22 Scenario"?

23 A. That's correct.

1 Q. And that's moderate gas with zero carbon  
2 pricing?

3 A. That's correct.

4 Q. And your typical -- your typical or your  
5 bill in that scenario is what?

6 A. 151.84.

7 Q. And let me back up for one second.

8 On your current 2019 pricing, what is  
9 your -- what is your bill there?

10 A. 147.60.

11 Q. Okay. And then your third scenario is  
12 labeled "LG Zero Scenario."

13 Is that low gas zero carbon pricing  
14 scenario?

15 A. That is correct.

16 Q. Okay. And then your final bill in that  
17 scenario is what?

18 A. 151.08. I feel like I need to repeat that  
19 this is the first version that we're looking at.

20 Q. Okay. So this is not the corrected  
21 version?

22 A. It's not the updated version. And I have  
23 those numbers in front me as part of my exhibit.



1 Q. Okay. We'll handle that.

2 A. Just to be sure it's on the record that  
3 these were not the final numbers.

4 Q. Okay. So 147.60, that is the typical 2019  
5 residential bill?

6 A. That was the typical bill using the pricing  
7 that was in effect for 2019. That pricing has  
8 changed in 2020 as we've had a rate reduction  
9 this year.

10 Q. And that's based on 1,000 kilowatt hours of  
11 usage?

12 A. That is based on assuming the customer used  
13 1,000 kilowatt hours each month of the year.

14 Q. What do Alabama Power customers actually  
15 average per month?

16 A. The average usage of customers per month  
17 averages closer to 1,200, but we -- when we're  
18 doing rate impact analysis, to use an industry  
19 standard, which is to quote 1,000 kilowatt  
20 hours, it's comparable between utilities. You  
21 can compare your increases.

22 We also find that if we look at the usage  
23 of our customers, 1,000 kilowatt hours is closer

1 to the median of our customers, meaning about  
2 the same number of customers fall below that  
3 1,000 kilowatt hours as the number of customers  
4 that fall above that. So the average usage is  
5 skewed a little bit.

6 Q. So it would be the real Alabama Power  
7 typical customer is averaging 1,200 kilowatt  
8 hours per month; is that correct?

9 A. If you want to talk about the average  
10 usage. I stated typical customers, because I  
11 find that the median is representative of the  
12 typical.

13 Q. So the real average usage by an Alabama  
14 customer is roughly 17 percent higher or 200  
15 megawatts higher than what you used for the  
16 typical resident bill?

17 A. It would be the kilowatt hours.

18 Q. Kilowatt hours; correct.

19 A. Much, much smaller.

20 Q. A kilowatt hour.

21 So the revenue impact estimates are not  
22 based on an average usage of a residential power  
23 customer; is that correct?

1 A. It is representative of a typical customer  
2 using 1,000 kilowatt hours. So if you know what  
3 your usage is, it's fairly -- I would say it's  
4 pretty linear. So you can take your usage and  
5 you can calculate what you believe your impact  
6 will be.

7 Q. Regardless of that, if you use the average,  
8 it's going to raise these numbers that you found  
9 in a typical residential bill; correct?

10 A. I think it's about 40 to 50 cents  
11 difference, but yes.

12 Q. So you have stated that the net pressure  
13 on -- through the various mechanisms would  
14 equate to approximately \$4 per month; correct?

15 A. That's correct.

16 Q. And we've established that the true  
17 average -- if you use the true average bill, it  
18 would actually raise that -- it would increase  
19 that pressure; correct?

20 A. That pressure would be slightly higher, but  
21 I would point that when you look at the average  
22 on my sheet, I actually rounded up for the \$4.  
23 So when you account for those, that difference,

1     you're still going to be close to \$4. It might  
2     be slightly higher than \$4.

3     Q.     So if your \$4 is going to be over, that's  
4     approximately \$50 a year at least?

5     A.     I'm sorry?

6     Q.     An average customer, it's going to be about  
7     \$50 a year at least?

8     A.     That's fair.

9     Q.     So it could be more?

10    A.     It would be more if you use more than 1,000  
11    kilowatt hours a month.

12    Q.     If you use 1,200 kilowatt hours.

13    A.     It's going to be slightly more, yes.

14    Q.     And rate FD customers are the majority of  
15    all your combined customers; is that correct?

16    A.     Yeah, they are by far the majority.

17    Q.     That's 1.2 million of your customers; is  
18    that correct?

19    A.     That is in the ballpark, yes.

20    Q.     So sales to FD customers are what percent  
21    of your sales?

22    A.     Percentage of sales of kilowatt hours?

23    Q.     Correct.

1 A. I do not know that figure as we sit here  
2 today. It's not coming to me.

3 Q. So you've shown what the typical impact is  
4 for a family dwelling rate, but this is also  
5 going to result in increases for businesses and  
6 large industries; is that correct?

7 A. That is correct.

8 Q. And have you done that analysis?

9 A. I provided a percent impact for all other  
10 retail customers of 2 percent. That would allow  
11 those customers to take the particular bill  
12 amount that they're familiar with and apply 2  
13 percent to it to get an estimated impact.

14 Q. Are there any customers that this petition  
15 will not affect?

16 A. There are no retail customers that I can  
17 think of that would not be affected, no.

18 Q. And this is all being driven by this  
19 alleged winter need?

20 A. It is being driven by our analysis that  
21 shows a winter need.

22 Q. Did your group conduct any bill impact  
23 analysis for low income customers?

1 A. To the extent that the low income customers  
2 look similar to the typical customer, I would  
3 suggest that the \$4 is an impact to low income  
4 customers as well.

5 Q. Do you know what energy burden means?

6 A. I have heard you speak of it in deposition.  
7 I was not familiar with it before that.

8 Q. Would you accept the definition of energy  
9 burden as a percentage of general income that's  
10 spent on utilities per month by households?

11 A. Yes, I will accept that definition.

12 Q. Do you know what the average energy burden  
13 of residents in Alabama is?

14 A. I do not.

15 MR. JOHNSTON: Your Honor, may I  
16 approach?

17 THE COURT: Sure.

18 MR. JOHNSTON: It will be two  
19 separate documents.

20 BY MS. JOHNSTON:

21 Q. Ms. Baker, have you seen these documents  
22 before?

23 A. I don't know that I've seen these specific

1 documents, but I've seen similar information.

2 Q. So do you know what the information in here  
3 is concerning?

4 A. I have not looked at the second document,  
5 but I do understand the first document.

6 Q. So take a minute to look at that document  
7 and tell me -- both documents, and tell me when  
8 you've had a chance to review it.

9 THE COURT: While she's do doing  
10 that, the first document will be marked as  
11 Energy Alabama/GASP 7, and the second will be  
12 marked as Energy Alabama/GASP 8.

13 MR. GROVER: Judge, can we put an  
14 asterisk on that and come back to it. I think  
15 per Mr. Johnston's comment, we might try to  
16 straighten that out and enter the correct  
17 exhibit into the record, unless you intended  
18 to not have the correct exhibit in the record.

19 MR. JOHNSTON: No. That's fine.

20 MR. GROVER: Okay. We can work on  
21 that, Christy and I. I think she understands  
22 what I'm thinking.

23 MR. JOHNSTON: Thank you.

1 BY MR. JOHNSTON:

2 Q. And I want to draw your attention to the  
3 document entitled "Electricity Costs, Rates,  
4 Bills, and Burdens."

5 A. Yes.

6 Q. And on the second page of that two-page  
7 document, could you describe who created this  
8 document?

9 A. Based on the logos at the bottom, I would  
10 say it's a U.S. Department of Energy and  
11 Berkeley Lab.

12 Q. And what's the date on that document?

13 A. October of 2017.

14 Q. And I want to draw your attention to the  
15 first paragraph, third bullet point of the first  
16 page of that document, where it talks about  
17 electricity burden.

18 A. Yes.

19 Q. And could you read the definition of  
20 electricity burden?

21 A. "Electricity burden is a measure of  
22 affordability, and it's the percent of household  
23 income spent on electricity bills."



1 Q. And then read, please, the fourth paragraph  
2 down where it says "The math to the right shows  
3 these differences, for example." Read the  
4 first full bullet point.

5 A. "Letter rate but high bill and burden,  
6 Alabama."

7 Q. And so does this document show that Alabama  
8 indeed has a high energy burden for its  
9 customers?

10 A. As stated, it shows that Alabama has low  
11 rates, but because of high usage, they have  
12 higher bills, and as they have defined it,  
13 higher burden.

14 Q. And let me draw your attention to the  
15 second document that I handed you just now.

16 A. All right.

17 Q. And can I get you to read the title of that  
18 document?

19 A. "Low Income Household Energy Burden Varies  
20 Among States. Efficiency Can Help in All of  
21 Them."

22 Q. Okay. And turning to the back of that  
23 document again, page 2, can you tell me who

1 produced that document and the date?

2 A. Again, the U.S. Department of Energy,  
3 December of 2018.

4 Q. And I want to draw your attention to one  
5 part of this document, which is the second full  
6 paragraph.

7 And could you just read the first sentence  
8 of that paragraph?

9 A. The second full paragraph, where the one  
10 that starts in the middle of the same column?

11 Q. That's correct. It starts "In five  
12 states."

13 A. Can't tell.

14 "In the five states with the highest low  
15 income energy burden, Mississippi, South  
16 Carolina, Alabama, Georgia, and Arkansas, low  
17 income households use 36 percent more  
18 electricity than the low income national  
19 average."

20 Q. Thank you. So do you have a good idea of  
21 what energy burden is at this point?

22 A. I think that you're talking about an energy  
23 burden, but the tables that we're looking at are

1 about electricity burden. And I would suggest  
2 that your terminology would be more appropriate,  
3 which is your energy burden.

4 I believe that we covered this topic in  
5 Ms. Burk's testimony, that I'm familiar with it,  
6 and our customers, as stated here, use more  
7 electricity than customers in other areas, and  
8 that is because they use that electricity to  
9 replace other fuel sources.

10 So where you might have a higher  
11 electricity bill, you may not have a gas bill.  
12 So if you were to look at the total energy of a  
13 customer, you would find a different answer.  
14 Because if I'm only paying an electric bill and  
15 not paying both, then only looking at one side  
16 of the equation doesn't tell you what my energy  
17 burden is. It only tells you what my  
18 electricity bill is.

19 Q. Do you draw a distinction between bills and  
20 rates?

21 A. Yes, I draw a distinction between bills and  
22 rates.

23 Q. Can you tell what that distinction is?

1 A. The rate is the rate set forth for each  
2 unit that we sell. Your bill is determined by  
3 the amount of units that you consume from us.

4 Q. And so according to this, in the document  
5 that you just reviewed, Alabama Power has high  
6 energy bills; is that correct?

7 A. I believe it says high electricity bill. I  
8 don't know about total energy bills.

9 Q. In your analysis, there was no analysis  
10 about how this rate impact might affect low  
11 income citizens; is that correct?

12 A. I think, as I answered before, I did a  
13 typical residential bill calculation to look at  
14 the impact, and so I would assume that that is a  
15 combination of low income customers and high  
16 income customers, but I do not ask my customers  
17 what their income level is before providing  
18 electric service to them.

19 Q. You reviewed impacts on customer bills  
20 through 2024?

21 A. I looked at the impact in the year 2024,  
22 because that is the first year that you will see  
23 the full annual cost of the portfolio.

1 Q. Did you look beyond 2024?

2 A. I did not look beyond 2024, but what I know  
3 about the portfolio is that over time, the  
4 revenue requirement declines. So if I look at  
5 the impact in the first year, that should be an  
6 impact where from that point forward, the  
7 pressure would decline.

8 Q. So is it your testimony that there will be  
9 decreasing pressure on a rate after the year  
10 2024?

11 A. There will be decreasing pressure from the  
12 non-fuel cost side. I can confidentially say  
13 that.

14 Q. Have you done a full life cycle analysis of  
15 all of the bills of what these bills would be?

16 A. I have not looked at the full life cycle of  
17 the bills, no.

18 Q. Turning back to the estimated supply side  
19 resources tab, and now I'm going to go from the  
20 corrected version, if you do have that in front  
21 of you.

22 A. I do.

23 Q. I can you get a copy here.

1 A. All right. Okay.

2 Q. So according to your estimated supply side  
3 resource impact tabs, the family -- the FD  
4 allocation, as you labeled it, or family  
5 dwelling allocation, the supply side generation  
6 is going to cost residential customers  
7 approximately \$95 million more per year in 2024;  
8 is that correct?

9 A. The cost side of this equation is  
10 additional \$95 million, but I do not have the  
11 savings side for just the residential customers  
12 on FD. It was incorporated in that typical bill  
13 calculation.

14 Q. So what happens if during the 40-year time  
15 frame of this proposed portfolio, as we have  
16 seen with Barry Unit 8, if a large customer  
17 demand, more investment, and solar and wind,  
18 what happens to their share of the cost from  
19 this proposal?

20 A. I'm not sure I understand the question.

21 Q. So if industrial or large customers end up  
22 demanding more renewable --

23 A. Yeah.

1 Q. -- what happens to the FD allocation of  
2 this supply side tab?

3 Would it have a tendency to go up?

4 A. I don't have -- I'm not making a connection  
5 between the choice of adding renewables for  
6 larger customers. If they were demanding that,  
7 we would add that, and it would become a part of  
8 the generation that serves all customers, so...

9 Q. Would all customers be on the hook for this  
10 petition still?

11 A. All customers who enjoy the benefit of the  
12 capacity made available would share in the cost  
13 of that capacity.

14 Q. Under your moderate gas zero carbon pricing  
15 scenario, I think you have the savings as \$76;  
16 is that correct?

17 A. I think if you're looking at the older one,  
18 that may be it. But on the newer one, the low  
19 gas is 74 million.

20 Q. Okay. And what exactly are these savings?  
21 Can you describe those savings to me?

22 A. Yes. I think other witnesses have talked  
23 about it up to this point, but you are planning

1 to provide service to customers, and you're  
2 planning to use the fuel -- burden fuel in our  
3 existing unit. But if you move forward with  
4 this portfolio and these units come online to  
5 provide the capacity that we need, they will  
6 also be there to generate in place of other  
7 units.

8 So if the fuel is a fuel savings, because  
9 you use less fuel to produce more kilowatt hours  
10 out of these more efficient units, then you  
11 don't have to spend the dollars on the fuel for  
12 the less efficient units.

13 Q. How is this --

14 A. It's the net of the cost and the savings,  
15 and it nets to a savings.

16 Q. How is this change if you added more energy  
17 efficiency and demand side management to Alabama  
18 Power's portfolio?

19 A. How would the energy savings change?

20 Q. Would that put more of a downward pressure  
21 on rates?

22 A. I'm sorry. The first was how would the  
23 energy savings change, that question?



1 Q. Yeah.

2 A. I believe it would depend on the fuel  
3 forecast going forward.

4 Q. But if you're adding resources that don't  
5 use fuel?

6 A. Then they're also displacing other  
7 generation, so I would say that the savings may  
8 decrease.

9 Q. So you did not perform a high gas scenario;  
10 is that correct?

11 A. I did not perform any gas scenario.

12 Q. And you weren't given any of the  
13 information for a high gas scenario; is that  
14 correct?

15 A. I was not provided any information for  
16 anything greater than the moderate gas, which I  
17 believe Mr. Looney indicated was in a high  
18 range.

19 Q. If there are gas increases over time, of  
20 course, to your moderate gas scenario and low  
21 gas scenario, would that change your analysis  
22 of the -- of the bill impacts?

23 A. There are two scenarios presented, a low

1 gas scenario and the moderate gas scenario. And  
2 so to the extent that what we actually see  
3 doesn't fall between those, there would be a  
4 difference between sort of average that I  
5 stated. But I think, for reference sake, you  
6 can look at what the difference is between the  
7 low gas and the moderate gas to kind of get a  
8 flavor for how wide the range of variability  
9 could be.

10 So between these two scenarios, it's  
11 about -- a little under 80 cents is the range,  
12 80 cents a month.

13 Q. What if you add carbon on top of that  
14 scenario? A carbon price?

15 A. I do not have an evaluation of that,  
16 because there was no evaluation that showed a  
17 carbon price in 2024, which from a non-fuel cost  
18 side was my highest cost year.

19 Q. And Brandon Looney's group at Southern  
20 Company Services did an analysis with carbon  
21 pricing; is that correct?

22 A. They did.

23 Q. And so why was the choice here not to do

1 any sort of analysis of carbon pricing?

2 A. As I just stated, the carbon pricing  
3 started later than the year 2024, but because  
4 2024 is when I have my highest revenue  
5 requirements, I went with an analysis that says  
6 this is the way rates will be impacted in 2024.

7 Q. For the demand side management programs,  
8 they lower the demand or the need for  
9 electricity on the system; is that correct?

10 A. They can do both. They can lower the need  
11 for demand, and they can lower the energy  
12 consumption.

13 Q. And almost all the company -- the company's  
14 DSM programs are interruptible supply contracts  
15 with very large customers; is that correct?

16 A. The largest portion of the demand side  
17 management options that provide part of our  
18 resources are interruptible contracts.

19 Q. And how often are these interruptible  
20 customers called upon?

21 A. As frequently as required when we're in an  
22 at-risk system. I recall that we've had  
23 multiple people talk about the 2014 polar

1 vortex, and I know that customers were called in  
2 that situation, opposed to not have a firm low  
3 setting event.

4 Q. How many active DSM programs does the  
5 company currently have in operation?

6 A. I do not know the number of the DSM  
7 programs.

8 Q. Active DSM programs?

9 A. I do not know of the number of active or  
10 passive.

11 Q. I think you pointed out one that may be  
12 frozen and one that was a pilot program in the  
13 works -- is that correct? -- during your  
14 deposition?

15 A. Those are two of the DSM programs that also  
16 have a rate associated with them, yes.

17 Q. And how many participants are there in  
18 these programs?

19 A. I asked that question after the deposition,  
20 because I did not know, and it's in the range, I  
21 think, between 6,000 and 7,000 customers, the  
22 majority of which were on DLC, not DPE.

23 Q. And those are the customers that are part

1 of the sensible switch in critical peak pricing;  
2 is that correct?

3 A. That's correct. The majority of them are  
4 sensible switch.

5 Q. Alabama Power currently uses declining  
6 winter block rates; is that correct?

7 A. Our standard at the rate does have a slight  
8 decline in the winter and a slight incline in  
9 the summer.

10 Q. So that means as customers uses more  
11 energy, the rates go down; is that correct?

12 A. That is correct.

13 Q. So specifically, if customers are using  
14 over 750 kilowatt hours per month, the next  
15 block of energy is cheaper; is that correct?

16 A. After you pass 750 kilowatt hours in the  
17 wintertime, the rate goes down by \$.01.

18 Q. Does it make sense for utilities that's  
19 concerned about winter peaking to use the claim  
20 winter block rates?

21 A. As the winter planning and winter peaking  
22 is confirmed and affirmed out of this proceeding  
23 and the company -- if the company should move

1 forward with procuring generation to meet a  
2 winter peak, then I would fully expect that as  
3 pricing, we would move forward with a transition  
4 of our rates as well, and that would include a  
5 transition to this rate.

6 Q. Did you hear Mr. Kelley's testimony  
7 yesterday about winter decline and block rates?

8 A. I don't recall what Mr. Kelley said about  
9 winter decline and block rate.

10 Q. But your testimony today is that if this  
11 petition is approved by the PSC, Alabama Power  
12 will get rid of winter decline and block rates;  
13 is that correct?

14 A. I fully expect that as we transition all of  
15 our rates, one of the things that will change is  
16 a winter declining block. That's correct.

17 Q. And I wanted to -- let me revisit this one  
18 question.

19 You said on the interruptible call -- did  
20 you know how many had been made in 2018? How  
21 many of those interruptible supply customers  
22 have been called upon in 2018?

23 A. I do not know.

1 Q. And how many customers do you have?

2 A. How many total customers do we have?

3 Q. On an interruptible.

4 A. Oh, on an interruptible. I do not know the  
5 answer to that either. I'm not responsible for  
6 the interruptibles.

7 Q. Well, subject to check, would it be  
8 surprising to hear that you called 60 out of  
9 more than 1,600 during 2018?

10 A. I don't know what that's referencing. I  
11 don't know how many we have, and as I understand  
12 the program, we don't call some customers. If  
13 we make a call, we call all customers.

14 Q. When the company makes a capital  
15 investment, it gets a return from that capital  
16 investment; is that correct?

17 A. The company does recover the cost of  
18 capital associated with any investment made to  
19 provide service to our customers.

20 Q. And then it gets some sort of interest upon  
21 that capital; is that correct?

22 A. There are various components of the  
23 capital. So the total cost of capital would be

1 recovered from customers.

2 Q. And that rate of return is called a return  
3 on equity; is that correct?

4 A. That is a name for it, yes.

5 Q. And that is recovered through rate RSC; is  
6 that correct?

7 A. Our cost of capital is recovered through  
8 more than one rate, but it is recovered under  
9 RSC as well.

10 Q. And do you know what the current ROE of  
11 Alabama Power is?

12 A. I do not have the current number. We are  
13 regulated on a waited retail return on equity,  
14 so the ROE number is not a number I keep track  
15 of.

16 Q. Subject to check, would it surprise you  
17 that the ROE is approximately 13 percent per the  
18 company?

19 A. I don't know what time frame you would be  
20 referring to. As I recall, our costs are  
21 declining as our equity is increasing. So I  
22 don't know what time period you're referring to.

23 Q. Over the last two years.



1 A. I don't know.

2 Q. Would a large self-bill project be more  
3 profitable than shorter term PPA for the  
4 company?

5 A. I'm trying to follow the question. The  
6 PPAs don't involve any investment, so there is  
7 no cost of capital to recover.

8 Q. Right. And so there is cost of capital to  
9 recover when you build a large unit, like Barry  
10 Unit 8; is that correct?

11 A. If you invest capital to provide a benefit  
12 to customers, there is a cost of that capital  
13 that is recoverable, yes.

14 Q. And then you get a return on the equity  
15 portion of that capital; is that correct?

16 A. That is correct.

17 Q. So therefore, wouldn't it be more  
18 beneficial, as far as an ROE standpoint is  
19 concerned, for the company to endeavor in a  
20 large self-bill project, rather than a  
21 short-term PPA?

22 A. I don't agree that it would be more  
23 beneficial, because our company is a long-term

1 company, and if we make short-term decisions  
2 that aren't in the best interest of our  
3 customers, we won't be profitable over the long  
4 haul.

5 Q. Give me a minute, please.

6 A. Okay.

7 Q. Are you familiar with Mr. Kelley's --  
8 strike that.

9 Do you remember Mr. Kelley's testimony  
10 regarding the plans for a residential thermostat  
11 control program.

12 A. I recall that he was testifying, yes.

13 Q. Can you provide a few more details about  
14 that program?

15 A. I wouldn't know any details about that  
16 program.

17 Q. You don't know how many customers that  
18 program covers?

19 A. I do not.

20 Q. What kind of load reduction it might  
21 achieve?

22 A. I do not.

23 Q. How much that type of program might cost to

1     deploy?

2     A.    I do not.

3     Q.    Will this program be part of the 200  
4     megawatt proposal for demand site management?

5     A.    It is my understanding that it's currently  
6     being piloted to determine if it is effective  
7     and should be used as a part of the 200  
8     megawatt.

9     Q.    To come up with your typical bill analysis,  
10    and as we've discussed, you were given data from  
11    several different groups within Alabama Power,  
12    and I assume Southern Company Services; is that  
13    correct?

14    A.    That is correct.

15    Q.    And you were running this data through a  
16    spreadsheet to come up with your final numbers?

17    A.    That's correct.

18    Q.    And so who in your shop decides on the  
19    analysis, the ultimate scope of analysis, for  
20    instance, field impacts, low income impacts, who  
21    makes that decision?

22    A.    I would say, ultimately, it would be my  
23    decision.

1 Q. Ultimately, was it your decision to use the  
2 typical customer FD 1,000 kilowatts -- 1,000  
3 kilowatts per hour per month, instead of the  
4 average Alabama customer usage?

5 A. Yes. It was consistent with what we have  
6 done for as long as I can remember doing bill  
7 impacts.

8 Q. But it wasn't your decision that you  
9 wouldn't run at a high gas scenario; is that  
10 correct?

11 A. It was not my decision.

12 Q. It wasn't your decision that you wouldn't  
13 review carbon purchasing; is that correct?

14 A. That was not my decision.

15 MR. JOHNSTON: I think that's all I  
16 have, Your Honor.

17 THE COURT: Let's straighten out the  
18 exhibit. I think you wanted to have some  
19 conversation about that.

20 MR. GROVER: It's my understanding,  
21 at the risk of presuming, that you intended to  
22 use the exhibit that was introduced in her  
23 deposition as part of the work paper produced

1 in response to the notice?

2 MR. JOHNSTON: That's correct.

3 MR. GROVER: Then that would be the  
4 one that actually has the exhibit sticker on  
5 it that says 2 Baker, which I assume you have  
6 a copy of that?

7 MR. JOHNSTON: Yes, I do have that.  
8 Yes.

9 MR. GROVER: Okay. I think that and  
10 then the worksheet that went along with it  
11 would be the ones that have the updated  
12 information that Ms. Baker testified to at the  
13 outset.

14 Just so the record is clear, she  
15 made the distinction the exhibit corresponds  
16 with it.

17 MR. JOHNSTON: Okay. I appreciate  
18 that. So we will get the judge copies of  
19 those.

20 THE COURT: All right. Well, here's  
21 what I propose, because she gave testimony on  
22 these documents that were marked.

23 MR. JOHNSTON: Right.

1           THE COURT: So what I would like to  
2 do is do a 5A and 6A, with the A being the  
3 revised version on each of those.

4           MR. GROVER: That's perfect, Your  
5 Honor.

6           THE COURT: All right. Let's do  
7 that.

8           MR. JOHNSTON: Thank you. And I  
9 will move for the other exhibits into the  
10 record.

11          THE COURT: If you got copies of  
12 those, I would like to go ahead and mark them.

13          We're going to mark as 5A, which is  
14 the corrected version of that particular  
15 exhibit, and then 6A, which is the corrected  
16 version of 6.

17          MR. JOHNSTON: Those are the new  
18 versions.

19          THE COURT: Okay.

20          MR. JOHNSTON: Thank you.

21          THE COURT: Thank you.

22          All right. Ms. Csank, are you  
23 ready?

1 MR. CSANK: Just a moment, Your  
2 Honor.

3 THE COURT: Any objection to the  
4 admission of all those exhibits that would be  
5 5, 5A, 6, 6A, 7, and 8?

6 MR. GROVER: No, Your Honor.

7 THE COURT: They are admitted.

8 CROSS-EXAMINATION

9 BY MS. CSANK:

10 Q. Good afternoon, Ms. Baker.

11 A. Good evening.

12 Q. We haven't met. My name is Diana Csank.  
13 I'm counsel for Sierra Club.

14 A. Nice to meet you, Diana.

15 Q. Are you still comfortable?

16 A. I am.

17 Q. Do you need anymore water?

18 A. No, I'm good.

19 Q. All right. Good.

20 Ms. Baker, you've worked for Southern  
21 Company for nearly 30 years; correct?

22 A. I think he said 26 earlier, but yes.

23 Q. Forgive me. Well, your entire career;

1 correct?

2 A. Yes. That is correct.

3 Q. All right. And I think we covered you have  
4 responsibility for deciding the electricity  
5 rates that Alabama Power customers will pay?

6 A. I have the responsibility for presenting  
7 those rates to the commission for their  
8 approval. Producing rates and presenting them  
9 for approval, but I don't get to decide.

10 Q. Thank you for that correction.

11 In terms of the -- your purpose here,  
12 you're helping us understand how to kind of  
13 translate this proposed expansion under review  
14 in terms of what customers will be seeing on  
15 their bill; is that correct?

16 A. That is correct.

17 Q. Okay. And in terms of the timeline, can  
18 you just briefly recap for us when you  
19 anticipate, if you were to receive approval,  
20 customers will start to see the cost appearing  
21 in their bills?

22 A. Yes, we can look at that. Let me --

23 Q. It's in your rebuttal testimony.



1 A. Yes. The rebuttal testimony exhibit will  
2 just help me keep my place, because we're  
3 talking about several generating units in this  
4 portfolio.

5 So we begin to incur cost and benefits  
6 associated with Hog Bayou as soon as practical  
7 after a determination is made. So if we get a  
8 approval for Hog Bayou this year, then we would  
9 begin seeing some costs associated with Hog  
10 Bayou as well as some fuel benefits.

11 I will point out that in that first year,  
12 2020, the benefit in our estimate are greater  
13 than cost, so it would actually be a benefit in  
14 2020. In the year 2021, that converts to very,  
15 very little cost. It's almost a wash. In the  
16 year 2022, we see one solar project come in  
17 service. And in the year 2023, we pick up  
18 Central Alabama about midyear, we pick up  
19 Barry 8 at the very end of the year, and we pick  
20 up -- no -- yes, we do pick up one more solar  
21 project. And then in January of 2024, which is  
22 when I stated that everything will be in place,  
23 the last three solar projects come on the line.

1 So all of the costs would be involved in the  
2 year 2024.

3 Q. And I think, in your opening statement, you  
4 referred to a recent rate decrease?

5 A. That's correct.

6 Q. Okay. And you stated that that will dampen  
7 the impacts of the closed expansions?

8 A. Yes. In comparison to last year, this year  
9 customers will use -- the residential typical  
10 bill would go down about \$4.50. So over the  
11 course of the next four years, if we see rate  
12 pressures equivalent to \$4, then we would be  
13 back to a point at the year 2024, where we were  
14 still \$.50 less than what customers saw last  
15 year. So that's what I mean by that statement.

16 Q. That's in terms of -- it's not as though  
17 there's some other interaction between whatever  
18 changes you're currently making compared to that  
19 rate to create them --

20 A. No. Just for the effect that they have on  
21 customer bills. Customer bills just went down,  
22 so if they go up, we'll be back to where we were  
23 last year.

1 Q. And just to be clear, the rates went down  
2 in past not because of this proposal?

3 A. No, not because of this certificate.

4 Q. And you agree that the existing resources  
5 on the system are cost effective for customers?

6 A. The existing resources --

7 Q. Right.

8 A. -- are cost effective. There may be more  
9 cost effective options, as we've seen today, but  
10 that's the resources that are in place that have  
11 been acquired over time, and I believe that they  
12 were the most cost effective at the time they  
13 were taken.

14 Q. But you don't contend that today customers  
15 aren't getting these cost service from the  
16 company?

17 A. I believe that they're getting the most  
18 cost effective service that they can get  
19 considering the portfolio that had been built up  
20 to this point.

21 Q. And there was mention of this Calhoun PPA?

22 A. Yes.

23 Q. Are you familiar with that?

1 A. I am.

2 Q. And remind me, when is that expiring, that  
3 power purchase agreement?

4 A. I believe it expires in 2022.

5 Q. Do you know of any analysis to extend that  
6 power purchase agreement for one, two, or  
7 three years?

8 A. I have not heard of any.

9 Q. Okay. If there were such analysis, would  
10 you know of it because of this rate  
11 implications?

12 A. I probably would not know of it at this  
13 point. We're not close enough to 2022 for that  
14 to be something I would be involved in.

15 Q. So how close to the expiration of power  
16 purchase agreement, given your decades of  
17 experience, do you start to think about the rate  
18 implication of that particular contract being  
19 renewed or allowed to expire?

20 A. The decision as to whether that contract  
21 would be renewed or expired would be a resource  
22 decision that would be made in the resource  
23 planning group, so they would determine if it

1 was most cost effective to continue or  
2 eliminate. So at the point that they make that  
3 decision, and we are reaching a point where that  
4 would have an impact on the rate, then I would  
5 become aware of it.

6 If the Calhoun PPA expires, then rates  
7 would have a decrease at that point, so that's  
8 when I would become aware.

9 Q. Okay. That was a pretty convoluted answer.  
10 I appreciate all the detail.

11 Let me just ask you, in terms of a month or  
12 a year range, again, given your experience and  
13 speaking in generalities, when you have these  
14 types of capacity power purchase agreements, and  
15 you have had many over the years; correct?

16 A. Yeah.

17 Q. So usually, they're time bound, and  
18 eventually, they expire.

19 And my question is simply, how close to  
20 that expiration date, are we talking months or  
21 years, that Mr. Kelley's going to come to you  
22 and says we should sit down and think about what  
23 the implications are for customers or whether we

1 should proceed under this power purchase  
2 agreement or get out of it?

3 A. Mr. Kelley wouldn't come and ask us. He  
4 would make the decision based on the economics  
5 that he's looking at. He wouldn't ask us. And  
6 I think it just all depends on what's going on  
7 at that point.

8 For example, if this certificate is  
9 approved, I know today that PPAs are going to be  
10 going entered in in the year 2024. So I know  
11 four years in advance in this circumstance. But  
12 I don't know how far in advance the resource  
13 planning group will make a decision on Calhoun.  
14 I'm just not aware.

15 Q. Have you been privy to any discussion about  
16 whether that should be extended?

17 A. I have not.

18 Q. Okay. Just to be equitable, Ms. Baker, are  
19 you a Southern shareholder?

20 A. Surprise. I am.

21 Q. Okay. And do you happen to know how many  
22 shares you own or have access to?

23 A. I do not know.

1 Q. Okay. Given the length of your service to  
2 Southern, would it be essentially comparable to  
3 your colleagues?

4 THE COURT: Don't be comparable to  
5 Mr. Looney.

6 THE WITNESS: I was thinking I might  
7 be more impressive than Mr. Looney, but I'm  
8 not sure.

9 It is an employee benefit, so it  
10 would be probably comparable based on years of  
11 services and that we are at same levels, so...

12 BY MS. CSANK:

13 Q. I got you. Thank you.

14 Do you recall the conversation from  
15 yesterday that I was having with Mr. Kelley, I  
16 believe, about the construction work in  
17 progress, and he sent me your way?

18 A. Yes, he did.

19 Q. All right. And so are you familiar with  
20 that October order that granted the company's  
21 request for this accounting treatment of  
22 construction work in progress?

23 A. I have read the order.

1 Q. Okay. And so can you help us out with your  
2 understanding that 5 percent threshold that was  
3 a condition of the commission's approval and the  
4 kind of reporting that the commission's order  
5 also prescribed? We'll take those in turns. I  
6 was just asking your familiarity with those  
7 subjects.

8 A. Yeah. And if you can provide a copy of the  
9 order, it would be helpful for me.

10 Q. One moment.

11 A. Thank you.

12 Q. My esteemed colleague will be coming your  
13 away shortly.

14 A. Thank you.

15 Q. I'll give you a moment to review and verify  
16 that's a true and correct copy of that order.

17 A. All right.

18 Q. And for the benefit of the record, since we  
19 spoke about this, this is Document U5316, I  
20 believe.

21 A. I think. Okay.

22 Q. And give me a moment to find my reference.  
23 There's a -- in the latter page of the order,



1 the conditions of approval identified as 5  
2 percent.

3 A. I believe it's on page 3.

4 Q. That's correct. Thank you.

5 So do you see that reporting requirement?

6 A. I do.

7 Q. So are you aware of whether that initial  
8 report of actual costs incurred through  
9 December 31, 2019, has been submitted?

10 A. I am aware that that report was submitted  
11 and that there has been a monthly update to that  
12 each month since then.

13 Q. Okay. And when I last checked that docket,  
14 which was yesterday morning, those were not  
15 posted in the public docket.

16 A. I believe they're just reports provided to  
17 staff under their oversight.

18 Q. And can you tell us whether you've met that  
19 5 percent threshold?

20 A. We have not.

21 Q. How close are you to it; do you know?

22 A. I do not know.

23 Q. Okay. And can you confirm for us whether

1 the commission or the staff has received  
2 estimates of the cost of Barry 8 beyond what's  
3 estimated into this cost that we were talking  
4 about earlier, which is the cost up to getting  
5 the unit up and running?

6 A. I believe that the commission staff has had  
7 access to all of the information that has been  
8 provided in this proceeding thus far, which  
9 included Brandon -- I'm sorry -- Mr. Looney's  
10 analysis, which included the cost for that unit  
11 as part of his analysis.

12 Q. So your understanding of the company's  
13 disclosure of Barry 8's cost is limited to the  
14 analysis and work papers and discovery responses  
15 by Mr. Looney; is that correct?

16 A. I'm sorry. I didn't understand the  
17 question.

18 Q. Okay. So you overheard in the last going  
19 on two days we've discussed various costs and  
20 risks associated with Barry 8?

21 A. Yes.

22 Q. And I was just confirming your  
23 understanding of what the scope of information

1 that was provided to the commission by the  
2 company with respect to those costs and risks.

3 A. I do not know the scope of everything that  
4 was provided to the commission staff. I am  
5 aware that as part of this process, Mr. Looney's  
6 numbers are available to the staff, such as  
7 staff may have requested other information that  
8 has been provided as part of this process that  
9 I'm not aware of.

10 Q. And in terms of your job responsibilities,  
11 do you communicate directly with customers?

12 A. I do not.

13 Q. Okay. Do any of your direct reports -- you  
14 supervise part of their job responsibilities?

15 A. Not directly to customers, no.

16 Q. Okay.

17 A. I will add to that, that I do have contact  
18 with some of our larger industrial customers,  
19 and so there is some interaction there between  
20 our departments.

21 Q. Okay. And why would that be?

22 A. Interaction on questions about pricings  
23 that are extremely impactful to them, doing

1 estimates on rate comparisons for them, things  
2 of that nature.

3 Q. So you don't provide comparable  
4 communication, for example, for low income  
5 residents?

6 A. We provide communication through our  
7 customer service center for anyone who calls and  
8 asks a question about rate options.

9 Q. Okay. In terms of -- going back to low  
10 income customers, do you perform any sort of  
11 analysis on ways to dampen the rate impacts of  
12 resource changes to that specific group of  
13 customers?

14 A. I have not performed an analysis specific  
15 to this resource portfolio. I know that we have  
16 a rate rider that provides a discount to  
17 customers who received supplemental security  
18 income or Medicaid for low income family.  
19 That's our SSI rider.

20 Q. Are you familiar with the fact that other  
21 retail operating companies, when proposing  
22 resource changes, have identified specific ways  
23 to dampen the impact on low income customers?

1           Would that surprise you?

2       A.    I am not aware.

3       Q.    Would you be the one who would receive  
4   information on various funding that's available  
5   from the federal government specifically to help  
6   dampen the energy burden for your customers?

7       A.    I heard you speak of dollars yesterday for  
8   weatherization.  So if it were of that nature,  
9   no, I would not be aware.  That would be  
10   something that would take place in our group  
11   that focuses on energy efficiency and demands  
12   that management option for customers.

13      Q.    But ultimately, it would come to you to  
14   translate into rates, would it not?

15      A.    If it were a specific program that had an  
16   individual rate associated with it, then I would  
17   definitely be aware of it.  If it were just a  
18   cost of the company that flows through, it would  
19   depend on the magnitude as to whether I would be  
20   aware of it or not.

21      Q.    Okay.  And for time's sake, I'm going to  
22   hand you two exhibits, and I just have a couple  
23   of questions for you about them.

1 A. Okay.

2 Q. And I have copies for your counsel, and  
3 then will eventually provide a copy for the  
4 judge. We'll just focus on the first one.

5 A. Thank you.

6 Q. The first one is shorter. It's just two  
7 pages.

8 Do you see that?

9 A. I do.

10 Q. And you see that it's a document from the  
11 U.S. Department of Energy, and it describes a  
12 low income weatherization program.

13 Do you see that?

14 A. I do.

15 Q. And you see at the bottom of the page,  
16 there's, I believe, on your copy, an exhibit  
17 sticker. But in any event, it's a two-page  
18 document, and on the second page, you can see on  
19 the lower right-hand corner the document that --  
20 the Department of Energy document number and the  
21 date, February 2018.

22 Do you see that?

23 A. Yes, I do.

1 Q. And have you seen this document before?

2 A. I have not.

3 Q. Well, let me represent to you that it was  
4 accessed on the U.S. Department of Energy's  
5 website, so it's a public government record.

6 And you will see that the subject is  
7 weatherization works, exclamation point, and it  
8 it's basically a fact sheet that describes this  
9 funding that the federal government makes  
10 available. And it says, you'll see on the first  
11 page on the right-hand column around the middle  
12 of the page, that the department provides this  
13 funding to all 50 states.

14 Do you see that?

15 A. I do see that.

16 Q. That would include Alabama. But  
17 Mr. Kelley, he's not aware of the company  
18 providing programs using the funding to your  
19 customers.

20 Is that your understanding too?

21 A. He would be more knowledgeable on the fact  
22 than I would. The department that he works in  
23 is more closely related to what we are doing in

1 terms of DSM programs, and I believe that's  
2 where this would fall.

3 Q. Okay. But insofar as you're making a  
4 recommendation to this commission about what is  
5 or is not dampening the cost implication for  
6 customers, you haven't looked at all options  
7 like this, have you?

8 A. I have not looked at this specific program,  
9 no.

10 Q. And having skimmed it, do you have any  
11 reason to dispute any of the facts in this  
12 government document?

13 A. I do not. And I know that the company  
14 provides information to customers about energy  
15 efficient actions that they can take, and this  
16 seems to be in line with that.

17 Q. But this specific type of home  
18 weatherization is not something that you  
19 provide?

20 A. I have not provided it. It sounds like  
21 something I've heard discussed in the past.  
22 It's like, at one point in time, this state was  
23 involved in a program where they did low income



1 weatherization, and we were involved with it.

2 But I do not know the specifics.

3 Q. And just bear with me for another moment.

4 If you turn to page 2. At the top of the page,  
5 it says, "Impact on communities."

6 A. Yes.

7 Q. And then let me just read this to you and  
8 tell me if I read it correctly for the benefit  
9 of another copy.

10 It says, "Weatherization not only helps  
11 households. It also helps revitalize  
12 communities by creating economic growth,  
13 reducing environmental impacts. Weatherization  
14 returns \$2.78 in nonenergy benefits in every  
15 dollar invested in the program," and there's a  
16 national evaluation.

17 You don't have analysis like this for  
18 weatherization specific to your system and what  
19 it would do to rates, do you?

20 A. I do not.

21 Q. Okay. And let's turn to the next document.

22 A. All right.

23 Q. This is an article from the news website

1 Box. Do you see that at top of the page, B-o-x?

2 A. I do.

3 Q. And this is a longer document. It was  
4 accessed from the Box website, and the title is  
5 "Utilities Have a Problem: The Public Wants 100  
6 Percent of Renewable Energy, and Quick." And  
7 then the subtitle is "The Industry is Groping For  
8 Ways to Talk the Public Down."

9 Do you see that?

10 A. I see that.

11 Q. And the immediate next line says, "updated  
12 October 11, 2018."

13 A. That's correct.

14 Q. Okay. And you've had a chance to quickly  
15 flip through this?

16 A. I did.

17 Q. Let me ask you before getting into the  
18 document, do you -- are you familiar with the  
19 Edison Electric Institute?

20 A. I am.

21 Q. That's a trade group that -- whose  
22 membership consists of electric utilities, like  
23 Alabama Power?

1 A. That's correct.

2 Q. Do you know if Alabama Power is a member of  
3 the EEI?

4 A. Yes, I believe we are.

5 Q. Okay. And have you seen this article  
6 before?

7 A. I have not seen this article.

8 Q. Have you per chance heard of or even  
9 reviewed yourself the referenced public polling  
10 done by EEI in this article?

11 A. I have not.

12 Q. So let me call your attention specifically  
13 to one finding in that polling conducted by this  
14 utility trade group.

15 All right. And it's on page 4 of the  
16 exhibit, towards the bottom of the page.

17 A. Yes.

18 Q. And actually, let me first direct you to  
19 the -- a third of the way down, it says, "Here's  
20 the most striking slide in the presentation,"  
21 and then you see that bar graph?

22 A. Yes, I do.

23 Q. Okay. And under that, it says, "In case

1     you don't feel like squinting, let me draw your  
2     attention to the fact that a majority of those  
3     surveys, 51 percent believe that 100 percent  
4     renewables is a good idea even if it raises  
5     their energy bills by 30 percent."

6             Do you see that?

7     A.     I do see that.

8     Q.     And then it goes on to say, "That is wild.  
9     If anyone who has been in politics a while knows  
10    Americans don't generally like people raising  
11    their bills, much less by a third. The majority  
12    has spoken. That is political dynamite."

13            Do you see that?

14    A.     I do see that.

15    Q.     Okay. And has the company conducted any  
16    polling like this across its customers; do you  
17    know?

18    A.     I do know that the company has conducted  
19    some polling. I don't know the results of that  
20    polling off the top of my head. I'm familiar  
21    with the fact that it's been done.

22    Q.     When was that polling done?

23    A.     I don't know when it was done. It's

1 something that as I sit here I have heard of it  
2 in my head. So I mean, I know that it has been  
3 done. I don't know how frequently or when.

4 Q. Are the results of that polling public?

5 A. I don't believe they would be.

6 Q. Have they been shared with the commission?

7 A. I am not sure if they have or not.

8 Q. What part of the company does the polling;  
9 do you know?

10 A. I believe it was in the public relations  
11 department.

12 Q. Is there a company witness here from that  
13 department?

14 A. There is not a specific employee who is  
15 here from the public relations department.

16 Q. Is there a manager who oversees that  
17 department here?

18 A. No, there is not.

19 Q. Would the results of that polling  
20 potentially influence resource decisions or  
21 raise; do you know?

22 A. I believe that we would continue to operate  
23 in a fashion that says we will provide

1 generation to our customers that's most cost  
2 effective and not because some customers are  
3 willing to pay more. To the extent that some  
4 customers are willing to pay more, we would have  
5 other options for those customers similar to the  
6 RGC option that we've been describing.

7 Q. And certainly, if you were able to add  
8 additional renewables without any upward  
9 pressure on rates, you would do so; correct?

10 A. I believe that we would.

11 Q. Okay. Have there been discussions about  
12 how you could go about doing so?

13 A. Discussions under the context of RGC would  
14 be where we currently would look at those  
15 options.

16 Q. And in your knowledge about the company's  
17 efforts in this area, sort of coextensive with  
18 Mr. Kelley's, or do you have additional  
19 information for us beyond what Mr. Kelley and  
20 the other company witnesses have said about that  
21 renewable procurement in the future?

22 A. I don't know if you're talking about  
23 renewable as a resource or if you're talking

1 about the actual RGC construct. So I may know  
2 more about the RGC, but I don't know that I  
3 would know more about our renewable resources.

4 Q. Okay. Before we waste time, let me just  
5 understand, what's your additional knowledge  
6 about the RGC?

7 A. I think you asked when it was going to  
8 expire. I believe that's at the end of 2021. I  
9 think I heard someone ask that today. I don't  
10 know if anyone knew the answer.

11 I am aware of the conduct behind the RGC,  
12 which is to look at -- if we were to add  
13 generation that is not required by need, then  
14 we're looking at adding something that we don't  
15 have to add, but we believe that it could provide  
16 benefit. So whenever you enter any kind of  
17 forward looking deal like this, there's some  
18 risks brought on.

19 So the way we look at the RGC, because it's  
20 not needs based, we would look to have  
21 participation from customers like those surveyed  
22 here, who are willing to put forth additional  
23 money to cover the risks that that project would

1 not be to the benefit of all customers over the  
2 life of that project. So that's my knowledge of  
3 how it operates, if that's helpful.

4 Q. Thank you. Have you participated in any  
5 planning for the potential denial of the  
6 petition?

7 A. I have not.

8 Q. So as we sit here today, you have no  
9 analysis about what rates will do without -- in  
10 the event of a denial?

11 A. If there is a denial, then I wouldn't  
12 expect it to have any impact other than as we  
13 move forward, it turns out that there was a  
14 need, and we have to go and procure resources  
15 from some high cost -- higher cost option, then  
16 it would have a higher impact in the future.

17 Q. I think it might be helpful for the record,  
18 and you might be the right person to ask, in  
19 terms of the estimates that you're presenting to  
20 the commission about rate impacts, do those  
21 include any estimate of climate damages that  
22 would result from the gas units that are in the  
23 petition?



1 A. I'm not aware of any climates damages, so  
2 it would not be included.

3 Q. And what's your understanding of climate  
4 damages?

5 A. I don't have a clear understanding of what  
6 you mean when you say "climate damages."

7 Q. Okay. Let me help you. I think I have a  
8 document that identifies the Southern Company's  
9 statements on climate damages, and forgive me  
10 for only having one. So I'll bring this to your  
11 counsel.

12 MS. CSANK: Your Honor, may I  
13 approach the witness?

14 THE COURT: Yeah. Do you have  
15 copies of the other documents that you  
16 presented her?

17 MS. CSANK: Yes, sir.

18 MR. GROVER: Oh, this is not mine to  
19 keep?

20 MS. CSANK: No. Sorry.

21 THE WITNESS: That's little.

22 BY MS. CSANK:

23 Q. I did not bring a magnifying glass. Sorry.

1           And while you're looking, in case it wasn't  
2     audible, this is an excerpt from the Southern  
3     Company's 10K, which has been the subject of  
4     cross-examination in this hearing already. And  
5     again, because it's voluminous, we're just  
6     providing you a single page, and this is from a  
7     section titled "Utility Regulatory, (inaudible),  
8     and Litigation Risks."

9           And it states, "Southern Company  
10    subsidiaries are subject to substantial state  
11    and federal governmental regulations, compliance  
12    with current and future regulatory requirements  
13    in procuring of necessary approvals.  
14    Certificates may results in substantial costs of  
15    Southern Company and subsidiaries."

16          The portion that I've highlighted at the  
17    bottom in page 518 of that document states,  
18    "Litigation over environmental issues in various  
19    types, including property damage, personal  
20    injury, common law nuisances, and citizen  
21    enforcement of environmental requirements has  
22    occurred throughout the U.S. This litigation  
23    has included claims for damages alleged to have

1     been caused by CO2 and other emissions, CCR  
2     releases of regulated substances, and alleged  
3     exposures to regulated substances and/or  
4     requests for injunction relief in connection  
5     with such matters."

6             Did I read that?

7     A.     You did.

8     Q.     Thank you. And so far as you know, the  
9     scope of damages that I just read about is not a  
10    scope that's been analyzed or otherwise  
11    incorporated into the rate impact estimates that  
12    you're providing?

13    A.     No. It appears to be a disclosure of a  
14    potential risk. I do not see that there's any  
15    magnitude or calculations associated with it  
16    that would be something that could be used to  
17    evaluate.

18    Q.     Okay. And as applied here, you don't know  
19    of a case specific, petition specific analysis  
20    of damages resulting from the gas units in the  
21    petition?

22    A.     I do not know of any.

23    Q.     Okay. And -- but you agree that it's

1 possible to analyze and estimate the quantity of  
2 such damages?

3 A. If actual damages were identified, this  
4 just says there's a risk that there could be  
5 some. But if actual damages were identified,  
6 then I do believe you would quantify them.

7 Q. Okay. And so quantify those damages would  
8 be something that you would typically seek to  
9 pass onto your customers; correct?

10 A. I'm not sure. I believe it would depend on  
11 the circumstances under which those costs are  
12 accrued. It says litigation, so I don't know  
13 that the results would be a cost that would be  
14 passed on. But I don't have a context to make  
15 that determination.

16 Q. And just by way of example of an  
17 illustration of the quantification of such  
18 damages, did you review the pre-filed testimony  
19 of the Sierra Club witness Rachel Wilson?

20 A. I did not.

21 Q. You did not. Okay.

22 But in general, in your experience,  
23 environmental compliance costs are passed onto

1 customers?

2 A. That is correct.

3 Q. And would that include litigation  
4 associated with environmental compliance?

5 A. I am -- I'm not clear on that one.

6 Q. Are you familiar with any person of the  
7 company passing on litigation costs, including  
8 from environmental compliance, to customers?

9 A. I believe, what's coming in mind, it would  
10 depend under what context the litigation costs  
11 are that you're discussing. For example, the  
12 litigation cost of being here today would be  
13 included as a recoverable cost to customers.  
14 Any work done regarding our environmental  
15 compliance tariff would be a recoverable cost.  
16 So I'm not sure.

17 Q. So it sounds like it's probably a yes in  
18 the context of environmental compliance specific  
19 litigation?

20 A. I believe so, but I'm not the authority on  
21 that.

22 MS. CSANK: No further questions.

23 Thank you.

1 THE COURT: If I can get documents  
2 to mark, I would like to do that, so we can  
3 get them introduced.

4 Sierra Club 3 will be the U.S.  
5 Department of Energy low income  
6 weatherization.

7 MS. CSANK: And, Your Honor, the  
8 order from Docket U531680, you don't need to  
9 mark that.

10 THE COURT: I can just take  
11 administrative notice of that.

12 The U.S. Department of Energy  
13 weatherization document is marked as Sierra  
14 Club 3, the article from the Box is Sierra  
15 Club 4, and the page from the 10K is Sierra  
16 Club 5.

17 MS. CSANK: Thank you, Your Honor.

18 THE COURT: Any objection to the  
19 admission of those documents?

20 MR. GROVER: No objection, Your  
21 Honor.

22 THE COURT: They are admitted.  
23 Any cross-examination from Alabama

1       Solar.

2               MS. HOWARD:   No, Your Honor.

3               THE COURT:   Attorney general?

4               MS. MARTIN:   I have just a few  
5       questions.

6                       CROSS-EXAMINATION

7       BY MS. MARTIN:

8       Q.    Hello, Ms. Baker.   I'm Olivia Martin.

9       A.    Hello.

10      Q.    Will you be involved in the development of  
11      the demand side on options for the 200 megawatt?

12      A.    I don't believe I will be involved in the  
13      development, but to the extent that any of it  
14      has a rate associated with it, I would be  
15      involved in the development of the rate, and  
16      then potentially involved in gaining approval  
17      for either part of it that does require  
18      additional approval.

19      Q.    And what part would you imagine would not  
20      require approval?

21      A.    I don't foresee there being a need to be an  
22      approval specific to like expanding industrial  
23      interruptible program.   If we were to add some

1 interruptible load into that, that would be a  
2 part of adding that 1,500, that, of course,  
3 would be something we would probably report.

4 But I don't think we would have specific  
5 approval associated with just expanding that.

6 Q. But if have a problem, you will bring that  
7 to the commission for approval?

8 A. Yes, I do believe we would.

9 Q. Do you know how much of the 200 megawatt is  
10 planned to come from residential or small  
11 business?

12 A. I don't think there's been any  
13 determination at this point. We have pilots in  
14 effect so that we gain some knowledge as to how  
15 customers might actually respond to these  
16 signals in the winter.

17 Q. Well, I know for the interruptible, and  
18 Mr. Kelley talked about this last night, to the  
19 extent the payout for the large industrial  
20 customers to participate, if you were to design  
21 a rate for residential customers, would you  
22 anticipate (inaudible).

23 A. Do you mean payment incentive to the rate



1 or just that there is incentives?

2 Q. That they would not be developed to be  
3 revenue neutral.

4 A. I think they would be revenue neutral, but  
5 it would be including the new costs. So I don't  
6 foresee that we would create a discount in the  
7 new rate, but the rate would give the customer  
8 the potential to change their behavior and  
9 achieve a lower cost. But it wouldn't be  
10 designed with a lower cost recovery in mind,  
11 unless there was behavior changes that did  
12 reduce that winter peak.

13 If there is no behavior change, then it  
14 doesn't actually say it was any cost. Does that  
15 make sense? I'm sorry.

16 Q. Even with the rates that are in effect now,  
17 if you change your behavior, you have a lower  
18 cost, but if you don't, do the rates spike? It  
19 can cost you more?

20 A. It has the potential to cost more if you  
21 don't respond. That's correct.

22 Q. It has somewhat of a built-in penalty?

23 A. Yes. That would be the piece of it that

1 tries to incent the customer's behavior, that it  
2 would signal to them.

3 Q. And earlier, when Mr. Johnston was talking  
4 and he was asking you about commercial or maybe  
5 a larger customer, who may want 100 percent  
6 renewable.

7 A. Yes.

8 Q. So it's my understanding that you answered  
9 him that all customers would have to pay for  
10 this new capacity, that they would not be  
11 exempt; in other words, that would not be  
12 shifting just to residential customers.

13 A. The piece that we're asking for here today,  
14 you're correct, it would not be shifted to  
15 anyone as long as all customers were still  
16 benefitting from the capacity value of it, the  
17 capacity needs. All customers will continue to  
18 pay for it.

19 Q. I just have one more question.

20 I know you have your SSI rider, and I'm not  
21 asking for you a legal conclusion.

22 A. Okay.

23 Q. But do you know whether Alabama law allows

1 the company to develop special rates for low  
2 income customers?

3 A. I would assume by the fact that we have a  
4 rider that was developed before I was around  
5 that that was allowable by state law.

6 MS. MARTIN: Okay. Thank you. I  
7 have no further questions.

8 THE WITNESS: Thank you.

9 THE COURT: Questions from the  
10 staff?

11 MR. MASON: Yes, Your Honor.

12 CROSS-EXAMINATION

13 BY MR. MASON:

14 Q. Good evening.

15 A. Good evening.

16 Q. I'm Chad Mason with the commission staff.  
17 I will be very brief.

18 You state in your testimony that revenues  
19 from the existing PPA agreement from the Central  
20 Alabama are expected to offset the acquisition  
21 costs during the interim period; correct?

22 A. That's correct.

23 Q. I understand you expect revenues to offset

1 cost, but is there any likelihood revenues do  
2 not offset costs?

3 A. We use the word expectation, because it's  
4 forward looking. But all of our assumptions  
5 about the normal operations of plants during the  
6 time that it would be serving another customer  
7 are costs that are pretty well-defined by the  
8 contract, and then revenues that are pretty  
9 well-defined by the contract.

10 Any risk, typically, comes from fuel risks  
11 being different than what we projected. In this  
12 circumstance, the customer of that agreement,  
13 actually brings the fuel to the arrangement. So  
14 the company has no fuel risks in that scenario.

15 So the only thing that I can foresee being  
16 different would be some catastrophic event that  
17 changed costs within a year, but because we  
18 operate under forward looking mechanisms under  
19 ROC, I don't foresee that we would project any  
20 unforeseen events. So it wouldn't ultimately  
21 have impact on customers rate during that time  
22 period.

23 Q. That was my follow-up.

1 A. Yeah.

2 Q. So in that event, what impact would it have  
3 on rates?

4 A. If it was not something that was foreseen,  
5 which is the only thing I can see being a real  
6 risk here, it would not have been put into the  
7 forward look. So if it occurred in the year, it  
8 would have just impact the company's recovery,  
9 not customer's rate.

10 MR. MASON: Okay. Thank you.

11 That's all I have.

12 THE COURT: Redirect?

13 MR. GROVER: I have a bunch of  
14 questions.

15 REDIRECT EXAMINATION

16 BY MR. GROVER:

17 Q. One cleanup item. At the outset,  
18 Ms. Baker, you referenced treatment of, I think,  
19 the capacity component of the solar battery  
20 storage PPA.

21 Do you recall that?

22 A. I do recall.

23 Q. I want to make sure I heard you correctly.

1           Which factor under rate CNP would the  
2           capacity component be captured in?

3           A.    It would be captured under the CNP purchase  
4           factor.

5           Q.    Not the --

6           A.    Did I say plan?  I apologize.  There's a  
7           lot of Ps.

8           Q.    Next question.  In talking about the  
9           typical bill with Mr. Johnston, I heard you use  
10          the word linear.

11          What did you mean by that?

12          A.    I meant that the impact -- it's a per  
13          kilowatt hour change.  So to the extent that the  
14          kilowatt hour doubled, the impact should  
15          relatively double.  There's a little bit of  
16          difference due to taxation and all, but you can  
17          generally make a linear decision.

18          So if a 1,000 kilowatt hour bill was a \$4  
19          impact, then if you had a 2,000 kilowatt hour  
20          bill, you would be looking at an \$8 impact.  I  
21          just think it makes it easy for customers to  
22          reference.

23          Q.    Thank you.  Are you familiar with the

1 program known as Greener State?

2 A. Yes. Yes, that is a REC sales program.

3 Q. And when you say -- can you elaborate? I  
4 mean, I may be testing your knowledge.

5 A. It is a program under which a company sales  
6 RECs to those that are interested, customers  
7 that are interested in purchasing RECs, which  
8 will be Renewable Energy Credits, which means  
9 that they have gotten the value of the renewable  
10 after the use of any generation that produced  
11 the renewal attributes.

12 Q. So it's not an opportunity for a customer  
13 who want to spend more toward renewable energies  
14 to do that?

15 A. That is correct.

16 Q. Okay. And just to clarify a point with  
17 respect to the difference between the plant  
18 factor and the purchase factor.

19 A. Okay.

20 Q. The purchase factor under CNPV, that would  
21 be also the area in which you would see recovery  
22 for capacity costs associated with the Hog Bayou  
23 PPA?

1 A. That is correct. Did I get them both  
2 wrong?

3 Q. Maybe.

4 A. I apologize.

5 Q. That's okay. Last question is this.  
6 Earlier, there was a discussion with -- I'm  
7 sorry.

8 There was a discussion with Ms. Csank  
9 respecting the 10K and the commentary about  
10 litigation.

11 A. Yes.

12 Q. Okay. And since there was some hesitance  
13 in your voice regarding how it gets treated from  
14 an accounting perspective, are you aware of any  
15 situations where accounting rules might require  
16 treatment of litigation damages or expenses in a  
17 way other than recovery from customers under  
18 Part C?

19 MS. CSANK: Objection. Leading.

20 THE COURT: I'll allow it.

21 THE WITNESS: I hate to ask to  
22 repeat it, but I think I need it repeated.

23 ///



1 BY MR. GROVER:

2 Q. Maybe I'll set it up just briefly. You  
3 have general familiarity -- first of all, you're  
4 not an accountant, are you?

5 A. No, I am not.

6 Q. You do understand, though, that company's  
7 books and records are governed under the First  
8 Uniform System of Accounts?

9 A. I do understand that.

10 Q. And do you have a general understanding of  
11 whether the Uniform System of Accounts  
12 prescribes treatment for damages associated with  
13 litigation?

14 A. My gut is telling me that I recall that it  
15 is excluded, which is why there was hesitation  
16 in my voice.

17 Q. But that would be reflected in the Uniform  
18 System regardless of whether your gut is right  
19 or wrong?

20 A. That's correct. Accounting would certainly  
21 know how to account for it, and so if it were  
22 excluded, it would never make it to the cost of  
23 service for customers.

1                   MR. GROVER:   Okay.   Great.   You know  
2   what?   That is actually all I have.   Thank  
3   you.

4                   THE COURT:   All right.   Ms. Baker's  
5   pre-filed testimony will be entered into the  
6   record as will her two exhibits.

7                   Does that bring us to conclusion --  
8   you're excused, Ms. Baker.   Have a good  
9   evening.

10                  Does that conclude the presentation  
11   of the company's case?

12                  MR. McCRARY:   Yes, it does, Your  
13   Honor.

14                  THE COURT:   All right.   We will  
15   resume in the morning at -- let's go 9:30  
16   since we got through the company's case.   Some  
17   folks in here will appreciate the 9:30.   I  
18   think we can still get done.

19                  We will adjourn and return to the  
20   tomorrow at 9:30 in the morning.

21                                END OF PROCEEDINGS

22                                       (7:02 p.m.)

23

REPORTER'S CERTIFICATE

STATE OF ALABAMA

MONTGOMERY COUNTY

I, Haley Tunnell, Court Reporter,  
Commissioner for the State of Alabama at Large,  
hereby certify that on March 10, 2020, I  
reported the testimony and proceedings in the  
foregoing cause and that pages 545 through 940  
contain a true and accurate transcription of the  
proceedings set out herein.

I further certify that I am neither kin nor  
counsel to any of the parties to said cause, nor  
in any manner interested in the results thereof.



HALEY TUNNELL, Court Reporter

Commissioner for the

State of Alabama at Large

ACCR 639, Expires 09/30/20

MY COMMISSION EXPIRES: 02/25/23

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