BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA COLUMBIA, SOUTH CAROLINA

SPECIAL CM #19-24

August 12, 2019

 $10:02 \sim 2:23$ P.M.

COMMISSION MEMBERS PRESENT: Commissioner Thomas J. 'Tom' ERVIN, presiding; and COMMISSIONERS Florence F. Belser, Swain E. Whitfield, and Vice Chairman Justin T. Williams_[VIA TELEPHONE]

COMMISSION MEMBERS ABSENT: Chairman Comer H. 'Randy' RANDALL and Commissioners John E. 'Butch' HOWARD and G. O'Neal HAMILTON

ADVISORS TO COMMISSION: David W. Stark, III, Esq.

B. Randall Dong, Esq. Josh Minges, Esq.

LEGAL ADVISORY STAFF

STAFF PRESENT: Jocelyn G. Boyd, Chief Clerk/Executive Director; Joseph Melchers, General Counsel; Jerisha Dukes, Legal Advisory Staff; Randy Erskine, Information Technology Staff; Melissa Purvis, Livestream Technician; and Jo Elizabeth M. Wheat, CVR-CM/M-GNSC, Court Reporter.

TRANSCRIPT OF SPECIAL COMMISSION BUSINESS MEETING and PUBLIC INTERVIEWS

Internet website.

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PROCEEDINGS

COMMISSIONER ERVIN: Before we begin our

session this morning, let's bow our heads in a moment of silence, in memory of Chairman Randall's

father, who passed Friday evening.

[Brief pause]

Amen.

Thank you.

Has Commissioner Williams joined us yet? I haven't heard that he has, but we're scheduled to begin, so we'll go forward and he can join us, hopefully, when his schedule allows. I believe he's out of State on Reserve duty, and we appreciate his service to our country.

We're here this morning for the first of several public interviews and presentations that have been set to fulfill the requirements of the South Carolina Energy Freedom Act, which authorizes, among other things, that the Commission is allowed to hire an independent expert to assist us with the three dockets that were sent out on our notice.

[WHEREUPON, at 10:04 a.m., Vice Chairman Williams joined the proceedings via telephone]

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1	COMMISSIONER ERVIN: So, we are happy to
2	conduct the first interview this morning, and I
3	believe we have Dr. Pechman here, today; is that
4	correct, sir?
5	DR. PECHMAN: Yes, Your Honor.
6	COMMISSIONER ERVIN: Before we begin, would
7	you swear the witness, please, ma'am?
8	[Witness/Interviewee affirmed]
9	Dr. Pechman, welcome to South Carolina.
10	WITNESS/INTERVIEWEE DR. PECHMAN: Thank you.
11	It's my pleasure to be here.
12	COMMISSIONER ERVIN: I've not had the pleasure
13	of meeting you, but I understand that you are with
14	the National Regulatory Research Institute, which
15	is a nonprofit in Washington DC. Is that correct?
16	DR. PECHMAN: That's correct.
17	COMMISSIONER ERVIN: And would you go ahead
18	and give us kind of an opening statement, and I
19	think you've been sent a copy of the Act that's in
20	question?
21	WITNESS/INTERVIEWEE DR. PECHMAN: I have, Your
22	Honor.
23	COMMISSIONER ERVIN: And you've had a chance
24	to review it?
25	WITNESS/INTERVIEWEE DR. PECHMAN: I have. I

have.
COMMISSIONER ERVIN: Very good. Why don't
you —
COMMISSIONER WHITFIELD: Judge Ervin, you want
to see if Commissioner Williams is with us?
COMMISSIONER ERVIN: Before we continue, is —
Commissioner Williams, are you with us?
VICE CHAIRMAN WILLIAMS[via phone]: Yes,
Commissioner Williams is on the line.
COMMISSIONER ERVIN: Thank you for joining us.
We're just getting started.
Dr. Pechman, let me recognize you to give us a
brief overview of your current position, your
background, and experience.
WITNESS/INTERVIEWEE DR. PECHMAN: Okay. My
current position is that of the Director of the
National Regulatory Research Institute, NRRI. NRRI
was formed in 1976 by NARUC to be the research arm
of the public utility commissions in the country.
I've been the Director since last April.
Fundamentally, we do three types of activities
in support of the public utility commissions, who
we consider, along with the commissioners and their
staff, to be our clients.
The first is that we provide general research.

For example, we recently put out a monograph evaluating how net energy metering practices have changed in different states around the country.

The second is that we provide training for regulatory staff. In addition to training for regulatory staff, we've begun — we've gotten a grant to help plan and create what we call a regulatory training initiative, which will be a remote-based training platform.

And the third is direct support for regulatory commissions, such as yourself. Over the last year, we facilitated a process in Chicago for the NextGrid process there. We have worked with the City of New Orleans and the City Council, which is the regulatory commission for New Orleans, on smart cities and created a concept called the smart energy audit for the City, which they have adopted by resolution of the City Council, and we've provided support to the new Puerto Rico Energy Bureau on a variety of different issues.

We have a number of subjects that we cover.

We cover electric, gas — natural gas — water, and telecom. I think of particular interest to you today is what our experience is with respect to issues of avoided cost and integrated resource

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planning and contracting of power. I will say that
we have two new employees coming on to supplement
our electric practice, if you will. They will be
starting in September. They are both senior
analysts.

But let me give you a sense of my background,

But let me give you a sense of my background, since I would lead this work. I was on the Staff of the New York Public Service Commission from 1979 through 1997. During that time, I had a series of positions. Ultimately, I was the supervisor of Energy and Environmental Economics at the Commission. In that role, or in previous roles, I oversaw the development of avoided cost in New York, both the theory and practice. So there were many — when avoided cost began to become a regulatory issue in the early '80s, there were many theoretical issues associated with it — in particular, the context of how one would estimate avoided cost in the New York power pool.

I worked on avoided cost. I facilitated and led the conversations that we had on avoided cost. I was responsible for overseeing the modeling, using production cost models and also using reliability-based models for evaluating generation-capacity cost estimates. I worked with the counsel

on writing briefs and reports and Commission orders on avoided cost, and was involved in the translation or the transition of avoided cost from methods of calculating, essentially, what the marginal cost of power was, into a bidding-based program of avoided cost in the early '90s. And those programs were fairly short-lived because, as time went on, the avoided-cost regime got subsumed by competition and the fact that many states that had restructured — like New York and California — had started using the system prices from the ISOs as the basis of avoided cost. So I have a tremendous amount of experience with avoided cost.

With respect to integrated resource planning, I also have a tremendous amount of experience, a lot of which was based upon the use of the production costing models, but also thinking about how one can incorporate energy efficiency, the kinds of programs that one would have with energy efficiency. So we're talking about right from the beginning of starting to consider energy efficiency and how one would put that into a regulatory process.

My book on regulating power — the title of which is *Regulating Power: The Economics of*

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Electricity in the Information Age — traced the evolution of planning, if you will, from your standard generation planning, which was essentially cost-minimization — what power plant do we add — to an integrated resource planning, and the subtleties associated with that.

More recently, I've been working with the Puerto Rico Energy Board — Bureau, excuse me, on planning issues, both at the distribution level — in fact, I'll be in Puerto Rico on Thursday and Friday for a working group on distribution system planning and also commenting on the PREPA — which is the municipal utility in Puerto Rico — IRP.

Over the intervening years, I've been involved in many cases where I evaluated integrated resource plans and investments associated with integrated resource plans, so I'm very comfortable and familiar with the theory and practice of integrated resource planning. But more than that, the interrelationship, increasingly, of integrated resource planning with distribution system planning, and of particular importance to me is how that interaction affects prices, and what kind of information we can get out of that process for prices.

1	So, I would lead the project, but I have
2	capable staff in Washington and two very new — not
3	new in terms of experience, but very experienced
4	new analysts joining us in September.
5	COMMISSIONER ERVIN: Could you share with us
6	what staff members would be working with you on our
7	project, if you were chosen?
8	WITNESS/INTERVIEWEE DR. PECHMAN: Yes. Tom
9	Stanton, in Michigan, would be working — who is —
10	he likes to say he's the Michigan Office. He's a
11	remote employee.
12	COMMISSIONER ERVIN: He's an Institute
13	employee?
14	WITNESS/INTERVIEWEE DR. PECHMAN: He is an
15	Institute employee, correct.
16	COMMISSIONER ERVIN: Okay. Yes, sir.
17	WITNESS/INTERVIEWEE DR. PECHMAN: So we have -
18	our core is in Washington, but we do have remote
19	employees.
20	COMMISSIONER ERVIN: All right. What,
21	briefly, is his background? What's his expertise?
22	WITNESS/INTERVIEWEE DR. PECHMAN: His
23	background is working at the Michigan Public
24	Service Commission, I think for close to 20 years
25	or more; worked with the State Energy Office. He
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did a lot on integrated resource planning and the 1 2 incorporation of renewables and energy efficiency 3 into the regulatory process. 4 He is most recently the author on a paper on 5 how net energy metering is changing across the 6 country. 7 **COMMISSIONER ERVIN**: And are you — can you 8 share with us the two new members that are going to be joining your team? 9 WITNESS/INTERVIEWEE DR. PECHMAN: I would be 10 happy to. I'm very pleased to be able to share 11 Elliott that publicly. One is Elliott Nethercutt. 12 is an economist with a lot of experience in both 13 the wholesale market and on reliability issues. 14 15 So, he would be very helpful. He is a — what we 16 like to call in economics — quan, so he's very 17 quantitatively oriented and will assist on modeling. 18 Most recently, he was working on market 19 design with the California ISO. COMMISSIONER ERVIN: "ISO" being -20 WITNESS/INTERVIEWEE DR. PECHMAN: Independent 2.1 system operator. 22 23 **COMMISSIONER ERVIN**: All right. WITNESS/INTERVIEWEE DR. PECHMAN: And the 2.4 second is Jeffrey Loiter. Jeffrey has a bachelor's 25

1	degree in mechanical engineering and a master's
2	degree in science and technology, from MIT. Much
3	of his background has been involved in energy
4	efficiency. He has done a lot of work on the
5	customer side of energy — design of energy
6	efficiency programs, M&V — which is measurement and
7	verification of energy efficiency programs — and
8	he's also worked on — both of them have actually
9	worked on national gas issues.
10	COMMISSIONER ERVIN: Where was he employed
11	prior to coming with the Institute, or where is he
12	currently employed, if you know?
13	WITNESS/INTERVIEWEE DR. PECHMAN: He's
14	currently working as a private consultant, and
15	prior to that he was a partner for 20 years in —
16	can I give you the name of the —
17	COMMISSIONER ERVIN: Sure.
18	WITNESS/INTERVIEWEE DR. PECHMAN: — firm,
19	later?
20	COMMISSIONER ERVIN: It's a law firm?
21	WITNESS/INTERVIEWEE DR. PECHMAN: No, no. No,
22	he's an analyst.
23	COMMISSIONER ERVIN: Analyst.
24	WITNESS/INTERVIEWEE DR. PECHMAN: Not a law
25	firm.

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COMMISSIONER ERVIN: Gotcha.

WITNESS/INTERVIEWEE DR. PECHMAN: But I want to make sure I get it right.

COMMISSIONER ERVIN: Okay, that's fine. So how would you go about assisting this Commission, you and your team, as independent experts? What specifically could you offer us after having read the statute we provided? How would you approach it?

witness/interviewee dr. Pechman: Well, I think in a number of different ways. The first way we would approach the avoided-cost question is to do a review — which we've already initiated when we were told that this was an issue that South Carolina was interested in and other states are interested in — a review of how avoided costs are calculated in different states around the country. So we would have a baseline to look at avoided cost.

Second, we would look at the — and not only the way avoided costs are estimated currently, but also, to the extent practical, a review of how they have been estimated over time, because for many states the regime of avoided-cost calculation was discontinued, as you know, when states moved to or

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joined organized markets, so that there were methodological issues that were — where a great deal of time and effort was spent in the '80s and '90s looking at that, and we would try to glean what we could from that. Certainly with respect to contracting issues, there are some very significant lessons both from New York and California, things to be avoided.

But then, with respect to the Commission's —

But then, with respect to the Commission's — to the filings of the — so, we would have a laundry list, if you will, of different methods. We would then review the submissions of the utilities, prepare discovery of those, review their workpapers, and try to understand the rationale behind what they've done and how to, you know, proceed from that. I think the other thing we would do would be to look at the various models which are being employed by the utilities in the State — production costing models, reliability models — and evaluate which of those may be applicable for estimating avoided cost, if they had not been used in the context of the utilities' filings.

COMMISSIONER ERVIN: I believe the statute contemplates that, if you were chosen as the

Commission independent expert, that you could make 1 data requests of parties if you needed additional 2 3 information. Would you and your staff be prepared 4 to do that, or is that something you would consider? 5 WITNESS/INTERVIEWEE DR. PECHMAN: 6 0h. 7 absolutely. And I noted that one of the questions was, "Have you written data requests in the past?" 8 And I'll let you know, I've written data requests; 9 10 I've written deposition questions, crossexamination questions, for many, many years in 11 12 many, many proceedings. So yes, we're very comfortable with doing that. 13 **COMMISSIONER ERVIN:** And the statute also 14 15 contemplates that, at the end of the proceedings, 16 once the testimony and evidence is in, or closed, 17 that you would be asked to offer opinions and recommendations to the Commission, which would not 18 19 be binding upon the Commission but would guide the Commission in its decision-making. So would you 20 2.1 and your staff be available to testify at the end of the case and -22 WITNESS/INTERVIEWEE DR. PECHMAN: Yes, we -23 **COMMISSIONER ERVIN**: – offer your opinions? 2.4 WITNESS/INTERVIEWEE DR. PECHMAN: — would. 25

And I think what our approach would be is to 1 evaluate a number of different alternatives and to 2 3 provide the Commission with information, the 4 benefits and costs, of pursuing different alternatives. Here's this method; what are the 5 risks associated with using that method? What 6 7 information does it capture, does it not capture, 8 and things of that sort. So, yes, we're very comfortable providing testimony in that context. 9 **COMMISSIONER ERVIN**: I assume you've done this 10 before in a commission setting? Of course, you 11 were a commissioner for many years in New York. 12 WITNESS/INTERVIEWEE DR. PECHMAN: 13 No, I excuse me. I was not a commission; I was Staff in 14 15 New York. 16 **COMMISSIONER ERVIN**: Staff, okay. So you've 17 seen this process evolve over time, but have you ever testified before a commission? 18 WITNESS/INTERVIEWEE DR. PECHMAN: 19 I have testified before a number of commissions. I've 20 21 testified probably 50 times before the New York Commission. I've testified before commissions 22 around the country and before the Federal Energy 23 Regulatory Commission. 2.4 COMMISSIONER ERVIN: Have you been qualified 25

1	as an expert in any of those proceedings? I
2	suppose it's not like a court of law; it's an
3	administrative hearing, so "qualified" just may
4	be — I assume you rendered expert opinions in those
5	proceedings.
6	WITNESS/INTERVIEWEE DR. PECHMAN: Oh,
7	absolutely. And, typically, you're correct; public
8	utility commissions don't qualify you. I have been
9	qualified as an expert in federal court and, I
10	believe, in bankruptcy court, as well.
11	COMMISSIONER ERVIN: I believe those are all
12	the questions I have. I may come back. But let me
13	recognize Commissioner Belser for some additional
14	questions.
15	COMMISSIONER BELSER: Good morning, Dr.
16	Pechman.
17	WITNESS/INTERVIEWEE DR. PECHMAN: Good
18	morning, Commissioner.
19	COMMISSIONER BELSER: I apologize if I repeat.
20	I've got a lot of notes that I've been taking, so
21	I'll try to avoid that, but I apologize in advance.
22	WITNESS/INTERVIEWEE DR. PECHMAN: I'm at your
23	disposal.
24	COMMISSIONER BELSER: Also, when I refer to
25	"you" or when I use the word "you," I would

appreciate it if you would use that as a broad 1 term, to include you yourself, your staff, and 2 3 NRRI, your company. I'm trying to get an 4 understanding of the team and the entity of NRRI, so I'm using the word "you" very broadly, if you 5 would. Let's see. First of all, have you read and 6 7 had a chance to review Act 62, known as the South Carolina Energy Freedom Act? 8 WITNESS/INTERVIEWEE DR. PECHMAN: Yes. I -9 ves. I believe I've read the full Act. 10 11 MS. BOYD: That's what I sent to you. 12 **COMMISSIONER BELSER**: Well, in particular -WITNESS/INTERVIEWEE DR. PECHMAN: Yes? 13 Okav. **COMMISSIONER BELSER**: In particular, the parts 14 15 having to do with the proceedings that we're talking about - hiring an expert for, especially, 16 17 avoided cost - you've had a chance to review that section. 18 WITNESS/INTERVIEWEE DR. PECHMAN: 19 Yes. 20 **COMMISSIONER BELSER**: I think you've given us 21 your experience with PSCs. Let's see. If selected as this Commission's independent consultant, I 22 think you've described the process that y'all would 23 use to conduct the analysis needed for each 2.4 25 utility — and we are talking about three utilities,

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three separate utilities here, for the avoided-cost calculations. Do y'all rely on any particular method or methodology, or do y'all look at multiple methodologies?

WITNESS/INTERVIEWEE DR. PECHMAN: We would look at multiple methods.

COMMISSIONER BELSER: Okay. Could you explain your experience or familiarity with solar integration cost studies and quantification of integration cost studies?

WITNESS/INTERVIEWEE DR. PECHMAN: Yes. And by the way, when I talked about the team initially, I talked about the part of the team that were employees of NRRI. We also have a group of people that are fellows of NRRI, typically people with extensive experience in the utility industry, one of whom is Bernie Needan, who recently retired as a senior technical executive of EPRI, and one of the activities that he was involved in were integration studies of solar. Those tend to be fairly engineering-oriented and, in particular, one of the questions that one has with an integration study of solar is the level of power injection on the distribution system and whether or not the distribution system is capable of absorbing that

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power.

commissioner Belser: Could you explain any experience or familiarity you and your team have with ancillary service requirements in planning for and maintaining reliability of the electrical utilities' transmission and distribution systems?

a fair amount of experience with ancillary services. In particular, during my time in the policy office at the Federal Energy Regulatory Commission, one of my activities there involved the evaluation of new types of ancillary services. For example, I helped initiate the proceeding that led to a change in the way that frequency response is priced in the wholesale markets. So, yes, we have extensive experience with ancillary services.

And returning back to Dr. Needan, he has spent a lot of time with the distribution system and how the injection of power on the distribution system can affect the stability. He is an economist, not an engineer, but...

COMMISSIONER BELSER: Any experience or familiarity with assessing regulating reserve requirements on a utility's system?

WITNESS/INTERVIEWEE DR. PECHMAN: By

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"regulating reserve requirements," are you referring to installed — I mean, operating reserve requirements?

COMMISSIONER BELSER: Yes.

WITNESS/INTERVIEWEE DR. PECHMAN: Certainly, operating reserve requirements are important. My experience tends to have been the importance of maintaining operating reserves during the California energy crisis, which was one of the critical issues associated with maintaining service in that system, but more so there's a lot of activity that we are aware of with respect to whether or not you have rotating mass of generators to have primary response in the event of a drop in generation. So there's been a shift in terms of the ways in which inverters are used, or can be used, in the future, and that whole issue is evolving with IEEE 1547, in terms of the ability of solar facilities to provide alternatives to rotating mass as a way of maintaining operating reserves.

COMMISSIONER BELSER: And I believe you may have already answered this, but you and your team have experience using utility system production cost models —

1	WITNESS/INTERVIEWEE DR. PECHMAN: Yes.
2	COMMISSIONER BELSER: — of IRPs and avoided-
3	cost calculations?
4	WITNESS/INTERVIEWEE DR. PECHMAN: That's
5	correct.
6	COMMISSIONER BELSER: Are there any specific
7	models which you can name that y'all have
8	experience with?
9	WITNESS/INTERVIEWEE DR. PECHMAN: PROMOD and
10	the GE MAPS program — Multi-Area Production
11	Simulation model. Both of those. There are older
12	versions of different models: OGP, the Optimal
13	Generation Program that GE had. I don't believe
14	it's any longer used. And Wescougar would be a —
15	in production costing, it would be a reliability
16	analysis model.
17	COMMISSIONER BELSER: Do you have access to
18	these models? I mean, I know that —
19	WITNESS/INTERVIEWEE DR. PECHMAN: No.
20	COMMISSIONER BELSER: — some of these — okay.
21	WITNESS/INTERVIEWEE DR. PECHMAN: I do not
22	have access to these models. Access to the models
23	tends to be very expensive, as you know. When I
24	was in New York, I was responsible for the New York
25	Commission acquiring the PROMOD model and then

1	oversaw its use within the Commission. I think
2	that we would need to work with the utilities and
3	create data requests to ask the utilities to run
4	various —
5	COMMISSIONER BELSER: That was my next
6	question. How would you analyze — if one of the
7	utilities is using one of these models that are
8	very expensive to get and that they've spent money
9	on, how would you analyze what they are doing in
10	respect to the model they are using?
11	WITNESS/INTERVIEWEE DR. PECHMAN: Oh, one way
12	to analyze it is to look at the data that they use,
13	to look their input data. Another — I mean, I
14	think the first question is, "Do the results make
15	sense?"
16	COMMISSIONER ERVIN: Excuse me for
17	interrupting, but would you pull that microphone a
18	little bit closer? I'm getting signal from the
19	back that maybe we —
20	WITNESS/INTERVIEWEE DR. PECHMAN:
21	[Indicating.] Is that better?
22	COMMISSIONER ERVIN: That's much better.
23	Thank you, sir.
24	WITNESS/INTERVIEWEE DR. PECHMAN: My
25	apologies.

So the first - I mean, the first thing is, 1 does the analysis make sense. Now, I'll give you 2 3 an example. Back in the late '80s when we were 4 using PROMOD, we ended up with negative marginal That did not make sense. And it resulted 5 costs. in a lot of analysis of what was happening in the 6 7 model resulted in that. Now, given the duck curve 8 that we have in California, we now know that negative marginal costs can occur on the system, 9 10 especially when you have wind that's bidding in, in order to get their production tax credits, putting 11 12 in negative numbers to get their production tax credits. 13 So the first step is just, does this make 14 15 sense? The second step is, let's dig in and look at the data associated with using the model. 16 17 the third way is to ask for sensitivity analysis 18 associated with the model, so... 19 COMMISSIONER BELSER: Do you have any 20 experience with modeling or studying the power 21 system in South Carolina, specifically? WITNESS/INTERVIEWEE DR. PECHMAN: No, I do 22 not. 23 COMMISSIONER BELSER: Would lack of 2.4 25 familiarity with the power system in South Carolina

be a hindrance to conducting the analysis and work 1 2 needed under Act 62? WITNESS/INTERVIEWEE DR. PECHMAN: I don't 3 4 believe it will be. Obviously, we would need to 5 create a conceptual picture in our minds about the way the system operates, but we'll also have 6 7 information, for example, on interchange between utilities, both within South Carolina and at the 8 borders of South Carolina, that will help inform us 9 10 as to what the prices and costs that are being evaluated are. 11 **COMMISSIONER BELSER**: Do you have a copy of 12 Act 62 with you? 13 WITNESS/INTERVIEWEE DR. PECHMAN: 14 I do. 15 **COMMISSIONER BELSER**: I want to look at 16 Section 58-41-05, and it's really - it's near -17 it's probably the first - it's the very first section in the Act, right after Chapter 41; it's 18 19 right at the beginning May I assist him? 20 MS. BOYD: 21 COMMISSIONER ERVIN: [Nodding head.] MS. BOYD: [Indicating.] 22 WITNESS/INTERVIEWEE DR. PECHMAN: 23 [Indicating.] 2.4 COMMISSIONER BELSER: It's actually the 25

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introductory section.

witness/interviewee DR. Pechman: Okay, thank you. I have it. Thank you.

COMMISSIONER BELSER: 58-41-05 provides: The Aommission is directed to address all renewable energy issues in a fair and balanced manner, considering the costs and benefits to all customers of all programs and tariffs that relate to renewable energy and energy storage, both as part of the utility's power system and as direct investments by customers for their own energy needs and renewable goals. The Commission also is directed to ensure that the regulatory [sic] recovery, cost allocation, and rate design of utilities that it regulates are just and reasonable and properly reflect changes in the industry as a whole, the benefits of customer renewable energy, energy efficiency, and demand response, as well as any utility or State-specific impacts unique to South Carolina which are brought about by the consequences of this Act.

Can you tell me, generally, how would your work, with those directives contained in that section — how would you work those into your analysis and recommendations made to this

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Commission? Quite a lot there.

WITNESS/INTERVIEWEE DR. PECHMAN: Yeah, it's a very good question. Let me have a second to formulate an answer.

COMMISSIONER BELSER: We can come back to that one, if you want to address it at the end.

WITNESS/INTERVIEWEE DR. PECHMAN: No, no, no.

There's a huge amount, as you know, in that. And I
think that part of — the first issue is getting the
prices right that you're paying for solar. And I
note that there is a concern within the Act in
terms of cost-shifting, which goes to the costallocation issue here. I think, to some extent,
we're going to need to build on information that
Staff already has, and we intend to work closely
with your Staff.

But, for example, with respect to the cost allocation, those are issues that we would help provide information into that process, and I see that as less of an issue with respect to the activities that is an overall goal in terms of the Act. So, to me, the best way of answering the requirement of the Act is to get the prices right.

COMMISSIONER BELSER: Do you view Act 62 as direction from our Legislature to encourage

renewable energy in South Carolina? 1 WITNESS/INTERVIEWEE DR. PECHMAN: I believe it 2 3 says that. 4 COMMISSIONER BELSER: Okay. I know that PURPA, which came about, what, '78 - late '70s, was 5 it? 6 7 WITNESS/INTERVIEWEE DR. PECHMAN: '78. **COMMISSIONER BELSER**: Yeah. — required 8 avoidable cost - avoided cost, excuse me, but it 9 also left to the discretion of states some - how to 10 implement and come up with the avoided cost. 11 you are selected as our consultant, how do you 12 envision your role in adhering to the mandates of 13 PURPA and this South Carolina Energy Freedom Act? 14 15 WITNESS/INTERVIEWEE DR. PECHMAN: The critical phrase in PURPA is to determine avoided cost — and 16 17 I'm paraphrasing — the cost, but for the presence 18 of the independent power producers — or however you 19 want to characterize; there are different categories under PURPA, qualifying facilities — but 20 21 for their presence in the system. So part of that is to determine how those -22 are you looking, for example — and the Act also 23 allows for different types of technologies or 2.4 25 different types of patterns. So the question is

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are you going to focus on daylight hours or nighttime hours? How are you going to focus — what is going to be the overall focus of what you're doing? My sense is that you want to focus on all hours, and then be able to use whatever hours are appropriate for determining a rate for the facilities that are receiving the avoided-cost payment.

And, again, it really goes to trying to get the price right. What does it mean to have something in a but-for world? The methods that were used — and you're absolutely right; different states use different methods. For example, the Maine Commission used the price of Seabrook as an avoidable unit, led to a very, very - led to 13 cents a kilowatt-hour as a price. In New York, we tried to look at what the marginal cost or marginal value of the unit is. So, to me, the question is how do we really — what is the range? How do we think about what that value of that power being injected into the system, not only next year but over a long time horizon, a 10-year time horizon, when technologies are going to change, when fuel prices are going to change, when there's a lot of uncertainty with respect to doing those

types of things, and how — those types of estimates. And how do we then balance those different kinds of uncertainties, the types of information that we have with respect to those uncertainties, with respect to the criteria that you've, you know, read from the first paragraph of the Act?

So there may be, "Okay, we have this uncertainty. With respect to the Act, here are these three criteria that we're looking at. Under this criterion, we may go with this particular approach; under this criterion, we may go with this particular approach," and then to provide that information to the Commission so that it can choose from the laundry list that we're going to provide — or the menu, if you will, that we're going to provide you — of what approaches, or what the answers are to specific questions.

COMMISSIONER BELSER: Well, let me ask you this. Given that Act 62 is new, and we're all operating under it, would you feel — as a consultant, would you feel constrained or the need to adhere to past decisions, orders issued by this PSC, or would you be conducting an independent, future forward-looking analysis, giving your best

professional advice, not necessarily constrained by 1 prior Commission orders? 2 WITNESS/INTERVIEWEE DR. PECHMAN: We would not 3 4 be constrained by prior orders. **COMMISSIONER BELSER**: If there are 5 differences, would you be able to explain why your 6 7 recommendation would differ from prior Commission orders? 8 WITNESS/INTERVIEWEE DR. PECHMAN: 9 Yes. we would. Absolutely. I think, while we would not be 10 constrained by prior orders, I think it's important 11 for us to evaluate and understand the prior orders. 12 COMMISSIONER BELSER: And that may be the 13 wrong word, but I just think it's a new day, and 14 15 I'm just kind of wanting your feeling on that. 16 You mentioned significant lessons with 17 contracting issues. Have you or anyone on your 18 team been in a position to draft purchased-power 19 agreements? WITNESS/INTERVIEWEE DR. PECHMAN: I have been 20 2.1 involved with drafting purchased-power agreements. Most recently, I drafted purchased-power 22 agreements — well, it's not that recent — 10 years 23 ago, for the Santa Cruz City School System in 2.4 25 purchasing power, solar, from, for example,

1	SolarCities is one of the vendors that we purchased
2	solar from.
3	COMMISSIONER BELSER: How about, have you or
4	any of your team drafted commitment-to-sell forms?
5	WITNESS/INTERVIEWEE DR. PECHMAN: No. Not
6	that I'm aware of.
7	COMMISSIONER BELSER: What about LEO standards
8	under PURPA?
9	WITNESS/INTERVIEWEE DR. PECHMAN: I'm sorry?
10	COMMISSIONER BELSER: Familiarity with LEO
11	standards under PURPA?
12	WITNESS/INTERVIEWEE DR. PECHMAN: I'm sorry,
13	I'm not familiar with that term.
14	COMMISSIONER BELSER: Is "legally enforceable
15	obligations" under PURPA, when are those —
16	WITNESS/INTERVIEWEE DR. PECHMAN: Oh, okay.
17	COMMISSIONER BELSER: — created, when do those
18	arise, when are those formed? Any of —
19	WITNESS/INTERVIEWEE DR. PECHMAN: I'm not —
20	COMMISSIONER BELSER: Any analysis or —
21	WITNESS/INTERVIEWEE DR. PECHMAN: — familiar
22	with that term but, certainly, when I was in New
23	York, there was concern about standards of size and
24	efficiency with respect to thermal loads, but I was
25	not directly involved in that.

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COMMISSIONER BELSER: Let's see. I think you've answered those. I'm going to shift gears a little bit and would like to — let's talk about independence, if we can. The statute requires us to hire an independent third-party consultant. Can you explain the relationship between NRRI and NARUC and the members of NARUC, basically being the state commissions?

WITNESS/INTERVIEWEE DR. PECHMAN: Yes NRRT is an independent 501(c)(3). So, we're nonprofit. We don't have any authority to lobby; we don't Our Executive Director is the Executive Director of NARUC. There was a change in the status of NRRI a number of years ago, where NRRI basically was brought in closer to NARUC; although we're still separate, we have the same — as I mentioned — executive director. We have a board that's made up primarily of commissioners. We have one non-commissioner who is the executive director of the Nevada Commission. And two of the members of our board are members of the executive committee of NARUC. So, we're independent. We do not go through NARUC approval processes; we have our own internal approval processes.

COMMISSIONER BELSER: Does NARUC or any other

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board members direct how you conduct your work or have any say in what your results are?

WITNESS/INTERVIEWEE DR. PECHMAN: Not in terms of our results. We've had conversations, for example — we're very concerned about independence and how we maintain independence. We've been making a lot of changes at NRRI over the last, almost, year and a half since I've been there. And as we try new ideas, we have conversations about how we maintain NRRI's independence and whether or not there are specific rules. For example, associated — I'll give you an example. One rule that we instituted was that - we have fellows that are very experienced experts in various aspects of the regulated industries. We had a circumstance where somebody was interested in being a fellow who also was interested in working for public utility commissions, and we decided that that would be too complicated, having somebody who was part of our who was one of our fellows, and that came about in conversation with the board, for example. So there was a question about how do we proceed, how do we stay independent, how do we recognize that our clientele are the commissions and the commission staffs and the commissioners?

COMMISSIONER BELSER: Would you utilize any of 1 these fellows if you were selected for this? 2 WITNESS/INTERVIEWEE DR. PECHMAN: I might. 3 4 particular, there are three fellows that I might use: Bernie Needan, who I've mentioned: Theresa 5 Flaim, who I believe used to be the Executive Vice 6 7 President of TVA, but she was also the Vice President of Rates at Niagara Mohawk; and Les 8 Gulasi, who's very familiar with — he was in 9 California - very familiar with the avoided-cost 10 regime that was in California. He had been a 11 manager or director of Government Relations for 12 PG&E. He left probably 15, 20 years ago. 13 COMMISSIONER BELSER: PG&E is Pacific Gas -14 15 WITNESS/INTERVIEWEE DR. PECHMAN: Pacific Gas & Electric. 16 17 **COMMISSIONER BELSER**: - & Electric? WITNESS/INTERVIEWEE DR. PECHMAN: Excuse me. 18 19 None of those — I've done a conflict check, and none of them have any relationship with the South 20 21 Carolina utilities. COMMISSIONER BELSER: Okay. How about, were 22 you able to do a conflicts check with any of the 23 other parties? For instance, South Carolina Energy 2.4 Users Committee, or Nuclear Steel South Carolina is 25

a party in one of the dockets. The South Carolina 1 Solar Business Alliance is a party. 2 WITNESS/INTERVIEWEE DR. PECHMAN: I did not do 3 4 a conflict check with any of those parties. For us, we have - within NRRI, we do not have any 5 conflict because we don't work for entities that 6 7 are before public utility commissions. 8 **COMMISSIONER BELSER**: Walmart, Incorporated, is a party. 9 WITNESS/INTERVIEWEE DR. PECHMAN: 10 No. No, but I - and I would check any list of conflicts 11 12 that you'd potentially have, but I can pretty well assure you that none of these people have 13 conflicts. I don't know if they own stock, for 14 15 example, in Walmart. 16 **COMMISSIONER BELSER:** That would be another 17 issue, would there be any financial or anyone 18 holding stock in — there are a number of publicly 19 traded entities that are involved, and we have a couple of associations — the Solar Business 20 21 Alliance, they have members, and South Carolina Energy Users has a list of members that could be 22 publicly traded. 23 WITNESS/INTERVIEWEE DR. PECHMAN: Yeah. 2.4 25 know that a number of the fellows have not, just as

1	a matter of course, invested in the utility
2	industry. And I suspect, but would certainly go
3	back — I did a conflict check of the questions that
4	were provided to me. I didn't do a broader
5	conflict check than that.
6	COMMISSIONER ERVIN: Would you be willing to?
7	WITNESS/INTERVIEWEE DR. PECHMAN: Oh, of
8	course.
9	COMMISSIONER ERVIN: Well, we may submit you a
10	list for check, just — and not that I question your
11	recollection or your representation, but just out
12	of an abundance of caution, you'd be willing to
13	check with your team and any others that are going
14	to be involved in the project?
15	WITNESS/INTERVIEWEE DR. PECHMAN: Absolutely.
16	COMMISSIONER ERVIN: Thank you.
17	WITNESS/INTERVIEWEE DR. PECHMAN: Absolutely.
18	COMMISSIONER BELSER: Are you aware of any
19	work in South Carolina with any of the law firms or
20	lawyers who might be involved in these dockets?
21	Could you do a conflict check on those, as well —
22	not only the parties, but the counsel representing
23	them?
24	WITNESS/INTERVIEWEE DR. PECHMAN: I'm happy to
25	do a conflict check on anything that you'd like me

1	to do a conflict check on. I would ask, do you
2	want the conflict — so, I have fellows who work
3	with us on a case-by-case basis. For those who
4	will not work with us, do you want us to do a
5	conflict check with those, also? They're not
6	employees of NRRI.
7	COMMISSIONER ERVIN: We would only want you to
8	check the employees of NRRI and any others —
9	outside consultants or parties — that are going to
10	be working with you on our project.
11	WITNESS/INTERVIEWEE DR. PECHMAN: Okay, very
12	good. Thank you.
13	COMMISSIONER BELSER: That's going to cut out
14	a lot of questions. Do you have — this may be
15	overly broad, but I'm going to ask it anyway. What
16	processes do y'all have in place to ensure the
17	independence of your work, whether it's
18	independence from — I don't reckon — you don't do
19	work for utilities; is that correct?
20	WITNESS/INTERVIEWEE DR. PECHMAN: That's
21	correct.
22	COMMISSIONER BELSER: Do you do work for
23	consumer-advocate type groups?
24	WITNESS/INTERVIEWEE DR. PECHMAN: No.
25	COMMISSIONER BELSER: Any renewable trade
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association - renewable energy trade associations 1 or anything like that? 2 WITNESS/INTERVIEWEE DR. PECHMAN: 3 4 **COMMISSIONER BELSER**: I'm just keying on this 5 independence, but what processes do you have in place to ensure the independence of your work 6 7 product from the commissions that belong to NARUC, or NARUC itself? 8 WITNESS/INTERVIEWEE DR. PECHMAN: I think that 9 the - when you're talking about "independence" 10 you're talking about whether or not those 11 commissions unduly affect our work, as opposed to 12 consulting and learning from commissions and 13 commission staff. 14 15 COMMISSIONER BELSER: Right. 16 WITNESS/INTERVIEWEE DR. PECHMAN: And -17 COMMISSIONER BELSER: Direct the outcome or -WITNESS/INTERVIEWEE DR. PECHMAN: 18 We have 19 not — that comes to me and the board. The board is 20 very jealous, in a positive way, of the 21 independence of NRRI and will not allow me to pursue different activities if they feel that that 22 independence would be adversely affected. 23 far as my position, one of my roles is to assure 2.4 that we are providing quality information that's 25

not advocacy information. Our position is, by 1 providing the best information to regulatory 2 3 commissions, we get the best results, and that 4 we're not pushing a particular type of result. 5 so, you know, we're providing the best information possible. And one of the ways by which we insure 6 7 that is by going out for peer review. Now, in the context of a litigated proceeding, peer review 8 occurs through cross-examination, typically, so... 9 COMMISSIONER BELSER: One of our South 10 Carolina Commissioners serves on the board of NRRI. 11 12 Is there any problem — any — do you foresee any conflict or issue with the fact that a South 13 Carolina Commissioner, member of this Commission, 14 15 is on the board? 16 WITNESS/INTERVIEWEE DR. PECHMAN: No. 17 **COMMISSIONER BELSER**: Can you explain that? I 18 mean, tell us how — and you've talked about it. 19 How is he insulated from your work, directing what 20 you do? 21 WITNESS/INTERVIEWEE DR. PECHMAN:. Basically, the board deals at a much higher level than the 22 specifics of what we actually do. The only time 23 2.4 that we engage the board in what we're doing has 25 been when we've had papers written by outside

1	parties — we have a series that I've created called
2	Insights, so they're two-to-four-page papers.
3	Hopefully, you're all getting them and read them
4	when they come out periodically. The idea is to
5	inform. And one way in which we get people to help
6	inform is by soliciting — you hear an interesting
7	talk. You say, "Hey, could you write me a paper on
8	that, two to four pages, you know, 1000-2000
9	words?" It's not a huge hurdle. Now, we've had
10	some instances at the board where we've had
11	conversations of how do we maintain our
12	independence, and the questions that the
13	commissioners have dealt with was what process do
14	we do to maintain our independence, as opposed to
15	the substance of the material. So the board really
16	does not get involved in the substance of our
17	material.
18	COMMISSIONER BELSER: Do you have to get board
19	approval to — if you're selected, do you have to
20	get board approval to accept this job? Do they —
21	WITNESS/INTERVIEWEE DR. PECHMAN: No.
22	COMMISSIONER BELSER: — have to approve that?
23	That's up to you?
24	WITNESS/INTERVIEWEE DR. PECHMAN: Well, I've
25	discussed it with Greg White.

COMMISSIONER BELSER: And he's the director -1 WITNESS/INTERVIEWEE DR. PECHMAN: He's the 2 Executive Director of NRRI. 3 4 COMMISSIONER BELSER: Okay. WITNESS/INTERVIEWEE DR. PECHMAN: And also of 5 NARUC. 6 7 COMMISSIONER BELSER: And he's - he does not does he or does he not - does he have to take 8 direction from the board as to the jobs that y'all 9 would work on? 10 WITNESS/INTERVIEWEE DR. PECHMAN: 11 COMMISSIONER BELSER: 12 Okay. WITNESS/INTERVIEWEE DR. PECHMAN: 13 Of course, whenever you have a board, you do listen to the 14 15 I mean, you know. But we haven't received 16 direction to do something or not do something from the board. You know, but one wants to be 17 18 respectful of their opinions. 19 **COMMISSIONER BELSER**: If you and NRRI are 20 selected, and members of your team, there are some ex parte communications laws that need to be 21 adhered to, and are y'all willing to refrain and 22 avoid any improper ex parte communications with 23 parties? 2.4 WITNESS/INTERVIEWEE DR. PECHMAN: Absolutely. 25

My only request is that we get briefed by counsel 1 after we've had an opportunity to review those 2 3 laws, so that we make sure that we're consistent 4 with the laws and in full compliance. 5 6 7 8 Commission in these dockets? 9 10 11 12 13 14 15 16 17 18 19 dockets? 20 WITNESS/INTERVIEWEE DR. PECHMAN: 2.1 22 23 2.4 25

what we do. 1 COMMISSIONER BELSER: Mr. Chairman. I think 2 3 that's all I have right now. 4 **COMMISSIONER ERVIN:** Thank you. Commissioner Whitfield? 5 COMMISSIONER WHITFIELD: Thank you, Judge 6 7 Ervin. Good morning, Carl, good to have you with -8 Dr. Pechman — good to have you with us. 9 WITNESS/INTERVIEWEE DR. PECHMAN: 10 11 morning, Commissioner Whitfield. COMMISSIONER WHITFIELD: I think Judge Ervin 12 and Commissioner Belser covered a lot of territory 13 with you and asked most of the questions I had. 14 15 There are a few that I want to get real specific on with you and try not to be duplicative. But one of 16 17 the last areas Commissioner Belser was in when she 18 asked you, if you were chosen, about abiding by our 19 strict laws on ex parte communications, and you 20 answered that you would like to get with counsel -21 and, certainly, if you are the one chosen, I certain would highly recommend just what you said 22 in your answer, that you do so, because South 23 Carolina does have — and I know you're familiar 2.4 25 with other state commissions throughout 50 state

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members of NARUC, but South Carolina does have unique and strict and specific ex parte communications laws. Because you — in that sense, you would — we would be treating you almost like one of our advisory staff members where we are advised and consult with them on matters pending before the Commission, and they, of course, are full-time employees here and they understand that. And I certainly appreciate your answer, because that would be critical that we have that same type of confidentiality with you in this matter, as well.

And that said, I want to go right to two of the matters. Act 62, as Commissioner Belser said and focused on the last part of her questioning, requires that this consultant be independent. In fact, the word "independent" is used several times — multiple times throughout the Act. So I want to start with that and then I want to close with some specific technical qualifications. And I think Ms. Boyd and I had an exchange from here on the bench last Wednesday about there being a finite number of folks with expertise, like you have, that can do what we need, what Act 62 requires. So we recognize that, and you are one of those and you're

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here at the table and this is your time. But that 1 being said, also, one of the things that was 2 3 brought to light about our previous consultant, 4 about a board member having ties to one of our 5 utilities — and just for the record, so you know, Dr. Pechman, I could not even identify that board 6 7 member who was mentioned in a picture, if her 8 picture was presented to me, so, I did not know that individual. So I'm going to start with you. 9 You and I know each other, obviously, from NARUC. 10 I'm very familiar with NRRI. And probably not as 11 12 familiar with you as I am the previous NRRI directors, particularly the past two prior to you, 13 but it's fair to say we know each other, we're 14 15 familiar with each other, right? 16 WITNESS/INTERVIEWEE DR. PECHMAN: That's 17 correct. COMMISSIONER WHITFIELD: And that, in your 18 mind, would not preclude you, knowing me or any of 19 the other Commissioners on this Commission, from 20 21 being independent and impartial and unbiased, and giving us — and working for us as our consultant. 22 WITNESS/INTERVIEWEE DR. PECHMAN: It would not 23 preclude me from being independent. 2.4 COMMISSIONER WHITFIELD: Going a little step 25

further, Dr. Pechman, the way I have always viewed 1 NRRI — and Ms. Boyd will tell you, we've had NRRI 2 3 down here years ago, in the past, under previous 4 directors — not you — had an event here at Saluda Shoals Park that Ms. Boyd very diligently worked 5 and put together about a three-day training 6 7 seminar, and it wasn't just for Commissioners and 8 Staff; she opened it up to the public. So I've always viewed NRRI as our research arm at NARUC, 9 10 with all 50 states, much like we would have Staff here researching things for us here. NRRI still is 11 12 operating in that role, even with the changes 13 you've had, that you just mentioned, in the last vear and a half. Is that correct? 14 15 WITNESS/INTERVIEWEE DR. PECHMAN: Absolutely. 16 **COMMISSIONER WHITFIELD**: And you're still 17 operating that way, and you've explained - I'm 18 somewhat familiar with those changes, maybe not as 19 familiar — wasn't intimately involved, but I'm 20 aware of the changes with NRRI. And I do 21 understand, as you just said, that you answer to Greg White, who's also the Executive Director, 22 currently, of NARUC. 23 WITNESS/INTERVIEWEE DR. PECHMAN: Greg White 2.4 and the board. 25

That's

COMMISSIONER WHITFIELD: Yes. And going back 1 to the involvement with Executive Director Greg 2 3 White, the questioning of the independence of 4 NRRI — I guess what I'm trying to say, the board of 5 NARUC, he's more responsive to the operations — as I understand it, and I want you to verify this -6 7 he's more responsive to the actions and operations of NARUC, from the NARUC board, more so than NRRI. 8 Is that correct? In other words, he still allows 9 10 you your independence in your research and education work. 11 WITNESS/INTERVIEWEE DR. PECHMAN: 12 correct. He has not dictated anything with respect 13 to the direction of the research that we're taking. 14 15 I discuss different ideas with him; he discusses different ideas with me. But, largely, his role 16 17 has been on the administrative — clearing the 18 administration of NRRI and providing support with 19 respect to that, and he's also, as you know, wonderful counsel -20 21 COMMISSIONER WHITFIELD: Right. WITNESS/INTERVIEWEE DR. PECHMAN: - to discuss 22 issues with on how to proceed on different matters. 23 But he has not delved into the substance of what 2.4 25 we're working on, in terms of providing any

direction. 1 COMMISSIONER WHITFIELD: And just for the 2 3 benefit of the public, NARUC, as you well know, has 4 training for staff of state commissions and 5 commissioners from all 50 states, all member states, correct? 6 7 WITNESS/INTERVIEWEE DR. PECHMAN: NARUC does, and NRRI also -8 COMMISSIONER WHITFIELD: Separately. 9 WITNESS/INTERVIEWEE DR. PECHMAN: — does. 10 **COMMISSIONER WHITFIELD**: That's where I'm 11 12 going. WITNESS/INTERVIEWEE DR. PECHMAN: 13 Right. **COMMISSIONER WHITFIELD**: NRRI — I mean, excuse 14 15 NARUC has training for staff and commissioners 16 that may have nothing to do with NRRI, in some 17 instances, correct? WITNESS/INTERVIEWEE DR. PECHMAN: That's 18 19 correct. COMMISSIONER WHITFIELD: And then NRRI has 20 21 things that may not have direct — well, let me say that certainly it's all beneficial to state 22 commissioners and state commission staff, but NRRI 23 2.4 has its own training that might not be directly 25 tied to a NARUC-sponsored event, so to speak, I

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guess is a way - or NARUC -

witness/interviewee DR. Pechman: I — you're absolutely right. I just hope what we're training people on, in terms of the fundamentals of regulation, are consistent with what NARUC is training people on. But we do not — they do their training independently of us. Sometimes we're asked to participate in the new-commissioner training, sometimes we're not, so...

COMMISSIONER WHITFIELD: Well, thank you. And let's talk about — lastly, on independence, let's talk about funding. I think Commissioner Belser went down that path a little way, but let's be really clear. There's no funding that comes to NRRI, directly or indirectly, that would influence you or — as Judge Ervin said — create a conflict of interest.

WITNESS/INTERVIEWEE DR. PECHMAN: Not —

COMMISSIONER WHITFIELD: None that you know of, or no groups, no affiliates, no nothing that would —

WITNESS/INTERVIEWEE DR. PECHMAN: We do not —

COMMISSIONER WHITFIELD: — put you in a

position where you could not be our independent

consultant.

1	WITNESS/INTERVIEWEE DR. PECHMAN: We do not
2	take funding from market participants. We take
3	funding from the Department of Energy. We have —
4	COMMISSIONER WHITFIELD: US Department of
5	Energy.
6	WITNESS/INTERVIEWEE DR. PECHMAN: Yes.
7	COMMISSIONER WHITFIELD: Certainly, yes, sir.
8	0kay.
9	WITNESS/INTERVIEWEE DR. PECHMAN: We've
10	recently received foundation funding for the
11	regulatory training initiative, but we do not
12	work — or, we do not take funding from individual
13	market participants. In fact, I was approached by
14	EEI — Edison Electric Institute. Under a prior
15	executive director, EEI had paid NRRI to do
16	training. And I indicated that we would be happy
17	to do the training, but we would not accept any
18	compensation for it, because of conflicts.
19	COMMISSIONER WHITFIELD: And —
20	WITNESS/INTERVIEWEE DR. PECHMAN: We didn't —
21	we haven't done any training for them, but — I
22	mean, it was just a general conversation.
23	COMMISSIONER WHITFIELD: So you just answered
24	a question that might be on the minds of many.
25	You're not taking any funding from EEI, which is

1	Edison Electric Institute, right?
2	WITNESS/INTERVIEWEE DR. PECHMAN: That's
3	correct.
4	COMMISSIONER WHITFIELD: All right, sir. Dr.
5	Pechman, let's shift gears just a little bit. And
6	Commissioner Belser -
7	COMMISSIONER BELSER: Could I ask a follow-up
8	on what you just asked, before you shift?
9	COMMISSIONER WHITFIELD: Certainly, because
10	I'm about to leave that and go into more technical
11	things. Go ahead, Commissioner Belser.
12	COMMISSIONER BELSER: Dr. Pechman, when you
13	reference "market participants," does that include
14	regulated investor-owned utilities, the renewable
15	energy providers, and any trade organizations
16	associated with those?
17	WITNESS/INTERVIEWEE DR. PECHMAN: Trade
18	organizations. On the customer side, it would be
19	somebody like the AARP, I would consider to be a
20	market participant. Any stakeholder groups. We
21	would not take funds from any stakeholder groups.
22	COMMISSIONER BELSER: Thank you, very much.
23	Thank you.
24	COMMISSIONER WHITFIELD: Thank you.
25	And thank you for answering Commissioner

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Belser's more detailed question in that realm.

Let's shift gears just a little bit to your qualifications. As I said, I've had an exchange with Ms. Boyd and we recognize there are a finite number of folks that have this expertise.

And you mentioned about putting together a number or a recommendation for us, and this is and I'm trying to be fair to all who are seeking this consulting position, but putting a number or recommendation together for us, what we really are going to need is not only somebody to put that number together, but - and Act 62 is new, as Commissioner Belser said. But the way I understand it, we don't just need to have that number; we're going to have to take that number and turn it into a real-world application. And I guess what I'm trying to say is this isn't just like another white paper, as you mentioned, or another 1000-word paper; this is something we have to take and will have to take your work and apply it, going forward, to implement Act 62. In other words, we're not yes, we're looking for the work and the supporting documentation, supporting principles to back it up, but we're going to have to take that and apply it to implementing Act 62. And you're going to be -

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you, as our consultant, would be the person that would help us implement that. How do you — and I'm not — I know you don't have specific knowledge to South Carolina, as we said, and I'm not concerned about that. I just want to know how are we going to take this and turn it into a real-world application.

WITNESS/INTERVIEWEE DR. PECHMAN: So I think it's important to recognize that the bulk of my career has been involved, to some extent or another, with legislative mandates and implementation of legislative mandates through commission actions, through solicitations, and things of that sort. So I think that what we want to do is to work at both ends. On the one hand, we want to identify what the ultimate product will be. When it came to the orders, in terms of the implementation of avoided-cost in New York, a lot of my activity was involved with producing the cost estimates or the rate schedules and things of that sort, but also involved in what the different issues associated with the operation of those is, of the regime is. For example, the role of curtailment during periods of excess generation was an issue that came up in the early '90s in New

It was '94. But I think that what is really York. 1 important is to identify what it is that you need -2 3 what kind of product. Is it a standard offer that you're producing? How does that standard offer 4 5 change? What are the criteria that change the standard offer? What's the information that you 6 7 need within that standard offer to proceed and to 8 energize the regime of avoided-cost? So part of it is the methodologies associated with determining 9 the numbers, but then there's the translation. And 10 part of that translation is knowing what is being 11 translated into. So we would work with the 12 Commission and with Staff to determine what that 13 end product is going to look like, and then 14 15 determine the information needs associated with 16 creating that end product and make sure that it 17 gets done. 18 **COMMISSIONER WHITFIELD**: Well, thank you. 19 Pechman, I think we're running a little close on time, but I'll look at Judge Ervin just one second. 20 21 I do have one more question I'd like to slip in, real quick, if I could. And I've cut quite a few 22 of them off. 23 And I'm not going to get into your staff. 2.4 25 You've adequately described them. I actually think

I've met Tom Stanton, maybe, from the Michigan PSC. But, again, it's a technical question, and I'm going to be fair to the others and try to hurl the same thing at them. You had an exchange with Commissioner Belser about what you called a PROMOD system and how expensive that was. In the past, we've had utilities in here, and some of them use the PROSYM system, which I understand also is very, very expensive, and some of the other parties have complained that they weren't able to afford and be able to have that analytical type system - have access to that kind of information. If you don't have that or can't get it independently yourself, how can we - I know you told Commissioner Belser you would send out data requests to the utilities, but how can we be certain that you have access to an expensive system like PROMOD or PROSYM, whatever it might be, to where you can have your own independent data, to advise us?

WITNESS/INTERVIEWEE DR. PECHMAN: Oh, I think that would involve the Commission and that, ultimately, I would need — if the utilities did not provide access, that the Commission would need to order them to provide access. And I would come to you with that request, that, in order to get the

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job done, that the commissions[sic] provide access to the models. And that was the way, prior to the acquisition of PROMOD, in New York, that we proceeded. The administrative law judge ordered the utilities to provide access.

COMMISSIONER WHITFIELD: I think we certainly could and would do that, but there's been some concern among some of the parties that they're just having to trust that data and that information.

How can you verify, I guess, is where I'm —

think access is critical. And I don't know your ex parte rules, but one way to approach this, and which I have done in the past, has been to negotiate the types of — instead of all parties presenting lots of different sensitivity analyses to the utilities — which could be overwhelming and expensive — to try to work through and say, "What sensitivity analyses, as parties to these proceeding, do we really need," to try to pare things down so that the information is reasonable. But, to me, it seems that any party that signs the appropriate confidentiality agreements should have access to the data and access to the manuals, also. I mean, we're not only talking about the data, but

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it's appropriate to have access to the manuals so that you know how the models will operate.

COMMISSIONER WHITFIELD: Dr. Pechman, one thing Act 62 does is it authorizes us to go outside of the normal procurement processes to hire you, or a would-be consultant — this process we're going through now — and it is essentially telling the Commission to get the job done. And I guess in that realm, do you have any range of how much these systems might cost?

WITNESS/INTERVIEWEE DR. PECHMAN: I don't - I don't know - I don't have a current estimate. I mean, my estimate is very old and would not necessarily - but they still tend to be expensive. There are consulting firms.

COMMISSIONER WHITFIELD: I was going to ask you, could you contract with someone, if you didn't buy the system. And what would that — we're just trying to get our hands around some cost, because, you know, for whoever the consultant is, but this is something that could be critical to the Commission to implement Act 62, and it could be it'd be helpful. Is that something you could maybe follow up with? Judge Ervin, could he follow up and maybe get back to us on a range of how much

these systems might cost? Or how much it might 1 cost for you to obtain it from — you know, for you 2 3 to contract it, or from a consultant? WITNESS/INTERVIEWEE DR. PECHMAN: Yes, I can. 4 5 Let me just -**COMMISSIONER WHITFIELD**: Could he file that, 6 7 Ms. Boyd, respond with that later? 8 MS. BOYD: Yes, sir. We would just place it in the docket, have him file it through the docket. 9 10 Yes, sir. In those docket numbers. WITNESS/INTERVIEWEE DR. PECHMAN: Let me 11 12 just -COMMISSIONER WHITFIELD: Yes, sir. 13 WITNESS/INTERVIEWEE DR. PECHMAN: If I may 14 15 respond in a couple of different ways. One, I'm 16 happy to do that. Two, what we're doing here is 17 we're forecasting into the future, and we're 18 forecasting with tremendous precision, using these 19 types of models. And one question that we might 20 want to ask is, is that level of precision 21 necessary as we're forecasting into the future? One question is, it's necessary if you have load 22 pockets and you want to have separate prices in the 23 different load pockets. But basically what we're 2.4 25 trying to do is to find out what the marginal cost

is of the system, and how that marginal cost is 1 going to change for every hour during the course of 2 3 the day. 4 But the one thing that I can assure you: No 5 matter what the forecast is, we're going to be wrong. We're not going to get it right. 6 7 question is how precise do we want to be, and how incorrect we can be in the future. 8 COMMISSIONER WHITFIELD: Understood. I've 9 10 always heard the only thing you can say for certain about a forecast is it won't be perfect. So that 11 said -12 WITNESS/INTERVIEWEE DR. PECHMAN: 13 So, that said — but I will get back to you with some costs. 14 15 **COMMISSIONER WHITFIELD**: If you could get -16 file that with a letter to Ms. Boyd, I would 17 certainly appreciate it. And that's all I have, Dr. Pechman. 18 Thank you, Judge Ervin. 19 **COMMISSIONER ERVIN:** Thank you. 20 Ms. Belser? 21 COMMISSIONER BELSER: Just very quickly, Dr. 22 Pechman, have you or any of your team ever 23 testified before this South Carolina Public Service 2.4 25 Commission in a proceeding?

WITNESS/INTERVIEWEE DR. PECHMAN: I haven't, 1 and I don't believe any of my team have. 2 3 COMMISSIONER BELSER: Okay. Are you aware if 4 you or any of your team have served as an advisor, consultant, or witness, or received compensation 5 from Duke Energy or any of its subsidiaries? And 6 7 this might be something you want to add to your conflicts check. 8 WITNESS/INTERVIEWEE DR. PECHMAN: No. The 9 10 only — maybe I can short-circuit this. 11 COMMISSIONER BELSER: I'm basically going to 12 ask you about any of the parties, being Duke Energy or its subsidiaries; Dominion Energy or its 13 subsidiaries: SCANA Corporation, which was the 14 15 precursor to Dominion here in South Carolina; South Carolina Solar Business Alliance or any of its 16 17 members; Johnson Development Company; Walmart; 18 South Carolina Energy -WITNESS/INTERVIEWEE DR. PECHMAN: We'll do -19 **COMMISSIONER BELSER:** — Users. 20 21 WITNESS/INTERVIEWEE DR. PECHMAN: We'll do a more in-depth — we did a conflict check based upon 22 the questions that were in the solicitation. We're 23 happy to do more in-depth. 2.4 COMMISSIONER BELSER: So all those 25

stakeholders that are involved.
WITNESS/INTERVIEWEE DR. PECHMAN: So if I can
get a list of the stakeholders, that would —
COMMISSIONER BELSER: We can do that. Thank
you, very much.
Thank you, Mr. Chairman.
COMMISSIONER ERVIN: Commissioner Williams,
did you have any questions?
VICE CHAIRMAN WILLIAMS _[via phone] : Thank you,
Commissioner Ervin. I think you all covered it
pretty well. I just want the witness to
understand — or, I should phrase it as a question.
Sir, do you understand the current climate in South
Carolina regarding the South Carolina Energy
Freedom Act and the hopes that this will improve
energy for South Carolinians?
WITNESS/INTERVIEWEE DR. PECHMAN: Yes, sir, I
do.
VICE CHAIRMAN WILLIAMS _[via phone] : And the way
that that energy is provided?
WITNESS/INTERVIEWEE DR. PECHMAN: Yes. It
seems to be a transformational Act.
VICE CHAIRMAN WILLIAMS _[via phone] : Okay. And my
colleagues asked you a lot of questions about
conflicts. You understand that there may be some

members of the public that want to ensure that the Commission selects a consultant that can be fair and impartial to all parties. And so we've been through one iteration of this and we were told there were no conflicts, so I just want to give you the fair opportunity to go back and conduct a proper conflict check to make sure that you - and I'm using "you" as Commissioner Belser used it earlier; "you" meaning yourself, the company or organization you work for, and anyone involved directly or indirectly with this project - don't have any ties to any parties in this matter.

I am happy to do that, and I appreciate the concern. And as somebody who's had a long career in public service, I take it very seriously. So I'm happy to do that.

VICE CHAIRMAN WILLIAMS[via phone]: Thank you, sir. And just, finally, I understand that Commissioner Whitfield has some level of familiarity with you, sir, and I understand that Commissioner Howard serves on the board. Your opinion is that those existing standing relationships will in no way, shape, or form, influence your decisions in this process, if you were selected as a consultant?

That's

I do not believe that they will — it's 1 correct. not that I don't believe; it's they will not affect 2 3 my opinions and conclusions. 4 **COMMISSIONER WHITFIELD**: And you know a couple of our other Commissioners, as well, who couldn't 5 be here today, as well, I believe, too, Dr. 6 7 Pechman. WITNESS/INTERVIEWEE DR. PECHMAN: I've had the 8 pleasure of meeting many of the Commissioners, both 9 at the NARUC meetings and at the SEARUC meetings, 10 11 as well. COMMISSIONER WHITFIELD: 12 Yes, sir. VICE CHAIRMAN WILLIAMS [via phone]: All right. 13 Commissioner Ervin, that's all I have. 14 15 **COMMISSIONER ERVIN**: Thank you, Commissioner Williams. 16 17 VICE CHAIRMAN WILLIAMS[via phone]: Thank you, sir, 18 for your testimony. 19 **COMMISSIONER ERVIN**: The final question that I have is — and you may be aware of this — we've been 20 21 given a limited amount of time to implement the Act, and so would you be willing to staff up this 22 project quickly and be ready to roll? Because we 23 are having filed testimony in, I believe, this 2.4 25 week - Ms. Boyd? Prefiled testimony?

1	MS. BOYD: Yes, sir. One of the parties is
2	filing their direct this week, and I believe next
3	week we'll get two other sets of testimony, direct
4	testimony.
5	COMMISSIONER ERVIN: And so, would you be -
6	assuming — if you were chosen, could you staff up
7	quickly and begin work immediately?
8	WITNESS/INTERVIEWEE DR. PECHMAN: Yes.
9	COMMISSIONER ERVIN: Thank you.
10	If there are no further questions, so that we
11	can stay on schedule, Dr. Pechman, thank you for
12	your attendance today. And I'm going to ask Ms.
13	Boyd if she will give you a list of all of the
14	parties and their representatives, so that you can
15	conduct a thorough conflicts check and then submit
16	a letter back to us that you've completed that
17	process and there are no conflicts.
18	WITNESS/INTERVIEWEE DR. PECHMAN: Okay. Thank
19	you.
20	COMMISSIONER ERVIN: We appreciate your
21	testimony today, and we're going to take a 10
22	minute break and we'll come back and hear the next
23	invitee on our schedule. Thank you, sir.
24	WITNESS/INTERVIEWEE DR. PECHMAN: Thank you.
25	[WHEREUPON, Witness/Interviewee Dr.

1	Pechman was excused, at which time Vice
2	Chairman Williams departed the
3	proceedings, followed by a recess taken
4	from 11:29 to 11:39 a.m.]
5	<u>Filings related to Pechman Interview</u> :
6	Biographical Information Posted 8/8/2019
7	8/13/2019 Conflict-of-Interest Letter - PSC to Dr. Pechman
8	<u>Letter regarding Conflicts Check Posted 8/15/2019</u>
9	
10	
11	
12	COMMISSIONER ERVIN: Is our next party ready
13	to be interviewed? Mr. Sedano, can you hear us?
14	MR. SEDANO _[via Skype] : I can hear you just fine,
15	thank you.
16	COMMISSIONER ERVIN: Great. My name is Tom
17	Ervin, and I'm going to be presiding here this
18	afternoon for the interview. Our Chairman had a
19	death in the family and he's unable to join us
20	today, but he will have the benefit of the
21	transcripts of these interviews, as will the other
22	Commissioners.
23	Let me welcome you to this vetting. And first
24	of all, would you introduce yourself, please, and
25	give us a brief summary of your background and work

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experience?

MR. SEDANO_[via Skype]: My name is Richard Sedano. I'm the president and chief executive officer of the Regulatory Assistance Project, which is approximately a 40-employee organization, doing work with government on energy policy in the United States, Europe, India, and China.

COMMISSIONER ERVIN: Before we go further, I'm going to ask our court stenographer to administer the oath, please.

[Witness/Interviewee affirmed]

COMMISSIONER ERVIN: Thank you. So, tell us, if you would, what your relevant work experience is, what qualifies you to assist the South Carolina Public Service Commission in the implementation of the new Solar Energy Act.

WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: Well,
I'm speaking for my nonprofit, the Regulatory
Assistance Project, which has 27 years of assisting
governments on challenging public-interest publicutility matters. All of us have extensive decades
of experience working in the public-utilities
sphere. My own experience, I actually started
calculating avoided costs for PURPA projects in
Vermont, as a Commissioner of the Vermont

Department of Public Service for almost 10 years. 1 I've worked at the Regulatory Assistance Project, 2 3 assisting states on all kinds of matters since 4 2001, and our staff has very significant experience 5 in many policy matters that rest on commissions. **COMMISSIONER ERVIN**: Have you had specific 6 7 experience specifically in avoided cost? WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: Well. 8 Commissioner, I'm not sure if we're the right fit 9 10 for what you're looking for. We're not a consulting firm and we don't do modeling of avoided 11 costs, even though many of us at RAP have done that 12 work directly or supervised it directly in our past 13 When that kind of work appears in the 14 lives. 15 course of our work, we tend to partner with others who have that direct capacity and who are current 16 17 with the models that tend to be used. Though we 18 are very expert in the design and interpretation of 19 these processes, we do not do them, although we do have access to senior associates and senior 20 21 advisors who can do that sort of experience — who do that sort of work. 22 **COMMISSIONER ERVIN**: Well, the Act allows the 23 Commission to retain a qualified, independent 2.4 25 third-party expert to assist the Commission in

rendering opinions and conclusions relating to the 1 testimony and evidence presented at our hearings. 2 3 And I think you've had a chance to review the Act. 4 Have you seen the Act? 5 WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: Jocelyn Boyd sent me a copy of the Act over the 6 7 weekend, or just before the weekend. **COMMISSIONER ERVIN**: So, having seen the Act 8 and understanding the role, do you think you and 9 10 your firm would be qualified to independently assist the Commission as an expert witness and 11 render opinions and conclusions about these 12 dockets? 13 WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: Well, 14 15 Commissioner, I think the role that we're very comfortable with is helping people in your 16 17 position, your colleagues, your staffs - the office 18 of public counsel, also - in overseeing and 19 directing work like this. We would, I think, advise that a firm that is professionally oriented 20 21 in modeling — and that, of course, doesn't have conflicts — would need to be on the scene, as well. 22 **COMMISSIONER ERVIN**: Did Ms. Boyd provide you 23 with a copy of the dockets involved in these cases, 2.4 25 so that you could -

1	WITNESS/INTERVIEWEE MR. SEDANO _[via Skype] : I have
2	a document that has three dockets on it — -184, -
3	185, and -186 — as well as a series of questions —
4	COMMISSIONER ERVIN: Yes, sir.
5	WITNESS/INTERVIEWEE MR. SEDANO _[via Skype] : — but I
6	haven't actually had a chance to read the docket
7	opening statements from you.
8	COMMISSIONER ERVIN: I understand. You see
9	the names of the parties involved. And so let me
10	just ask you about potential conflicts of interest
11	that we are asking. We're not just singling you
12	out; we're asking all interviewees these same
13	questions.
14	WITNESS/INTERVIEWEE MR. SEDANO _[via Skype] : I
15	totally understand. I think this is going to be
16	quick.
17	COMMISSIONER ERVIN: Have you or members of
18	your team or firm ever received work or performed
19	work or received any compensation for services
20	rendered from Duke Energy, Dominion Energy, or its
21	subsidiaries?
22	WITNESS/INTERVIEWEE MR. SEDANO _[via Skype] : No.
23	COMMISSIONER ERVIN: How about SCANA, which
24	was formerly doing business in South Carolina,
25	purchased by Dominion?

1	WITNESS/INTERVIEWEE MR. SEDANO _[via Skype] : No.
2	COMMISSIONER ERVIN: The South Carolina Solar
3	Business Alliance?
4	WITNESS/INTERVIEWEE MR. SEDANO _[via Skype] : No.
5	COMMISSIONER ERVIN: Johnson Development
6	Associates, Incorporated?
7	WITNESS/INTERVIEWEE MR. SEDANO _[via Skype] : No.
8	COMMISSIONER ERVIN: Walmart Incorporated?
9	WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: No.
10	COMMISSIONER ERVIN: Nucor Corporation?
11	WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: No.
12	COMMISSIONER ERVIN: Or any of the attorneys
13	involved in these dockets? I believe the law firms
14	of Robinson Gray Stepp & Lafitte, LLC?
15	WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: No.
16	COMMISSIONER ERVIN: Sowell Gray; Robinson
17	McFadden; Womble Bond Dickenson, LLC; Willoughby &
18	Hoefer, PA? Attorney Frank Ellerbe, Attorney
19	Belton Zeigler, or Attorney Mitchell Willoughby?
20	Have you been retained by any of those attorneys or
21	their law firms?
22	WITNESS/INTERVIEWEE MR. SEDANO _[via Skype] : No.
23	COMMISSIONER ERVIN: Do you or any member of
24	your immediate family own stock in any of these
25	entities?

1	WITNESS/INTERVIEWEE MR. SEDANO _[via Skype] : No.
2	COMMISSIONER ERVIN: Do you have a business
3	relationship with any of these entities?
4	WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: No.
5	COMMISSIONER ERVIN: Have you testified before
6	a public service commission anywhere in the United
7	States?
8	WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: Anywhere
9	in the United States. Well, when I was in Vermont,
LO	I did testify in front of the Vermont Public Service
L1	Board at that time in the 1980s and '90s. And since
L2	then, I don't think I personally have, although I
L3	have participated in PUC proceedings as advisors to
L 4	a PUC, but not as a witness. Across my
L5	organization, that's typically how we work. And so,
L 6	at the moment, I can't recall a situation where we
L7	have appeared as a witness in front of a PUC,
L8	although I'd have to check with everybody to
L9	determine whether that is a 100 percent accurate
20	answer or whether there were one or two exceptions.
21	COMMISSIONER ERVIN: When you testified before
22	the Vermont Public Service Commission, who called
23	you as a witness?
24	WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: Oh, I
25	was working in my capacity in State government at

the Department of Public Service, and so I was an 1 employee of the organization for which I was 2 3 appearing. 4 COMMISSIONER ERVIN: Beyond your public 5 service commission work, what's been your involvement in avoided-cost proceedings? 6 7 WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: Well, in my State of Vermont work, I actually was the 8 expert witness delivering testimony in PURPA 9 avoided-cost cases — I believe it was three times — 10 and that would have been in difference with 11 12 testimony from the utilities and other parties. And then, of course, there's integrated resource 13 planning dockets. Since I left working for the 14 15 State of Vermont and joined the Regulatory Assistance Project, I don't think I've appeared 16 17 even in any formal way talking about avoided cost, 18 but very often in our public work with commissions 19 or sometimes behind-the-scenes work with commissions as advisors, we talk quite a lot about 20 21 avoided cost and some of the more emergent issues like value of solar tariffs and things like that. 22 COMMISSIONER ERVIN: Do you have any 23 experience in rate design or calculation of avoided 2.4 25 cost and methodologies used in those calculations?

1	$\label{eq:windstand} \textbf{WITNESS/INTERVIEWEE} \ \ \textbf{MR.} \ \ \textbf{SEDANO}_{\texttt{[via Skype]}} : \textbf{Yes.}$
2	Yes. Well, rate design, of course, has to do with
3	a series of steps that get you to rate design,
4	including calculations about avoided cost. And,
5	yes, I've been involved in rate design, both in
6	Vermont and since I've been advising commissions.
7	And I should say that the Regulatory Assistance
8	Project has published many things about these
9	topics that are publicly available on our website.
10	COMMISSIONER ERVIN: Are you currently or have
11	you in the past done any work for investor-owned
12	utilities, served as a consultant or advisor or
13	testified on their behalf?
14	WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: No.
15	No. No. Actually, as a rule, the Regulatory
16	Assistance Project does not do that.
17	COMMISSIONER ERVIN: Have you advised or
18	testified for any solar providers or —
19	WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: No.
20	No, we don't appear as an advocate for anybody.
21	COMMISSIONER ERVIN: Do you consider yourself
22	independent in that regard, to render —
23	WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: Yes.
24	COMMISSIONER ERVIN: — opinions free of any
25	outside influences or biases, prejudices?

WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: 1 bring our experience in what we know, and that's 2 3 all that we bring. 4 **COMMISSIONER ERVIN**: Thank you. I'm going to ask Commissioner Belser if she has questions at 5 this time. 6 7 COMMISSIONER BELSER: Thank you, Judge Ervin. Good morning, Commissioner Sedano. How are 8 you this morning? 9 10 WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: 11 morning. Nice to see you. I'm fine, thank you. 12 How are you? COMMISSIONER BELSER: Fine. Thank you for 13 talking with us this morning and expressing 14 15 interest in this project. We appreciate that. I do want to follow up. You mentioned that 16 17 your group does not do the modeling itself, but 18 there would need to be another firm or entity or 19 person that does the modeling. Please, can you elaborate on that for me? 20 21 WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: Sure. Well, we've had occasion in the past where we've 22 been, I guess I would call it policy advisers to a 23 commission. And in situations where this kind of 2.4 25 quantitative firepower is needed, we might either

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let the Commission find an expert that they are 1 comfortable with or we might go to an entity that 2 3 we know is competent and have them join us. 4 either way, the emphasis of our work is on policy 5 analysis and helping to execute and implement the policies that the statutes deliver to commissions. 6 7 And that means designing processes to do that, 8 interpreting information, and sometimes cutting through the jungle of information and advocacy that 9 10 you receive to help commissions sort of decide where they want to land on how to implement their 11 12 statute. So, in that regard, our organization is 13 staffed with people who are steeped in policy 14 15 analysis and when it's needed and useful can 16 partner with an organization that has the modeling 17 capacity. We understand what they are doing, but we don't do it. 18 COMMISSIONER BELSER: 19 Here in South Carolina, 20 we're on a pretty tight timeline to get through -21 WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: I see that. 22 23

COMMISSIONER BELSER: Do you have access to folks that do the modeling that you could call in?

Or would you —

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witness/interviewee Mr. Sedano_[via Skype]: Well, yes, I think we do. I did want to ask, if we got to this question, if there's a standard generation expansion and power systems simulation model that is typically used in South Carolina, that you and the parties are used to using.

COMMISSIONER BELSER: I think that's going to be coming forth this week and next week, as the utilities file their testimony, as to what models they will be using.

WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: Because one of the — well, I'll just share with you that when I was in Vermont, it was very important for the State to have the same modeling capacity as the utilities, and to have the capacity to compare down through the models into the assumptions, so that you could appreciate where different results had come from — because, of course, the assumptions drive the results. So we know that many parts of the country, many different states, are used to using specific models, so when you have dueling models it's very difficult to the decision-makers in your situation, so it's helpful if there's a single one. If it's comfortable to have the utility model be the one that everyone else uses,

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that's fine, but without knowing what that is, it 1 would be hard to get even started in determining 2 3 who might be the right people. And, of course, I 4 know that many people in the modeling business might have conflicts with all the different 5 utilities that you mentioned. So it does suggest 6 7 somebody that's maybe not even on the East Coast, or somebody relatively small and relatively local. 8 So I'm not sure I can answer the question 9 10 about whether we can deliver somebody to you, without knowing a little bit more about what it is 11 12 that you need delivered. But we are in close contact with firms that we enjoy partnering with. 13 Some of them may be conflicted in South Carolina 14 15 already, but some may not. **COMMISSIONER BELSER**: Okay. Do y'all — does 16 17 your group or your team — and when I use "you," I'm 18 using that very broadly to include -19 WITNESS/INTERVIEWEE MR. SEDANO_[via Skype]: Very 20 good. 21 **COMMISSIONER BELSER:** — the company, your entity, and your associates that might be working 22 on this. So if you would use that very broadly, 23 I'd appreciate it. Do y'all have any — and I'm in 2.4 25 South Carolina, so I say y'all a lot. I don't know

that you hear that in Vermont. 1 WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: All 2 3 y'all do that. 4 [Laughter] 5 COMMISSIONER BELSER: Do y'all have experience with drafting purchased-power agreements — because 6 7 there are several components to this, what we're 8 needing to do here. WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: We do 9 10 have people with that capacity, and as well as people that we could engage in a contract 11 relationship, which — who probably would not have 12 been engaged in any of the conflicts that you're 13 concerned about. 14 15 **COMMISSIONER BELSER**: And along with the 16 purchased-power agreements, commitment-to-sell 17 forms, all of the standard documents that are 18 needed with regard to going forward with solar 19 development and their interconnection with the utilities. 20 21 WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: Well, this gets further away from our core business, 22 which is policy advice to states. So if we were to 23 be helping you with this, we would have to be 2.4 25 creating a team of people that we wouldn't normally

work with, although some of the people that I think 1 do the modeling also have experiences of the kind 2 3 that you're talking about. 4 **COMMISSIONER BELSER**: This is viewed, for — 5 well, I mean, it's an administrative hearing and litigation. So do y'all have experience in 6 7 drafting discovery, such as data requests, interrogatories, and requests to produce -8 WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: Yes. 9 10 **COMMISSIONER BELSER**: — to get information from the utilities, and the intervenors? 11 12 WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: Yes. **COMMISSIONER BELSER**: And any assistance with 13 working on proposed orders to memorialize the 14 15 decision of the Commission? WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: Yes. 16 17 Yeah, that's actually something — out of all the 18 questions you've asked, that's probably the one 19 that we have the most frequent and current experience doing. We've helped several commissions 20 21 with drafting of orders, and always in the background. We are very occasionally credited, but 22 usually uncredited. 23 **COMMISSIONER BELSER:** Have you had a chance to 2.4 25 review Act 62, the South Carolina Energy Freedom

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Act?

WITNESS/INTERVIEWEE MR. SEDANO [via Skype]: I have been through it. I — I'll just say I've been through it.

COMMISSIONER BELSER: The very first section there, in the Act, is Section 58-41-05. And I'm going to read that. It provides: The Commission is directed to address all renewable energy issues in a fair and balanced manner, considering the costs and benefits to all customers of all programs and tariffs that relate to renewable energy and energy storage, both as part of the utility's power system and as direct investments by customers for their own energy needs and renewable goals. Commission also is directed to ensure that the revenue recovery, cost allocation, and rate design of utilities that it regulates are just and reasonable and properly reflect changes in the industry as a whole, the benefits of customer renewable energy, energy efficiency, and demand response, as well as any utility or State-specific impacts unique to South Carolina which are brought about by the consequences of this Act.

And this is just the question I'm going to ask: Can you tell us how you would work with these

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directives that have been mandated by the General

Assembly into any analyses and recommendations that
you would make as the consultant to the Commission?

WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: I think that the role of the utility has changed quite a lot with the technology trends that are allowing for energy to come from new and different kinds of places, as well as how customers are seeing themselves in a more active role in energy. so, I think, when we think about the role of the utility, where procurement in the past has largely been about procuring large blocks of resources from time to time, we're now talking about procuring small bits of resources - as well as, potentially, large blocks of resources — in a manner that is really quite different. We're seeing in a few states efforts to really change the way utilities think about resource procurement, like to think about distributed resources as alternatives to wired investments and to think about distributed resources as alternative to bulk power investments, and to challenge utilities to do that in a way that has no bias, but that successfully chooses the best long-term mix of sources. And with the declining cost curve of renewables and traditional resources

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not going down in cost — and, in some cases, going up in cost — states, I think, are challenged to look at their practices that they've had over many years and have served states well, and ask the question whether these practices need to be updated.

And I think what this section that you've read says is that the statutes are asking the implementation agency, which is the Commission, to consider how these procurement practices should be updated in order to assure that the right mix of resources from all the sources that we have — small and large, local and far away — can be accomplished in a way that ultimately benefits the State in the long run. So, that's what I see here.

And one word that is very frequently used these days, in connection with the power sector, is "innovation." The challenge of innovating is big. The systems that many commissions have tend to be difficult with respect to innovation. And so the leadership of commissions around the US, I think, are generally being challenged by the trends that we've talked about, to consider how their practices should change in the face of these new trends. And so I guess I see that in these few lines, all of

Public Service Commission of South Carolina

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that.

commissioner Belser: And your response leads me into the next kind of thought, regarding the development of avoided cost here in South Carolina from years ago and implementing the requirements of PURPA, as now clarified by Act 62. I think states have been provided discretion in how to implement PURPA over the years. Act 62 further — gives further direction to the South Carolina Commission on how to implement avoided costs. If your entity was selected as the consultant, how would you envision your role as far as advising the Commission on the requirements of Act 62 and the mandate that has been charged to us under Act 62?

witness/interviewee Mr. Sedano[via Skype]: Well, I think — first of all, I'd have to learn a little bit more about what current practices are. But the typical avoided-cost practices that use proxy plants perhaps need to be changed to think about a more dynamic system with maybe more complicated, but maybe more accurate definition of what avoided cost is. So, the use of simulations, the use of scenarios. All of these would be considering replacing existing approaches.

One approach that is conducive to the use of

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smaller resources is the idea of creating avoidedcost tranches. By that, I mean, instead of staying
with the avoided cost as represented by a large
power plant which produces a very large amount of
power, one might create an avoided cost for 20 or
25 megawatt tranches. These might suggest that the
earliest amounts might be worth more, and then
successive amounts might be worth less and less as
you accumulate more.

I think what we're talking about here is bringing more of a market discipline, and really adjusting the balance between regulation and market that the Commission is ultimately charged with.

Some of these choices are new choices, but they fall into an old category, which is adjusting the balance between regulation and market. So, I think what we're talking about is updating, in a pretty significant way, the procurement practices that your utilities do under your direction, and I think we would probably spend quite a lot of time on that.

COMMISSIONER BELSER: Well, and I think that response segues pretty nicely into my next thought, is that would you envision — and I think any starting point may require looking back over prior

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Commission orders on how avoided cost may have been established or what's been going on in that area in South Carolina. Would you feel constrained to follow those orders or would you feel comfortable as an expert in policy, in this area, recommending different approaches or — and certainly with the implementation of the new Act — looking at different methods and methodologies to move forward with avoided cost?

WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: One of the things you get used to working in the United States is that every state is different, and every state applies its priorities and preferences in particular ways, and there are a lot of right ways to do these things. There are also some ways that are inconsistent with your own priorities. And so, my sense of what we do at RAP — we call ourselves RAP — what we tend to do is really pay attention to what are your priorities as stated in statutes and the things that we hear you tell us, and what are the practices that you have. And the objective really is to align the performance of your processes to the outcomes that your statutes and yourselves say that you want. And that's really the objective here. So the term we sometimes use

is that we take people where they are and then work 1 with that. 2 COMMISSIONER BELSER: Commissioner Ervin had 3 4 asked you about some of the stakeholders. 5 going to switch gears a little bit and go back into some of the independence that we are looking at, as 6 7 far as our consultant. He mentioned some — most of the parties. There were a couple, though, that I 8 did want to follow up on. Are you aware that you 9 10 or anyone in your organization may have done work for or on behalf of the South Carolina Solar 11 Business Alliance? Or the Southern Alliance -12 WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: 13 **COMMISSIONER BELSER:** - for Clean Energy? The 14 15 Southern Alliance for Clean Energy? WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: 16 Southern Alliance for Clean Energy are people that 17 We've never worked for them. But I do 18 I know. 19 know people there. But no, we have no business relationship with any of those organizations. 20 COMMISSIONER BELSER: The South Carolina 2.1 Coastal Conservation League? 22 WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: I don't 23 know that I know who that is. 2.4 COMMISSIONER BELSER: Okay. South Carolina 25

Energy Users Committee? It's a trade organization.
WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: No.
COMMISSIONER BELSER: South Carolina Office of
Regulatory Staff? It's a State agency.
WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: No,
we've not been engaged to work with them.
COMMISSIONER BELSER: Or the South Carolina
Department of Consumer Affairs, which is also a
State agency here in South Carolina?
WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: No.
COMMISSIONER BELSER: Okay. Are you aware of
any work that y'all may have done with any law firm
or lawyers that are practicing in South Carolina?
I can go through a long list, but I thought I'd
just ask generally at first.
WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: Yeah.
Well, I appreciate that, because I don't think we
have — we don't do work for law firms, so I don't
think we've done any for the ones in your State.
COMMISSIONER BELSER: And from what you stated
previously, y'all don't do work for utilities.
WITNESS/INTERVIEWEE MR. SEDANO _[via Skype] : That's
correct.
COMMISSIONER BELSER: Well, it sounds like
you're kind of new to the South Carolina arena. So

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y'all would not have any expertise on the power system in South Carolina.

WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: We pay close attention to the power systems around the United States, and some of the Commissioners who have been around for a little longer -Commissioners Whitfield, Howard — are people that I've known for quite some time and have had some occasion to talk with on many occasions. They may remember a time when the National Council on Electricity Policy organized a meeting on regional planning, in which I think nearly the entire Commission at that time came, and I was a featured speaker in that program. So I've had quite a lot of engagement with some in your group, and I think all of us at RAP, part of our mission is to understand how the power system is working throughout the United States, including in the southeastern United States.

So I'm not looking to take a test at the moment, but I think we have an understanding of generally what's been going on and generally have been following the V.C. Summer situation over many years. I should say that I was the State liaison officer for the USNRC when I was working for

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Vermont, and tend to follow nuclear issues. My first job was working in a nuclear power plant for Philadelphia Electric Company between 1979 and 1984, so I have an interest in nuclear power and I pay attention to the industry.

COMMISSIONER BELSER: Okay. Would any of that, having worked with NRC and paid attention to what was going on here in South Carolina, and people that you may have known from working in the nuclear side of things, would that or any other reason that you know of prevent you and RAP from serving as a fair, impartial, or independent consultant to this Commission and these issues in this docket?

WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: The facts lead where they lead. And so I have no -I would not attribute to anyone in our organization, really, either a pro- or anti-nuclear It's all about what it costs and how it works and does it fit the system.

COMMISSIONER BELSER: If y'all were selected as a consultant for the Commission, we have some fairly strict and specified ex parte communication prohibitions and statutes. And are y'all willing to abide by - as a consultant for the Commission,

you'd be required to abide by those. Would that 1 present any kind of problem? 2 3 WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: 4 No, we've done that before in other relationships with commissions. 5 **COMMISSIONER BELSER**: Are you aware of any 6 7 reason, however slight or small you might think, that would give this Commission concern over your 8 independence or to be hired in this capacity? 9 10 WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: I have nothing to offer on that. 11 COMMISSIONER BELSER: 12 Okay. WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: We're 13 pretty independent. 14 15 COMMISSIONER BELSER: Have you or anyone associated with RAP advocated or adopted positions 16 17 on the issues in these cases in other proceedings 18 which could impact your impartiality as it relates 19 to this proceeding? In other words, have y'all been wedded to a methodology or resulting results 20 21 that would prevent you from viewing any of the materials or issues in this docket independently? 22 WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: I don't 23 think so. As I said, we've published a lot on 2.4 25 these things. A lot of the things that we publish

1	actually talk about the different ways to
2	accomplish results. So we have a lot of, I think,
3	ideas about ways to be successful, and as I said,
4	we are concerned when practices that are
5	inconsistent with government objectives are being
6	suggested, because that just seems like a way for
7	the public to not get the results it's looking for.
8	But, no, as far as I can tell, I don't think
9	anything would fall into that category.
10	COMMISSIONER BELSER: Thank you, Commissioner
11	Sedano. I appreciate your responses.
12	WITNESS/INTERVIEWEE MR. SEDANO _[via Skype] : Thank
13	you. I appreciate your questions.
14	COMMISSIONER ERVIN: Commissioner Whitfield?
15	COMMISSIONER WHITFIELD: Thank you, Judge
16	Ervin.
17	Good morning, Rich.
18	WITNESS/INTERVIEWEE MR. SEDANO _[via Skype] : Swain,
19	it's good to see you. I hope you don't mind if I $-$
20	if we're familiar.
21	COMMISSIONER WHITFIELD: Well, we are, and I
22	wanted to go ahead and, as you've mentioned, get
23	that out there. And I apologize if I'm looking all
24	over the place, but you're on about six screens —
25	more than that — multiple screens in this place.

1	And so, if I'm not looking — if you don't think I'm
2	looking at you, I am.
3	WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: A77
4	right.
5	COMMISSIONER WHITFIELD: So, anyway, I'll try
6	to stay focused where you can see me. I want to
7	kind of — right off the bat — kind of follow up on
8	a question Commissioner Belser asked, and just for
9	clarification. I think I know the answer, but just
10	for clarification. She asked about working with
11	NRC, about would that compromise you or bias you in
12	any way, and I think if I heard you right, you were
13	actually the liaison for the Vermont Commission to
14	the NRC. You never actually worked for USNRC, did
15	you?
16	WITNESS/INTERVIEWEE MR. SEDANO _[via Skype] : That is
17	correct.
18	COMMISSIONER WHITFIELD: Okay. I thought I
19	heard that correctly. So, I didn't want that to
20	get misinterpreted that you had actually worked at
21	USNRC. You were just the —
22	WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: The
23	NRC -
24	COMMISSIONER WHITFIELD: — liaison —
25	WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: NRC has

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a structure that invites each state to designate someone to be its liaison and to communicate issues of importance from the states to the NRC, so that they can hear those things. And so, on behalf of Vermont, I was that person for many years.

COMMISSIONER WHITFIELD: Our ethics rules in South Carolina, and I'll get into that in a minute, would probably not — I do know that it wouldn't be someone from this Commission, because I'm not aware of it, but it would be someone from the Office of Regulatory Staff, which also now — and I know Commissioner Belser asked you about ORS and — South Carolina Office of Regulatory Staff — which also encompasses the South Carolina Energy Office. So I would think — I'm aware of a person that at one time was with the Energy Office that might've been that person, but it's not someone here from the Commission, here at the Public Service Commission. That said, Mr. Sedano, I want to go back to where some of the things you mentioned. We've known each other for a while. You know me. You mentioned Commissioner Howard. You also know Commissioner Randall and Commissioner Hamilton, as well, too.

COMMISSIONER WHITFIELD: And would that -1 knowing us and having presented, would that cause 2 3 you any kind of conflict or any reason why you think you might not be able to be, as the Act 4 5 requires, our independent consultant? WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: No, I 6 7 don't think so. It would only motivate us to provide our best advice and service to you. 8 COMMISSIONER WHITFIELD: Yes, sir. And going 9 10 specifically to, I think, the event you mentioned, I think it was Commissioner Fleming who had kind of 11 worked with Ms. Boyd, our Director, to involve a 12 lot of the Commissioners. I think that event 13 you're referring to was in Atlanta, was on smart 14 15 grid and distributed generation, and multiple southeastern states - or SEARUC member states -16 17 participated, if I remember right. Is that the 18 way - at the Georgia Tech campus, maybe. Is that 19 the way you remember it? 20 WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: Well, 21 that's a different one, but, yes, I was involved with that, too. Yes. 22 **COMMISSIONER WHITFIELD**: But fair to say that 23 you've had interaction not only with us, but just 2.4 about all commissioners in all 50 states, from all 25

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state commissions that are members of NARUC, all 50 states.

 $\label{eq:witness/interviewee} \textbf{MR. SEDANO}_{[via\ Skype]} \colon \ \ Yeah,\ I$ think that's right.

COMMISSIONER WHITFIELD: Okay. That said, what I want to mention to you, back to our ethics rules in South Carolina, we operate a little bit differently. And I was looking at your RAP — your Regulatory Assistance Project - information, some of the information you included for today. And you talk about Rhode Island's model and you talk about it being an ambitious reform or model for others. And it looks like that was great for Rhode Island. But one thing I do want to point out to you, that you may be aware of, maybe not — but let's just make sure — you involved in a collaborative way the Rhode Island Commission, the Rhode Island State Energy Office, and the Rhode Island Consumer Advocate. And you said you engaged in strategic energy planning for the State, something few other states do effectively — is what you list in here. I just want to make you aware here, in this role and you may already be, but just so there's no ambiguity here — we can't collaborate with our Office of Regulatory Staff which also, in the past,

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has represented consumers. Consumer Affairs, under the new Act, going forward, will have a new consumer affairs person at the table. But, also, the Energy Office is under ORS, as I've mentioned, and we can't go collaborate with them. In fact, we can't even do planning here at the South Carolina Commission; we are not to be involved with that. The State Energy Office here in South Carolina does that. And I just wanted to make sure we're clear on that.

WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: Well, let me react to that. I was involved in, really, I think, a creative collaborative effort that involved those three agencies. And, then, the utility that served Rhode Island — National Grid — filed a rate case. And at that point, we made a choice — a choice that we consulted with the other agencies about — to continue working with the commission behind the veil of the ex parte rules and to be their advisor during that rate case. So, we cut off conversation with the other agencies, in order to provide that advice to the Rhode Island Commission during the rate case.

So I think what we encourage is innovation and creative thinking but, when it's time to do the

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regulatory work, the regulator has its rules, and if we can be helpful inside the Commission at that point, that's where we would actually most rather be.

COMMISSIONER WHITFIELD: And that said, that's what we're looking for here is that Act 62 requires that we have an independent consultant advising us and basically kind of having a fiduciary relationship to us in this role, to the Commission, just as one of our own staff, technical advisors, would have with us, or one of our attorneys here. So that's exactly what we would need here. And I think you told Commissioner Belser very clearly that you have had — and Judge Ervin — that you've had no relationships or contacts or anything with our regulated utilities here, or regulated — or any of the parties in this proceeding, that Commissioner Belser asked you about, that would cause you to have a conflict of interest. That's correct, right?

WITNESS/INTERVIEWEE MR. SEDANO_[via Skype]: Yes.

COMMISSIONER WHITFIELD: And moving on ahead

from — let's move away from the independence part.

Moving into the technical part, one of the things

near the end you talk about thought leadership

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ahead of the curve. And you say teaching the duck to fly was your — I'm going to borrow your words. And that's, in some senses, the mandate that the Legislature, with Act 62, is sending us, to implement distributed generation. And they've removed the caps off of it. And the duck was born a few years ago maybe under Act 236, but now it's time — to borrow your words — to teach it to fly. And as we teach it to fly, I know you're saying you have the policy, but you might have to rely on some What we're getting into is we need to make it — in that theme of teaching it to fly, we need to take these avoided-cost methodologies and to put them in the real-world applications. And I had another discussion with a prior candidate about the PROMOD and the PROSYM models used by some utilities to calculate these — and these are very expensive systems. Do you have access to those systems or the people that you told Commissioner Belser you would consult with, do they have access to those expensive modeling systems?

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organizations and obviously vet them for the same 1 conflicts that you're concerned about. And so the 2 3 answer to that question is: maybe. I can't give 4 you a definitive answer at the moment. 5 **COMMISSIONER WHITFIELD**: And do you have any idea of a range of cost for either -6 7 WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: No. **COMMISSIONER WHITFIELD**: — those systems or 8 either for you to acquire the information, if you 9 10 had to consult with somebody else, what the range of costs might be to independently have access to 11 that data? 12 WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: 13 we're sitting here today, I have no idea. 14 15 COMMISSIONER WHITFIELD: Okay. And, lastly, I've said this before, but would you agree that, 16 17 including yourself, that there are a finite number - when I say "you" I'm talking about you and 18 19 your organization, as Commissioner Belser said -20 that you — would you agree that you and others, 21 that there are a finite number of experts that can do this task? 22 WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: 23 think it's a small group of people who appreciate 2.4 25 the range of both quantitative and qualitative

tasks that Act 62 has given you. And that is one reason why I think either a very large consulting firm or a confederation of smaller groups that piece together the elements and who can work together well are likely to be alternatives that you have. But the other thing I guess I would think is likely to be the case is that you're going to be looking for people outside of your region because your utilities are so big that there are likely to be a lot of conflicts, and many of the qualified people have perhaps worked for some of the advocates. So there is going to be, I think, a challenge in — there's going to be a limited number of people who are going to be able to do this. But I'm sure that there are people who, certainly, aside from us, would have the capacity to do this, but they might not be from around where you are.

COMMISSIONER WHITFIELD: We're running a little close on time, but lastly I want to possibly halfway answer a question that you asked to Commissioner Belser, and maybe, if you could, a quick response, if you have any to it. And, of course, you've included your background, and I'm somewhat familiar with it. But I noticed you had your bachelor's in engineering in — about a year

1	after PURPA. And a lot has changed since the 1978
2	PURPA Act. And I know you're tremendously familiar
3	with that. But as you fast-forward to now, a lot
4	has changed since then. And specifically, I think
5	you asked, kind of in a general nature to
6	Commissioner Belser, what more specifically are we
7	looking for. And I guess to maybe hit home a
8	little bit more of that exchange you had with her,
9	what we're looking for is consultants that can
10	accurately value the net-energy-metering
11	distributed-energy resources here in South
12	Carolina. And specifically needed is financial and
13	analytical experience dealing with avoided costs.
14	And just for historical purposes, I would tell you
15	that resources such as ancillary services,
16	transmission and distribution capacity, avoided ${\sf CO}_2$
17	emission cost, utility integration and
18	interconnection costs, admin costs, environmental
19	costs have historically been set to zero. So I
20	hope that helps you home in a little bit more
21	specifically what Act 62 is requiring.
22	WITNESS/INTERVIEWEE MR. SEDANO _[via Skype] : I think
23	what I've felt — this is something that animated my
24	work in Vermont in developing avoided costs — is
25	when you have factors that seem to impose costs and

1	you assume that they are zero, then you're
2	definitely wrong. So, if you — but the practice of
3	determining what those values should be is not
4	precise; it's subject to judgment. It is helpful
5	when there are some conventions that everyone can
6	agree to over time, so that the experts can do
7	their calculations and that there can be some
8	appreciation that accuracy is more important than
9	precision in these kinds of activities.
10	COMMISSIONER WHITFIELD: Let me kind of
11	rephrase that. Those costs I mentioned have
12	historically been set to zero. I'm not saying that
13	they were zero.
14	WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: Yeah.
15	COMMISSIONER WHITFIELD: But for purposes of
16	NEM and distributed generation resources, they've
17	been set to zero. But I certainly hear what you're
18	saying and appreciate your answer.
19	And unless you have anything further, Judge
20	Ervin, that's all I have of this candidate.
21	WITNESS/INTERVIEWEE MR. SEDANO _[via Skype] : Thank
22	you for your questions.
23	COMMISSIONER ERVIN: Thank you, Commissioner
24	Whitfield.
25	Any other questions?

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[No	respo	nse]	
Ms. Bo	yd,	can	you	ŗ

Ms. Boyd, can you provide a list of the parties to these three dockets, along with their attorneys of record, to the witness so that he can do a further conflicts check? We'd just like to get a letter from you for the record that you've run a conflicts check with all of your staff members, and verify in writing to Ms. Boyd, our Clerk, that the conflicts check came back clean, with no exceptions.

WITNESS/INTERVIEWEE MR. SEDANO_[via Skype]: Okay. We do routinely annually ask everybody who works at the at Regulatory Assistance Project for conflicts, and so we do have that.

COMMISSIONER ERVIN: Great.

 $\label{eq:without with the without with the without many most have anticipated this, and so we'll take that and answer it as quickly as we can. \\$

COMMISSIONER ERVIN: Great. Thank you, so much. We appreciate your testimony today and your participation in this process.

Ms. Boyd, if there's nothing further -

MS. BOYD: Yes, sir. I don't have anything else.

COMMISSIONER ERVIN: — we're going to take a

1	break until our next interview at —
2	MS. BOYD: At 1 o'clock.
3	COMMISSIONER ERVIN: - 1 o'clock.
4	MS. BOYD: Yes, sir.
5	COMMISSIONER ERVIN: Thank you.
6	WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: Okay.
7	COMMISSIONER BELSER: Thank you, Commissioner.
8	WITNESS/INTERVIEWEE MR. SEDANO[via Skype]: Thank
9	you. Have a good day.
10	[WHEREUPON, Witness/Interviewee Mr.
11	Sedano was excused, followed by a recess
12	from 12:35 to 1:00 p.m.]
13	Filings related to Sedano Interview:
14	Biographical Information Posted 8/7/2019 - see pgs 1-6 of PDF
15	8/13/2019 Conflict-of-Interest Letter - PSC to Mr. Sedano
16	<u>Letter regarding Conflicts Check Posted 8/16/2019</u>
17	
18	
19	
20	COMMISSIONER ERVIN: Welcome back, ladies and
21	gentlemen. We're now ready for our 1 o'clock p.m.
22	interview, and I believe we have with us Mr.
23	Chernick. Is that correct?
24	MR. $CHERNICK_{[via\ Skype]}$: That's correct.
25	COMMISSIONER ERVIN: All right, sir. Could

1	you give us your full name, please?
2	MR. CHERNICK _[via Skype] : My name is Paul Lee
3	Chernick.
4	COMMISSIONER ERVIN: Thank you. Madam Court
5	Reporter, would you swear the witness?
6	[Witness/Interviewee affirmed]
7	COMMISSIONER ERVIN: Mr. Chernick, thank you
8	for appearing this afternoon on behalf of Resource
9	Insight, Incorporated. I believe you're the
LO	President of that entity; is that correct?
L1	WITNESS/INTERVIEWEE MR. CHERNICK _[via Skype] : That's
L2	correct.
L3	COMMISSIONER ERVIN: And would you please give
L 4	us your relevant work background, experience, and
L5	an overview of your qualifications to serve as our
L 6	independent expert, if you're chosen?
L7	WITNESS/INTERVIEWEE MR. CHERNICK _[via Skype] : In
L8	terms of my work background —
L9	COMMISSIONER ERVIN: Yes, sir.
20	WITNESS/INTERVIEWEE MR. CHERNICK $[via\ Skype]$: — I
21	got a master's degree in technology and policy, in
22	1978; worked for the Massachusetts Attorney General
23	doing utility regulatory work for about two years;
24	then joined a small consulting firm for about five
25	years; and set up my own firm in 1986, which

continues to operate today. 1 I provided my qualifications, including a list 2 3 of the testimonies and presentations and reports 4 that I've done. There are some 350 pieces of 5 testimony, many of them on - a majority of them, I'd say — electric utility issues, and a couple of 6 7 dozen, I believe, on avoided costs, specifically. So, my qualifications are basically 40 years 8 of experience developing some of the methodologies 9 10 that are used widely today, and reviewing a large number of utility proposals and responding to them. 11 COMMISSIONER ERVIN: 12 Have you ever testified before the South Carolina Public Service 13 Commission? 14 15 WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: Yes, I believe I testified three times in the early 16 17 1990s, on behalf of the Consumer Advocate. 18 **COMMISSIONER ERVIN**: Have you testified more 19 recently or submitted prefiled testimony before the Commission? 20 21 WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: No, I didn't. 22 **COMMISSIONER ERVIN**: Could you give us some 23 insight about how many employees you have at 2.4 Resource Insight, Incorporated? 25

WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: 1 We have a staff of about seven. 2 3 **COMMISSIONER ERVIN:** And could you tell us 4 briefly what their background and qualifications 5 are, in terms of what they bring to the table? WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: My 6 7 partner - my de facto partner, anyway - is Jon Wallach. He's been doing this kind of work since 8 the 1980s, has also testified dozens of times on 9 10 utility planning and pricing. We have two master's -11 **COMMISSIONER ERVIN**: I think that — I think 12 Mr. Jonathan Wallach has testified in two dockets, 13 in 2018, before the Commission. Our staff alerted 14 15 me to the fact that he filed direct testimony and exhibits in Docket No. 2018-318-E, as well as 16 17 Docket No. 2018-319-E. So, were you aware of that? 18 WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: I'm 19 not sure exactly how aware of that I was. I knew that he was working on, I think, Duke cases. 20 And 21 I've lost track of whether those were North Carolina or South Carolina. But that certainly 22 sounds familiar, that he was -23 COMMISSIONER ERVIN: Yes. 2.4 WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: 25

did rate-design work, or cost-allocation work. 1 COMMISSIONER ERVIN: My recollection is that 2 3 those were base-facility-charges dockets, and I think we can verify that. But I interrupted you, 4 and I apologize. Go ahead and tell us about the 5 other staff members. 6 7 WITNESS/INTERVIEWEE MR. CHERNICK [via Skype]: just to be clear, I didn't think that the question 8 about whether I had testified in South Carolina 9 10 included whether anybody else in the firm had. COMMISSIONER ERVIN: 11 Right. WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: 12 My apologies if I -13 **COMMISSIONER ERVIN**: That's quite all right. 14 15 WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: - cut that short. 16 17 **COMMISSIONER ERVIN**: Let me — when we say "you" I think what we've been telling the other 18 19 interviewees is that that would include you, your employees, associates, partners, affiliates, 20 21 contractors, et cetera. So, it's a generic "you." But if you'll - you know, to the extent that you 22 know, we'd like for you to disclose it, because one 23 of the requirements of the Act is that we have an 2.4 25 independent expert. Have you seen the Act?

you receive a copy of the new Act? 1 WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: I 2 3 have. And I reviewed it a couple of times. 4 **COMMISSIONER ERVIN**: All right. So I'm sure 5 you noticed that independence is an important qualifier. 6 7 WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: Yes. **COMMISSIONER ERVIN**: And, so, do you think the 8 fact that Jonathan Wallach may have participated in 9 10 two prior dockets - do you think that would affect his ability to serve as an independent expert for 11 the Commission in these dockets? 12 WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: 13 Ι don't believe so. I think the subject matter was 14 15 different, and I'm not aware that his client in those proceedings are also involved in this 16 17 proceeding. But I can be corrected if I'm wrong. COMMISSIONER ERVIN: I believe some of them 18 19 My notes from Staff say that the intervenors that he testified for were the South Carolina 20 21 Coastal Conservation League, NAACP, and Upstate Forever. I think at least one of those is a 22 party — I believe Coastal Conservation League may 23 be a party in these dockets, so that's a potential 2.4 25 conflict. I just wanted to see what your thought

process was about whether or not that would affect his work in this case. Do you know whether — are any members of your staff currently working on or bidding on other projects with any of the parties in these dockets?

WITNESS/INTERVIEWEE MR. CHERNICK_[via Skype]: Not that I'm aware of. I would have to run that by Jon again, just to be sure, and I can do that after our call.

COMMISSIONER ERVIN: Great. I'm going to ask Ms. Boyd, like we have in the other interviews, to send you a complete list of the names of all the parties in these three dockets and the names of their attorneys of record, so that you can do a complete background check and report back in writing to Ms. Boyd your findings, just for the record, so we have that.

I apologize. I interrupted you, and you were still going through a list of staff members. So if you'd continue with that.

WITNESS/INTERVIEWEE MR. CHERNICK_[via Skype]: Yes. We have two associates who have master's degrees and various lengths of experience, who would be probably processing some of the information for Jon and me. And those are the senior staff, and then

we have people who do more data-gathering and manipulation work. And, in addition, assuming that it works okay with the Commission, if you decide to have me do the work, I might bring in some help from Synapse Energy Economics, just because there are a number of things you want to get done in a fairly short period of time.

COMMISSIONER ERVIN: Have you worked in the avoided-cost arena in the past? Have you testified before commissions as it relates to avoided costs?

WITNESS/INTERVIEWEE MR. CHERNICK_[via Skype]: Yes. I think the first time I did that was in 1985, before the Massachusetts Department of Public Utilities. And I believe there are about two dozen pieces of testimony in my qualifications that refer to avoided costs, either for non-utility generation or for energy efficiency and demand response. And that's in addition to the work that I've done on avoided costs that did not result in testimony, such as the regional New England avoided-cost studies, of which I've done five, I think, now.

COMMISSIONER ERVIN: All right. You are, of course, familiar with the Public Utility Regulatory Policies Act of 1978 and you're certainly — in reviewing your resume, you appear to understand the

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issues that are before us under the new Act. Is that a fair assessment?

WITNESS/INTERVIEWEE MR. CHERNICK_[via Skype]: Well, I certainly understand them at one level. Now, there's a deeper utility-specific and jurisdiction-specific level that I would have to become familiar with. You obviously have precedents and the utilities have particular planning approaches that I would need to understand in order to advise you.

commissioner ervin: And that leads me to my next question. Tell us what's your process and procedure that you would follow to independently derive recommendations and conclusions to this Commission regarding the recalculation of each utility's avoided cost, if you would.

WITNESS/INTERVIEWEE MR. CHERNICK_[via Skype]: Well, I think one place I would like to start, rather than pulling out a piece of paper as a blank sheet and trying to do all this from scratch, would be to look at what the utilities' positions are and ask them for the background and the supporting documentation for those positions and also ask other parties or refer to their previous filings to see what other information they brought forward, and then independently assess those positions both

1	from the utilities and other parties, and other
2	critiques or supporting information that I may find
3	on my own.
4	COMMISSIONER ERVIN: Fair enough. Is it fair
5	to say that you're familiar with the solar
6	integration cost studies across the country and the
7	quantification of integration services, generally?
8	WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: Yes,
9	in a general way. I wouldn't want to have a pop
10	quiz on every integration study.
11	COMMISSIONER ERVIN: You're familiar with the
12	general principles.
13	WITNESS/INTERVIEWEE MR. CHERNICK _[via Skype] : Yes.
14	COMMISSIONER ERVIN: And you're also familiar
15	with understanding of ancillary services
16	requirements and planning for and maintaining the
17	reliability of a complex transmission and
18	distribution system, generally?
19	WITNESS/INTERVIEWEE MR. CHERNICK _[via Skype] : Yes.
20	COMMISSIONER ERVIN: I'm going to turn the
21	questioning over to Commissioner Belser.
22	COMMISSIONER BELSER: Good afternoon. I'm
23	Florence Belser; I'm one of the Commissioners.
24	Thank you for agreeing to talk with us today.
25	Appreciate you doing that.

1	I've started my questioning earlier explaining
2	that, when I say "you" — or since I'm from South
3	Carolina, I may say y'all — that I'm talking about
4	a broader term. It would be not only you, but your
5	company and anybody you might bring in to help you.
6	You might have some people — I think you said you
7	had seven or so in-house, but I understand if
8	there — you mentioned Synapse Energy. You know, to
9	the extent you may know about any outside group or
10	entity that you might bring in, that you may have
11	to get back with us on some of that; you may not
12	have information on that. But the main thing is,
13	when I reference "you," I'm talking about you or
14	anybody that you might be working with, if you
15	don't mind. And I don't mean to be repetitive, but
16	I have been trying to ask the same questions of
17	each applicant, so that I can make sure that I'm
18	giving everybody the same shake, if you don't mind.
19	I'm going to just start off — have you had — I
20	think you indicated you've had the opportunity to
21	read through Act 62. Is that correct?
22	WITNESS/INTERVIEWEE MR. CHERNICK _[via Skype] : I
23	have.
24	COMMISSIONER BELSER: Okay. Because I'll have
25	some questions about that. Let's see. Well, let's

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just start with that. Do you have Act 62 available for you? If not, I'm going to read a section of it, if you don't mind.

 $\label{eq:wither_with_me} \textbf{WITNESS/INTERVIEWEE} \ \ \textbf{MR.} \ \ \textbf{CHERNICK}_{\texttt{[via Skype]}} \text{:} \quad \text{That's}$ fine with me.

COMMISSIONER BELSER: Okay. I'm actually in Section 1 of the Act, and it's the very first code section that is added, and it's the new Code Section 58-41-05. And this explains some of the charge - there's other in there - to the Commission, but this is, in my opinion, a fairly good synopsis of what we're supposed to be doing. And it states: The Commission is directed to address all renewable energy issues in a fair and balanced manner, considering the costs and benefits to all customers of all programs and tariffs that relate to renewable energy and energy storage, both as part of the utility's power system and as direct investments by customers for their own energy needs and renewable goals. The Commission is also directed to ensure that the revenue recovery, cost allocation, and rate design of utilities that it regulates are just and reasonable and properly reflect changes in the industry as a whole, the benefits of customer renewable energy, energy

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efficiency, and demand response, as well as any utility or State-specific impacts unique to South Carolina which are brought about by the consequences of this Act.

And my question to you is: How would you work with the directives the General Assembly has set forth in this Act — how would you work with these directives in your analysis and recommendations made to the Commission?

WITNESS/INTERVIEWEE MR. CHERNICK_[via Skype]: Well, to some extent, when I read this paragraph, it seems to me that the Legislature is saying, "Do the right thing." So it's not necessarily the case that specific approaches pop into my head, but the — one issue that I think is relevant is that the decision about pricing of services provided to and received from customers should be separate from those of revenue-recovery cost allocations and rate design other than the rate design specifically related to providing incentives for providing the services.

The first part of the problem is to figure out what you want as regulators of the State, in terms of having customers do — enter in providing, in this case, renewable energy services to themselves

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and to the grid. That's sort of the first sentence or so of that section. Then the questions arise as to, well, what do you do to make sure the utility is made whole, that the cost recovery isn't harming them for having done the right thing, for working with the Commission in bringing on distributed renewables, and that the cost allocation is fair, so that the classes that are getting benefits, which may be the specific reduction of their bill because they're reducing their load, but also would be the avoidance of system upgrades and purchases of new facilities — that goes to all the customers — so you want to make sure that the cost allocation is reasonably reflecting the way that the mix of benefits is distributed among classes. And then rate design within each class for how you recover whatever costs are flowing through - you want to take the same factors into account, that the services are going to be reducing energy and capacity costs, and those are the components in which you would naturally recover the charges.

COMMISSIONER BELSER: Under PURPA, states were given some discretion in implementing those requirements mandated by the federal law. In Act 62, or the South Carolina Energy Freedom Act,

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provides — is providing direction to this

Commission on avoided cost, but does leave some

discretion on the avoided-cost issues. If you're

selected as the consultant for these cases, how

would you envision your role with regard to the

avoided costs, compliant with PURPA and Act 62?

WITNESS/INTERVIEWEE MR. CHERNICK_[via Skype]: Well, I don't see PURPA as much of a constraint. states have implemented PURPA in a wide variety of ways, ranging from only spot-price — spot- — quite a mouthful - spot-price purchases, to fixed longterm contract prices, feed-in tariffs, and various kinds of RFP competitive procurement mechanisms. So I don't know that there's anything you would do with respect to setting avoided costs, that would meet the requirements of Act 62 that would be inconsistent with PURPA. PURPA is a broader tent; Act 62 is a little narrower, but still, I think, leaves a lot of discretion to the Commission about how you ultimately think about what is avoidable, where the utilities' costs come from, and what good is provided to the utility by distributed solar, in particular.

COMMISSIONER BELSER: Earlier, you made a statement and I kind of jotted it down, and I hope

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I did it correctly. But you reference that we obviously have precedent. And in the role of advising the Commission as a consultant under Act 62, of whether — do you see your advice or the Commission being constrained by prior precedent, or do you see your role as providing the best expert professional opinion that you can give to this Commission in 2019 versus decisions from years ago?

 $\label{eq:winds} \textbf{WITNESS/INTERVIEWEE} \ \ \textbf{MR.} \ \ \textbf{CHERNICK}_{\texttt{[via Skype]}} \text{:} \quad \text{The}$ latter.

COMMISSIONER BELSER: Okay.

WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: The one thing that I would add, though, is sometimes those precedents point out important issues that have been kicked back and forth within a jurisdiction and that should be addressed. And in some cases, the Commission might want to come down on the side of "Well, we've used 20 years for quite a while and that's a representative period, and while there are arguments for using longer and shorter periods, we'll stick with it because that's what we've been doing and everybody's familiar with it, and it's a good number. Maybe not the best, but it's good enough that it's not worth worrying about." So precedent can be important in that way,

and then precedent can also be important in terms 1 of the Commission saying, "In the past, we did 2 We're now in a different kind of situation. 3 We've rethought the issues, and we're going to do 4 something that's quite different." 5 **COMMISSIONER BELSER:** Have you, in your 6 7 professional experience, had any experiences 8 drafting purchased-power agreements. WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: 9 Ι have not drafted them. I've reviewed them. 10 some cases, there have been issues that created 11 some kind of burden for one party or another, that 12 I addressed as a technical matter. In general, the 13 drafting of contracts is a matter for the lawyers. 14 15 **COMMISSIONER BELSER**: Any experience in 16 drafting commitment-to-sell forms? And I'm using "you" in the broad sense, here: anybody in your 17 18 team. 19 WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: 20 would have to check with Synapse. I'm not aware of 2.1 anything that we've done squarely along those lines. 22 **COMMISSIONER BELSER**: Any experience in 23 drafting discovery requests, such as data requests, 2.4 interrogatories, requests to produce? 25

WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: Yes. 1 In those 350 cases, I've done discovery probably in 2 3 300 of them, or more. 4 **COMMISSIONER BELSER**: Any experience working 5 on drafting orders to assist in memorializing commission decisions on avoided cost? 6 7 WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: Not specifically on avoided cost, but I have worked 8 on — for commissions in other areas, in drafting 9 language for orders, including the District of 10 Columbia's original least-cost planning decision 11 and similar — other work in rate cases and related 12 matters for the Connecticut regulators and for the 13 Puerto Rico Energy Commission. 14 15 COMMISSIONER BELSER: I want to - and I think you've answered this, and I just want to be clear 16 17 on this. Could you explain to me again, do y'all -18 do you have in-house capabilities of the modeling 19 on avoided cost, or the methodologies, or is that something that you would bring in an outside entity 20 21 on? WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: 22 Well, it depends on what modeling is required. 23 Specifically for production cost modeling in which 2.4 25 you dispatch plants to meet load and determine what

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the marginal cost is, or what the avoided cost is from reducing load by some decrement, with a particular kind of load shape, that's the kind of thing that we usually rely on Synapse for. There's overhead involved in just licensing the model, learning to run the model, and we haven't bothered doing it. For other issues where the modeling can be done basically in spreadsheet, sometimes fairly fancy spreadsheet, we do that in-house.

COMMISSIONER BELSER: Thank you. I want to switch gears a little bit and talk about independence. We'll focus on that for a few minutes. I believe — and this is reflected in your

switch gears a little bit and talk about independence. We'll focus on that for a few minutes. I believe — and this is reflected in your resume and your CV — that, in 1991, you testified in a docket involving SCE&G. And I believe that is on page 26 of your resume, Item 100. It had to do with — well, can you tell us a little bit about what that was?

WITNESS/INTERVIEWEE MR. CHERNICK_[via Skype]: Yes. I believe that the central issue in all three of the cases that I testified on was SCE&G's relative neglect of energy efficiency as a resource.

commissioner Belser: Well, I believe only one was SCE&G. I think the other two were Duke cases, were they not? One of them is on page —

1	WITNESS/INTERVIEWEE MR. CHERNICK _[via Skype] : Oh,
2	yes, you're correct.
3	COMMISSIONER BELSER: One of them is on page
4	26, Item 102 —
5	WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: Yeah.
6	COMMISSIONER BELSER: — and it was Duke Power.
7	And then the other one is on page —
8	WITNESS/INTERVIEWEE MR. CHERNICK _[via Skype] : You're
9	right. There were two for Duke and one for SCE&G.
10	COMMISSIONER BELSER: Right. I think there
11	are two.
12	$\textbf{WITNESS/INTERVIEWEE} \ \ \textbf{MR.} \ \ \textbf{CHERNICK}_{\texttt{[via Skype]}} : \textbf{I}$
13	apologize.
14	COMMISSIONER BELSER: And then the one on page
15	25, Item 23 _[sic] , you were a witness and consultant
16	for the Department of Consumer Affairs in South
17	Carolina? All three of them, is that correct?
18	WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: Yes.
19	COMMISSIONER BELSER: Okay. Any — since 1992,
20	have you been involved with any other — you,
21	yourself — been involved with any other testimony
22	or docket in South Carolina? Just you; I'm not
23	talking about the one that was brought out earlier,
24	with Mr. Wallach.
25	$\textbf{WITNESS/INTERVIEWEE} \ \ \textbf{MR.} \ \ \textbf{CHERNICK}_{\texttt{[via Skype]}} \colon \textbf{I} \ \ \textbf{do}$

1	not believe that I've had any other involvement in	
2	South Carolina.	
3	COMMISSIONER BELSER: Okay. Do you know if —	
4	and now I'm going to use this in a broad sense. Do	
5	you know if you or anyone affiliated with your	
6	company has served as an advisor, consultant, or	
7	witness, or received compensation — and I'm going	
8	to go through a list of the stakeholders and	
9	parties here. Duke Energy or any of its	
10	subsidiaries?	
11	WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: No.	
12	COMMISSIONER BELSER: And that's not just the	
13	ones in South Carolina; that could be any of	
14	Duke's -	
15	WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: No,	
16	we've been involved in a number of proceedings	
17	relating to Duke, but never on behalf of Duke.	
18	COMMISSIONER BELSER: Okay. Dominion Energy	
19	or any of its subsidiaries?	
20	WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: Again,	
21	no, we've never worked for Dominion.	
22	COMMISSIONER BELSER: Okay. The former SCANA	
23	Corporation that used to be the owner of —	
24	WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: SCE&G,	
25	yes. I've never worked for them, nor —	

1	COMMISSIONER BELSER: So, have you ever —	
2	WITNESS/INTERVIEWEE MR. CHERNICK _[via Skype] : — has	
3	anybody in the group.	
4	COMMISSIONER BELSER: Have you ever testified	
5	on behalf or worked on behalf of any utility?	
6	WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: Yes.	
7	More often, gas utilities on avoided costs and	
8	least-cost planning. And in a few cases, for	
9	electric utilities, either municipal utilities or,	
LO	in some cases, utilities that were in the process	
L1	of some settlement or negotiation with other	
L2	parties, with consumer advocates and so on, in	
L3	which case I was testifying on behalf of a group.	
L 4	COMMISSIONER BELSER: Okay. But in those	
L5	instances that you just referenced, your testimony	
L 6	was on — was the group that the utility belonged	
L7	to; is that correct?	
L8	WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: Yes,	
L9	I'm — I'm not able to recall any case in which I	
20	testified on behalf of a utility by itself.	
21	COMMISSIONER BELSER: Okay.	
22	WITNESS/INTERVIEWEE MR. CHERNICK _[via Skype] : An	
23	electric utility. I have, for gas utilities. Oh,	
24	I'm sorry; I did forget one. There was a situation	
25	in which we have helped to develop an energy	

1	efficiency program in Maryland for the Potomac	
2	Electric Power Company. The same program was	
3	challenged in the District of Columbia, and I	
4	testified on behalf of PEPCO in the DC proceeding.	
5	The original work was done on behalf of the	
6	Maryland People's Counsel, but I actually wound up	
7	testifying in the other jurisdiction to defend our	
8	program, and I was working for the utility there.	
9	COMMISSIONER BELSER: Okay. And I'm going	
10	back to listing the entities involved in these	
11	dockets, to see if you've ever served as an	
12	advisor, consultant, or witness, or received	
13	compensation from these groups or parties. The	
14	South Carolina Solar Business Alliance?	
15	WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: No.	
16	COMMISSIONER BELSER: Johnson Development	
17	Associates.	
18	$\textbf{WITNESS/INTERVIEWEE} \ \ \textbf{MR}. \ \ \textbf{CHERNICK}_{\texttt{[via Skype]}}: \ \textbf{No}.$	
19	Never heard of them.	
20	COMMISSIONER BELSER: Walmart Incorporated.	
21	You've probably heard of them.	
22	WITNESS/INTERVIEWEE MR. CHERNICK _[via Skype] : Yes,	
23	I have heard of them. And, in fact, I was brought	
24	in as a subsidiary consultant on a project that	
25	Walmart was doing, related to energy efficiency,	

and perhaps solar - I forget whether solar was 1 actually involved — where they were looking for 2 3 some advice on how to approach rate-design issues, 4 I believe, in a number of states generically. And we did a couple of memos for them, and then they 5 had whatever they thought they were going to get 6 7 from us and the project ended. That was probably 15 years ago, maybe 20. 8 **COMMISSIONER BELSER**: Do you have any 9 recollection if any of that related to South 10 Carolina? 11 WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: 12 don't believe so. I think it was more midsouth 13 kind of area. They may have been dealing with 14 15 Entergy and perhaps Southern Company. COMMISSIONER BELSER: Another party: Nucor 16 17 Corporation. And in South Carolina, it's Nucor Steel South Carolina. 18 19 WITNESS/INTERVIEWEE MR. CHERNICK_[via Skype]: No, I've never worked for them. 20 They've been a party 21 in a couple of cases in which I was representing some other party, but I've never worked for them. 22 COMMISSIONER BELSER: South Carolina Coastal 23 Conservation League? And that was what you were 2.4 asked about earlier. 25

WITNESS/INTERVIEWEE MR. CHERNICK_[via Skype]: Yes. 1 I have not worked for them, and apparently my 2 partner worked for a coalition of environmental and 3 4 consumer groups that included the League, but that was, as far as I know, our only connection. 5 **COMMISSIONER BELSER**: All right. Southern 6 7 Alliance for Clean Energy. WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: 8 know that I've talked to them a couple of times 9 10 about possibly assisting them with some matter. don't think that they've actually ever hired us to 11 do anything. I think I gave them my good ideas and 12 they went off and did it on their own. 13 COMMISSIONER BELSER: Okay. And then the 14 15 South Carolina Energy Users Committee? trade association of some large industrials here in 16 South Carolina. 17 18 WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: I've never worked for them. 19 COMMISSIONER BELSER: Have you or any of your 20 21 partners, employees, affiliates ever served as an employee, officer, or director on any of those 22 parties that I just listed? The parties to this 23 2.4 case. WITNESS/INTERVIEWEE MR. CHERNICK [via Skvpe1: 25 No.

COMMISSIONER BELSER: Okay. Do you have processes in place or how could you ensure the independence of your company in working for the Commission on these matters? We're trying to make sure that our consultants are independent of all the parties. How can you assure us of that?

witness/interviewee MR. Chernick_[via Skype]: Well, if, by "independent," you mean not being paid or in some other way incentivized to do something other than what is right and appropriate and in the interests of our client, we don't have those kinds of relationships. We don't take side payments from parties to influence our work in other cases. I don't think anybody's ever suggested anything along those lines.

COMMISSIONER BELSER: Well, and in Act 62, in the section talking about the consultant, which is — what — 58-41-20? I get lost in these paragraphs. (I) says the qualified, independent third party's duty will be to the Commission.

That's what I'm looking for assurance of, is that we have this expert's loyalty and forthrightness to the Commission. Not me as a Commissioner, not any other individual, not to any of the stakeholders, but to the process and to the

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Meeting #19-24 Commission. 1 WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: 2 3 Indicating. COMMISSIONER BELSER: We're not hearing you. 4 5 WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: Sorry about that. I keep muting, to reduce the amount of 6 7 feedback. That's how we understand our role, that we are 8 working for a party and that, consistent with 9 10 ethical requirements and perhaps a broader public interest, we're there to serve our client. Now, I 11 12 won't testify to something that's not true. won't put something in the report that I think is 13 misleading, even if it's something that would 14 15 please a commissioner or the Commission as a whole. But in terms of, "This is the policy approach we 16 17 want to take," then that's the approach that I would take and I would say, "Consistent with these 18 19 guidelines, this is the best way to do this calculation," or, "this is a reasonable approach," 20 21 or whatever the specific question is.

COMMISSIONER BELSER: Do you have any reason, however small, slight, or just minimal, to believe that you cannot serve as a fair, impartial, and independent consultant for this Commission in these

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dockets?

WITNESS/INTERVIEWEE MR. CHERNICK_[via Skype]: Well, if you accept my description of what I think of as being a fair, impartial, independent expert, then I have no reservations about it. If, by "independent," you meant — and I don't think you mean this, but if you meant someone that comes in with a mind that is completely blank, that erases all prior understandings and concepts of how to approach an issue, that's not me. I do come in with 40 years of experience here.

COMMISSIONER BELSER: Let me ask you this — WITNESS/INTERVIEWEE MR. CHERNICK_[via Skype]: But in terms of respecting the relationship to the client, I think we can do that without any reservation.

COMMISSIONER BELSER: Based on your 40 years of experience, as you just said, would — and I think that in any — to gain the status of expert, you have to rely on your life experiences and your work experiences. But would any position that you took in another proceeding on a methodology, or a result, would that — could, could, a position that you had formulated in an earlier proceeding close your mind or prevent you from providing an

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independent analysis in these proceedings, based on the record that is being developed in these cases?

WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: That's a very deep question, you know? That experience includes having learned that certain approaches tend to work well, tend to be fair and productive, and therefore obviously I come in with some pre-— "preconceptions" may be too strong, but some leanings toward liking some approaches and being dubious about other approaches. But if a situation arises where some combination of state law and the specific facts indicate that a practice that I have testified against elsewhere is appropriate now and here, I have no problem supporting it.

COMMISSIONER BELSER: Or conversely, if something that you testified for in another proceeding might not be the best choice in this proceeding, would that — would you be hesitant to say differently than — or —

WITNESS/INTERVIEWEE MR. CHERNICK_[via Skype]: And that's even less of a problem, because I have supported different approaches in different places, depending upon the resources that are available, the timing issues, the cost structure, and so on. So it's very easy to say, "I liked this approach

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here, but now we're over here and it's 10 years later, and the technologies have changed, so I like this approach better." That's very easy. The hard one is to get around the experience that a particular approach or calculation or assumption is inappropriate and having found that a number of times, and then find in a different situation that, oh, maybe it does make sense here. That can take a little work to get your mind turned around. I've done that in the past, and I can do it when I need to. **COMMISSIONER BELSER**: Do you know of any impediment, however small or slight, that would prevent you and your team from providing an independent report and being able to advise this Commission in — excuse me — an impartial report and advise this Commission in an impartial manner?

witness/interviewee Mr. Chernick[via Skype]: I can't think of anything that I would consider that would be a barrier to being impartial. Some people may say, because I've taken positions in the past, because I've worked in some places to encourage removing barriers to solar development, that therefore I can't be impartial because I've said nice things about solar someplace else. If that's

your standard for impartiality, I don't meet it. 1 But in terms of looking at the facts and doing what 2 3 is consistent with my charge for my client, I can't 4 think of anything. 5 **COMMISSIONER BELSER**: Thank you for your responses to my questions. That's all I have right 6 7 now, but thank you very much. COMMISSIONER ERVIN: Thank you. 8 Commissioner Whitfield. 9 COMMISSIONER WHITFIELD: Thank you. 10 11 you, Judge Ervin. Good afternoon, Mr. Chernick. 12 WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: Good 13 afternoon. 14 15 COMMISSIONER WHITFIELD: I don't think you and I have met, but I do recall your associate Mr. 16 17 Jonathan Wallach's testimony and exhibits in recent 18 proceedings, Dockets 2018-318-E and 2018-319-E. 19 And, obviously, he was testifying on behalf of some 20 of the intervenors in that docket — multiple 21 intervenors — some of which Judge Ervin and Commissioner Belser have called by name. But I 22 would - other than that, I don't think that you and 23 I have met. And, again, I'm aware of who Mr. 2.4 Wallach is. But I think Commissioner Belser went 25

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pretty hard down this road, but let's just — and you did a good job answering it. Let's —

WITNESS/INTERVIEWEE MR. CHERNICK [via Skype]: Well, she did a good job asking the questions.

COMMISSIONER WHITFIELD: She did. She did. Let's go right to the heart of the point, right where she was, because we've got some staff that have expressed some concern. And you pretty much said in your last answer to her that you've testified to make solar more — solar generation more plentiful, if you will. But specifically, to address some concerns there and some concerns even that our Staff has had about - and to the utilities, they're concerned that the utilities might question your impartiality. And you went down that path. But let me, if you could, address any concerns that we might have here -Commissioners and/or Commission Staff — or that the utilities or any parties might have about your impartiality, as Commissioner Belser said, if you might've had a position that might be contradictory, if you will, to one you've had in That charge to us in Act 62 is to find the past. an independent consultant. And I'd like to hear just a tad more. You've gone pretty far down that

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path, but let's, specifically, maybe, address some concerns the parties that come before us, such as the utilities, and Commissioners and Commission

WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: think I like Commissioner Belser's questions better because they were more clearly defined. You sort of ask me to address a rather broad issue.

COMMISSIONER WHITFIELD: Well, let's narrow it down and say other parties — not the parties that your partner, Mr. Wallach, represented, but other parties in proceedings before us, concerns that they might have. In other words, adversary, if you will - I hate to use that word - to the parties that Mr. Wallach was representing. Does that narrow it down a little bit more for you?

WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: Ιt It does. And I'm thinking about how to address that. Certainly, a utility might say, "This is somebody who has opposed something that another utility wanted to do, that was adverse to the interests of people who wanted to install solar equipment on their homes, and, therefore," I'm not impartial. And if you accept that as precluding impartiality, then I guess you've got me.

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But the issue is not a simple one of solar good versus utilities' supply good. Let me give you an example. In an El Paso Electric case, I testified in opposition to a plan to split out electric - excuse me - solar customers from the general residential customer group and assess them distribution costs based on the non-coincident peak of the solar customers, which occurred in the evening, long after the peak demand for the residential customers as a whole, or for the system as a whole. And I said that's not cost-based; it's imposing costs on these customers simply because they have solar. They're located next to customers who don't have solar. The load on their transformer, the load on the feeder coming down the street to them and their neighbors, that will be determined mostly by non-solar customers, and it will occur in the afternoon when the solar is very And picking out an evening and saying, useful. "Oh, you people use more in the evening, so we're going to charge you as if that were what's driving the cost of the distribution system," that would be wrong.

Now, if the situation in South Carolina is that the system is peaking in the winter, and that

the distribution system is being sized for the 1 winter and that it's winter evening and so the 2 3 solar is not helping at all, then the answer may be 4 very different. If you give me the same facts, I'm likely to come up with the same conclusion, because 5 it was right then and it's right now. If you give 6 7 me different facts — and South Carolina is different than West Texas — then I may come up with 8 different conclusions. Does that help? 9 COMMISSIONER WHITFIELD: 10 Well, that's 11 certainly a specific answer. And certainly we are 12 different with West Texas being in ERCOT and us being in the Eastern Interconnect. Certainly, 13 that's a specific answer. What you're saying is, 14 15 just because you've sided one way in one circumstance, in another area, doesn't mean you 16 17 couldn't, in your mind, come here and be our 18 independent, impartial consultant. 19 WITNESS/INTERVIEWEE MR. CHERNICK_[via Skype]: That's 20 what I'm saying. 21 **COMMISSIONER WHITFIELD**: And along those lines, Mr. Chernick, just to kind of bore you for a 22 second with our specific ethics rules, we have a 23 law here called Act 175, which prohibits us from 2.4 25 talking with any - has a lot of ethics rules in it,

but one of the specific ones is that we can be advised by our technical and advisory staff and our legal staff, but we can't communicate with anybody else, including the South Carolina Office of Regulatory Staff. And we're unable to communicate So my point to you is if you become our consultant, you're going to have a fiduciary relationship to us and not be able to discuss with anybody — any former clients or any other certainly, any of the parties in the case, but it really needs to be, you know, advice to us, which at some point, some of your information will be made public, but you're also going to be advising us just as if one of our technical advisors here at the Commission were doing, or one of our attorneys. So I just want you to be aware of that, and do you think you would have a problem abiding by any of

WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: No, I'm familiar with ex parte rules, and I have a lot of experience with not talking to people about things that I'm not supposed to talk to them about. In your specific situation. I think it may be useful for your consultant, whoever that is -

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whatever way is legal under your system, perhaps by written questions that are made public, to get the views of other parties to try and flesh out the record and not just be reliant on the materials filed by the utility and whatever else the consultant can pull in, in the time available.

COMMISSIONER WHITFIELD: Okay.

WITNESS/INTERVIEWEE MR. CHERNICK [via Skype]: I understand that you can't just sit down and have a chat with a party to the case.

COMMISSIONER WHITFIELD: Yes, sir. Thank you for that, Mr. Chernick. About two more questions, Mr. Chernick, and we'll wrap it up. You obviously have a wealth of experience, years of experience, going way back to the days of PURPA. And I certainly - you've got a very thick list of work you've done over the years. I certainly respect that, certainly can tell that you have the background and knowledge, and so forth, and education. But you mentioned something earlier and you seem to have a good handle on the RTO states up in other regions of the country, and you, of course, very clearly understand that we still have vertically integrated utilities and assigned territories down here. While Act 62 has been

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passed here in South Carolina. There's been some talk here among some legislators — maybe a senator, and some legislators — about ultimately looking at changing the regulatory model in South Carolina. But until that time, or when or if it does, you mentioned in an exchange with Commissioner Belser about making the utility whole, if you will, for the avoided cost, when you were having that discussion with her. And some states down in the SEARUC region who are not in an RTO but yet have something called formulaic ratemaking — which we don't have here in South Carolina — how would you suggest, under the current regulatory model we have now in South Carolina, making that utility whole, or incentivizing them, I guess, was the answer you gave her, incentivizing the utility to move in that direction — because it is moving in the direction of them not producing more electrons. How would you - what specific or do you have a specific recommendation or way to incentivize the utility under the current regulatory model that we are under here in South Carolina now, at present?

WITNESS/INTERVIEWEE MR. CHERNICK_[via Skype]: Well, first of all, let me note that I haven't been involved in a South Carolina rate proceeding in a

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long time, if ever, so the details of the regulatory process there are maybe a little different than — well, I'm sure they're different than other jurisdictions, because they all vary. But the issue I was addressing earlier was one along the lines of, let's suppose the solar is valuable to the utility and the other ratepayers in the long term, or even the medium term, even five to ten years, because it reduces the need to build out the distribution system and transmission and new generation. COMMISSIONER WHITFIELD: Certainly. WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: But in the current rate-case cycle, the utility may not be saving a lot of money from those things, because it's not necessarily building right now for those situations, so it may not be incurring costs.

be saving a lot of money from those things, because it's not necessarily building right now for those situations, so it may not be incurring costs. It may not be saving money that it could put in its pocket to make up for the amount of a rate discount or a bill discount that the solar producer is getting.

So, in that case, in a conventional rate-case process, the Commission could set up a deferral accounting system in which the utility's shortfall due to the solar is rolled over and they're allowed

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to collect that in the next rate case from the customers who will benefit because a new peaking plant won't have to be built, because a new transmission line won't be built, and so on.

COMMISSIONER WHITFIELD: Well, thank you for your answer, Mr. Chernick. And lastly, I'm going to ask this to you, just in fairness, because I've asked the other candidates for this consulting position the same question. Some of the — it's come up twice already, and I'm going to bring it up with you, that the utilities use expensive analytical systems, called either PROMOD or PROSYM, to run this data. And we've heard from intervenors, some of which are possibly even the same - potentially, even some of the same intervenors that your partner, Mr. Wallach, represented, that they weren't able to - and check me on that. I can't - I'm just glancing, but I do think there might be some of those in common. some of those intervenors have complained that they can't afford the expensive analytical systems such as those models to run. Do you have capabilities of providing us that data, since you would be our independent consultant? Or do you have someone you can get it from? And, if so, do you know what

either those systems would cost, or a range of what 1 it would cost for you to obtain that information 2 3 independently? 4 WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: 5 would have to get back to you on the cost. you'd like, I can pull that information together. 6 COMMISSIONER WHITFIELD: Certainly, we'd -7 WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: 8 We 9 can -COMMISSIONER WHITFIELD: We'd -10 WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: - get -11 **COMMISSIONER WHITFIELD**: We've given the other 12 parties, I think, opportunity to get back with us, 13 to Ms. Boyd, on what they think the cost would be. 14 15 So I think Ms. Boyd is kind of looking for followup responses on what those costs would be. 16 17 just wondered what your resources — what you may 18 currently have access to now. 19 WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: Yes, we've worked with a couple of people. We worked 20 21 with Synapse to run models like that. We've also worked with a fellow called George Evans, from 22 Michigan, a former commission staffer, I believe, 23 who runs a production costing model, where that's 2.4 25 been necessary.

1	The preferred outcome or process, I would
2	think, would be for the utility to run calculations
3	at the Commission's request. In a proceeding with
4	many parties, you can't necessarily expect the
5	utility to run 10 runs for each of 10 intervenors,
6	but it often works where there's a limited number
7	of runs that need to be done, to just have the
8	utility do the calculations and provide the input
9	and output to data so that what they've assumed can
10	be reviewed. And that is often less expensive and
11	avoids the problems of trying to figure out whether
12	your modeling assumptions were consistent between
13	the utility runs and the other parties' runs.
14	COMMISSIONER WHITFIELD: Like an odometer in a
15	car, we've got to assume it's correct.
16	WITNESS/INTERVIEWEE MR. CHERNICK _[via Skype] : Well,
17	in this case, you also want to —
18	COMMISSIONER WHITFIELD: You'd be providing
19	data —
20	WITNESS/INTERVIEWEE MR. CHERNICK _[via Skype] : —
21	look behind the dashboard —
22	COMMISSIONER WHITFIELD: Right, for the 10 —
23	WITNESS/INTERVIEWEE MR. CHERNICK _[via Skype] : — for
24	both —
25	COMMISSIONER WHITFIELD: — or multiple models.

WITNESS/INTERVIEWEE MR. CHERNICK_[via Skype]: 1 The computer model will do what it's told. And if you 2 3 have somebody who can read the input and read the output and say, "Yes, this is what it was told, and 4 this is what it did," and the utility is willing to 5 work with the Commission on running some 6 7 alternative cases — perhaps the issue is future fuel prices or the availability of purchased power 8 or a weather load shape, or whatever it is that the 9 10 argument is about - that can just be a more 11 efficient way of getting the answer. COMMISSIONER WHITFIELD: Well, thank you for 12 your answer, Mr. Chernick. And, Mr. Chernick, 13 thank you for participating today. And that's all 14 15 I have. I'm going to turn it back to Judge Ervin. **COMMISSIONER ERVIN**: Thank you, Commissioner 16 17 Whitfield. 18 Do you have other questions? 19 **COMMISSIONER BELSER**: I do, if you don't mind. COMMISSIONER ERVIN: All right. 20 COMMISSIONER BELSER: 21 I'm back. Sorry. I'm just trying to ask the same questions of the 22 consultant candidates, so that we can all have 23 something to — and I realized I failed to ask you a 2.4 couple of them. But just briefly, do you have any 25

experience either modeling or studying the power 1 system in South Carolina, specifically? 2 3 WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: No. 4 COMMISSIONER BELSER: Okay. Would lack of 5 familiarity with the power system in South Carolina be a hindrance to the work that we need done 6 7 pursuant to Act 62? WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: 8 doubt that, very much. If there are important 9 10 issues that the utility wants to bring to the Commission's attention, I'm sure that the utilities 11 will do so. So, we'll be starting with a great 12 deal of local expertise on the specific issues that 13 need to be addressed. 14 15 COMMISSIONER BELSER: Okay. What methodologies have you used for calculation of 16 17 avoided cost? I know that there are a number of 18 different ones out there, but can you name the ones 19 that you've used? WITNESS/INTERVIEWEE MR. CHERNICK $[via\ Skype]$: Well, 20 21 I mean, we've looked at it in terms of an equivalent utility-owned resource. If the utility 22 were to build its own solar and then the 23 transmission and distribution to get the power to 2.4 25 customers, and losing power along the way in line

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losses, what would the cost be? And that's one benchmark. Another way of doing it is to look at the dispatch of the energy system and compare the costs of running more plants and building more plants, keeping older plants on-line that maybe you could shut down if not for some peaking conditions, compare those costs to what you're paying or the discount that you're giving for customers who own their own generation.

COMMISSIONER BELSER: Okay. Do you ever conduct an independent calculation of the utility's avoided costs? Or do you primarily take the methodology advanced by the utility and review the avoided costs in the context of the utility's method?

WITNESS/INTERVIEWEE MR. CHERNICK_[via Skype]: Well, with Synapse and other parties, we have developed avoided costs for New England, basically, from scratch, and taken into account a wide range of considerations.

In many cases, I start with what's available: The utility has an approach which may be pretty reasonable as an approach, but may have some specific flaws in terms of assumptions about the value of off-system sales or the availability of

1	low-cost purchased power or fuel costs for some
2	category of plant, and so on. And so, the easiest
3	way to get to a reasonable result may be to start
4	with what the utility has done, accept the parts
5	that are pretty reasonable, and correct the
6	remainder — which may require using a different
7	approach than the utility did for that part of the
8	cost, or may just be a little tweak into one of
9	their inputs that's unrealistic.
10	COMMISSIONER BELSER: And I think you may have
11	answered this question in response to Commissioner
12	Ervin, but I do want to make sure that I got it.
13	Have you done production-cost modeling?
14	WITNESS/INTERVIEWEE MR. CHERNICK _[via Skype] : We do
15	not do it in-house. As I said in an earlier
16	question, we have a couple of people that we bring
17	in to do the runs for us when we need them.
18	COMMISSIONER BELSER: But, basically, all
19	modeling to bring in somebody else to do that; is
20	that correct?
21	WITNESS/INTERVIEWEE MR. CHERNICK _[via Skype] : The
22	big computer models, yes.
23	COMMISSIONER BELSER: Okay. Thank you very
24	much. Appreciate your time today.
25	Thank you, Mr. Chairman.

1	COMMISSIONER ERVIN: Thank you, Commissioner
2	Belser.
3	Is Commissioner Williams with us this
4	afternoon? I just wanted to give him an
5	opportunity. I know he's —
6	COMMISSIONER BELSER: He couldn't.
7	MS. BOYD: He was not able —
8	COMMISSIONER ERVIN: He was not available —
9	MS. BOYD: — to join us this afternoon.
10	COMMISSIONER ERVIN: — so, he'll have the
11	transcript available to review at a later date.
12	MS. BOYD: Yes, sir.
13	COMMISSIONER ERVIN: All right. One of the
14	things that I'd like to follow up with you on is,
15	do you have experience or members of your staff
16	have experience in submitting data requests to
17	utilities? Because that's going to be an important
18	part of the role for our independent expert.
19	WITNESS/INTERVIEWEE MR. CHERNICK _[via Skype] : Yes.
20	I can't even estimate for you how many thousands of
21	data requests I've filed.
22	COMMISSIONER ERVIN: So you're quite familiar
23	with that process.
24	WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: Yes.
25	And I'm familiar with the fact that the process may

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vary a little bit from one jurisdiction to the 1 other. 2 3 **COMMISSIONER ERVIN:** But in order to get a 4 good outcome, you've got to have accurate and 5 detailed facts, so that's always an important part of the process. 6 7 WITNESS/INTERVIEWEE MR. CHERNICK_[via Skype]: You need to first have a really good understanding 8 of what the utility has done, and in this situation 9 10 we're starting with the utility's position, and you need to accept other data that the utility may have 11 12 access to that is not readily available otherwise, to flesh out alternative approaches. 13 **COMMISSIONER ERVIN:** Now, I suppose you're 14 15 aware of the fact that we have a fairly tight time schedule to complete this work. And if you were 16 17 selected as our independent expert, could you 18 assure us that you could staff up and be ready to 19 proceed as soon as, I'd say, September? Early If not before? 20 September? 21 WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: Yes well, we're not going to be able to do anything on 22 this until early September. My daughter is getting 23

married over Labor Day, so I'll be out for a little

But by September 9th - I think is the

Monday after Labor Day - I think we'd be ready to 1 hit the ground running. 2 3 **COMMISSIONER ERVIN**: And as I'm sure you're 4 aware, under the statute, our expert will 5 ultimately have to review the entire record — all the prefiled testimony, as well as the testimony 6 7 and evidence and exhibits that come in on these three dockets — and, ultimately, render their own 8 independent expert opinion about what your 9 recommendation would be as it relates to the 10 Commission's charge and our ultimate final order. 11 So would you or members of your staff be available 12 to monitor the testimony and evidence, review the 13 prefiled testimony and exhibits that are entered in 14 15 the record, and also to be available to testify and 16 be subject to cross-examination by the parties at 17 the conclusion of the record, to guide us so that we can make an informed decision about these 18 matters? 19 WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: 20 21 [Indicating.] COMMISSIONER BELSER: Can't hear you. 22 WITNESS/INTERVIEWEE MR. CHERNICK_[via Skype]: 23 There were a lot of parts to that question. The last 2.4 25 part was about appearing to testify and be cross-

examined, and that's what I do. 1 COMMISSIONER ERVIN: Sure. 2 3 WITNESS/INTERVIEWEE MR. CHERNICK[via Skype]: So 4 that's certainly no problem. I was a little bit concerned when I thought 5 you were suggesting that your lead consultant - if 6 7 that might be me — would have to read every word of all of the evidence that was filed. If I can rely 8 upon my associates to filter some of that for me, 9 10 then certainly that's feasible. There just isn't a lot of time during this project for one person to 11 sit down and read all of that material and do all 12 the work that needs to be done. 13 COMMISSIONER ERVIN: Understood. I've asked 14 15 our Clerk, Ms. Boyd, to send a list of all the parties involved in these dockets and their 16 17 attorneys of record to those who are being interviewed, to do a final conflicts check. 18 Would 19 you be so kind as to do that and return your response in writing, to Ms. Boyd, once you've 20 21 completed your check? WITNESS/INTERVIEWEE MR. CHERNICK_[via Skype]: 22 0kay. **COMMISSIONER ERVIN**: We're looking for any 23 potential conflicts of interest. 2.4 WITNESS/INTERVIEWEE MR. CHERNICK [via Skype1: 25

1	[Nodding head.]
2	COMMISSIONER ERVIN: Ms. Boyd, if you'd send
3	that along —
4	MS. BOYD: Yes, sir.
5	COMMISSIONER ERVIN: — we'd greatly appreciate
6	it. Thank you.
7	Any other questions?
8	COMMISSIONER WHITFIELD: Judge Ervin, I'd just
9	like to ask — remind him to include the cost that
10	he said he would submit —
11	COMMISSIONER ERVIN: Right.
12	COMMISSIONER WHITFIELD: — to Ms. Boyd, as
13	well, too.
14	COMMISSIONER ERVIN: We appreciate your time
15	today, and your interest in applying for this
16	position, and you've been patient with our
17	questions. We're appreciative of that.
18	[WHEREUPON, Witness/Interviewee Mr.
19	Chernick was excused.]
20	Filings related to Chernick Interview:
21	Biographical Information Posted 8/7/2019 - see pgs 8-65 of PDF
22	8/13/2019 Conflict-of-Interest Letter - PSC to Mr. Chernick
23	Letter regarding Conflicts Review Posted 8/14/2019
24	
25	

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2	COMMISSIONER ERVIN: And with that, we will
3	adjourn these proceedings. Our next set of
4	interviews will be scheduled for next Monday,
5	August —
6	MS. BOYD: August 19th.
7	COMMISSIONER ERVIN: — 19th.
8	MS. BOYD: Yes, sir. We'll start again at 10
9	o'clock.
10	COMMISSIONER ERVIN: At 10 o'clock. And
11	you're going to post the names of the —
12	MS. BOYD: We already have.
13	COMMISSIONER ERVIN: Yes.
14	MS. BOYD: Yes, sir, we have.
15	COMMISSIONER ERVIN: Very good. You've
16	already invited the parties to submit questions
17	through their attorneys, and we've already received
18	some, I $-$
19	MS. BOYD: We already —
20	COMMISSIONER ERVIN: — believe, that have been
21	submitted?
22	MS. BOYD: — have. Actually, one of them, at
23	least, referenced one of the interviewees for next
24	Monday.
25	COMMISSIONER ERVIN: Next -

1	MS. BOYD: Yes.
2	COMMISSIONER ERVIN: — Monday, so they're
3	aware of —
4	MS. BOYD: We served them.
5	COMMISSIONER ERVIN: — our schedule.
6	MS. BOYD: Yes, sir.
7	COMMISSIONER ERVIN: Very good. All right.
8	MS. BOYD: And, Mr. Chairman, if I might add,
9	that list might include some other individuals. We
10	just informed everybody as of —
11	COMMISSIONER ERVIN: That's right.
12	MS. BOYD: — that date and time.
13	COMMISSIONER ERVIN: I understand. Subject to
14	being expanded —
15	MS. BOYD: Yes, sir.
16	COMMISSIONER ERVIN: — as needed. All right.
17	If there's nothing further, we have an allowable ex
18	parte hearing, I believe, Wednesday morning at 10?
19	MS. BOYD: I think that's still scheduled,
20	yes, sir.
21	COMMISSIONER ERVIN: All right.
22	MS. BOYD: Wednesday morning, that's correct.
23	COMMISSIONER ERVIN: And then a business
24	meeting at 2 o'clock —
25	MS. BOYD: At 2 p.m.

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                    COMMISSIONER ERVIN: — on Wednesday.
                    MS. BOYD: Yes, sir.
 2
                    COMMISSIONER ERVIN: So if nothing further, we
 3
               stand adjourned. Thank you.
 4
                           [WHEREUPON, at 2:22 p.m., the
 5
                         proceedings in the above-entitled matter
 6
 7
                         were adjourned.]
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CERTIFICATE

I, Jo Elizabeth M. Wheat, CVR-CM/M|GNSC, do hereby certify that the foregoing is, to the best of my skill and ability, a true and correct transcript of all the proceedings had and interviewees' statements under oath taken during a Commission Meeting held by THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA in Columbia, South Carolina, including videoconference/ Skype and telephonic connection(s), on August 12, 2019, according to my verbatim record of same;

That the witnesses/interviewees appearing during said proceedings were sworn or affirmed to state the truth, the whole truth, and nothing but the truth;

IN WITNESS WHEREOF, I have hereunto set this $\underline{21}^{\text{st}}$ day of $\underline{\text{August}}$, 2019.

Jo Elizabeth M. Wheat, CVR-CM/M|GNSC Court Reporter

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