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BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

COLUMBIA, SOUTH CAROLINA

HEARING #16-11554 OCTOBER 4, 2016 10:30 A.M.

DOCKET NO. 2016-223-E:

SOUTH CAROLINA ELECTRIC & GAS COMPANY – *Petition of South Carolina Electric & Gas Company for Updates and Revisions to Schedules Related to the Construction of a Nuclear Base Load Generation Facility at Jenkinsville, South Carolina*

TRANSCRIPT OF TESTIMONY AND PROCEEDINGS **VOLUME 1 OF 4**

HEARING BEFORE: Swain E. WHITFIELD, CHAIRMAN; Comer H. 'Randy' RANDALL, VICE CHAIRMAN; and COMMISSIONERS John E. 'Butch' HOWARD, Elliott F. ELAM, Jr., Elizabeth B. 'Lib' FLEMING, Nikiya M. 'Nikki' HALL, and G. O'Neal HAMILTON

ADVISOR TO COMMISSION: F. David Butler, Esq.
Senior Counsel

STAFF: Joseph Melchers, General Counsel; James Spearman, Ph.D., Executive Assistant to Commissioners; David W. Stark, III, Esq., Legal Staff; Philip Riley, Doug Pratt, Lynn Ballentine, and Tom Ellison, Advisory Staff; Jo Elizabeth M. Wheat, CVR-CM/M-GNSC, Court Reporter; and William O. Richardson, Deborah Easterling, Hope Adams, Calvin Woods, and Randy Erskine, Hearing Room Assistants

APPEARANCES:

K. CHAD BURGESS, ESQUIRE, MATTHEW W. GISSENDANNER, ESQUIRE, MITCHELL WILLOUGHBY, ESQUIRE, and BELTON T. ZEIGLER, ESQUIRE, representing SOUTH CAROLINA ELECTRIC & GAS COMPANY, **PETITIONER**

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APPEARANCES (Cont'g):

SCOTT ELLIOTT, ESQUIRE, representing SOUTH CAROLINA ENERGY USERS COMMITTEE, **INTERVENOR**

ROBERT GUILD, ESQUIRE, representing SIERRA CLUB, **INTERVENOR**

FRANK R. ELLERBE, III, ESQUIRE, and ***JOHN H. TIENCKEN, JR., ESQUIRE,*** representing CENTRAL ELECTRIC POWER COOPERATIVE and THE ELECTRIC COOPERATIVES OF SOUTH CAROLINA, **INTERVENORS**

J. BLANDING HOLMAN, IV, ESQUIRE, and ***GUDRUN THOMPSON, ESQUIRE,*** representing SOUTH CAROLINA COASTAL CONSERVATION LEAGUE, **INTERVENOR**

FRANK KNAPP, JR., appearing *pro se*, **INTERVENOR**

SANDRA WRIGHT, appearing *pro se*, **INTERVENOR**

JEFFREY M. NELSON, ESQUIRE, and SHANNON BOWYER HUDSON, ESQUIRE, representing the **SOUTH CAROLINA OFFICE OF REGULATORY STAFF**

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1 corrected number -223-E, and we see that her filing
2 fee has been paid. So at this time, we will admit
3 Ms. Thompson *pro hac vice*. And do you want to
4 enter this in as an exhibit also, for the record?
5 **MR. HOLMAN**: Yes, Mr. Chairman.
6 **CHAIRMAN WHITFIELD**: We'll enter that as
7 Exhibit No. 4.
8 [WHEREUPON, Exhibit No. 4 was marked and
9 received in evidence.]
10 **MR. HOLMAN**: Thank you, very much.
11 **CHAIRMAN WHITFIELD**: All right. Thank you.
12 **MR. HOLMAN**: I appreciate the indulgence.
13 [Witness affirmed]
14 THEREUPON came,
15 **K E V I N B . M A R S H ,**
16 called as a witness on behalf of the Petitioner, South
17 Carolina Electric & Gas Company, who, having been first duly
18 affirmed, was examined and testified as follows:
19 **DIRECT EXAMINATION**
20 **BY MR. BURGESS**:
21 **Q** Mr. Marsh, would you please state your full name, for
22 the record?
23 **A** My name is Kevin B. Marsh.
24 **Q** And by whom are you employed and in what capacity?
25 **A** I'm employed by SCANA Corporation. I'm Chairman and

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1 CEO.
2 **Q** Have you prepared or caused to be prepared under your
3 direct supervision and prefiled in this docket 39 pages
4 of direct testimony?
5 **A** Thirty-six or thirty-nine. Maybe 39 [indicating]. Yes,
6 sir, that's correct.
7 **Q** And are there any changes or corrections required of
8 your testimony?
9 **A** I have no changes.
10 **Q** If I asked you all the questions contained in your
11 prefiled direct testimony, would your answers be the
12 same?
13 **A** Yes, they would.
14 **MR. BURGESS**: Mr. Chairman, at this time, we
15 would move into the record of evidence the prefiled
16 direct testimony of Kevin Marsh, as if given orally
17 from the stand.
18 **CHAIRMAN WHITFIELD**: Mr. Marsh's prefiled
19 direct testimony will be entered into the record as
20 if given orally from the stand.
21 [See pgs 43-81]
22 **BY MR. BURGESS:**
23 **Q** Mr. Marsh, have you prepared a summary of your direct
24 testimony?
25 **A** Yes, I have.

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1 **Q** Would you please deliver that, at this time?
2 **A** I will.
3 Good morning, Chairman Whitfield and members of the
4 Commission. In September of 2015, Westinghouse and its
5 consortium partner, Chicago Bridge & Iron, or CB&I, came
6 to us to say that CB&I wanted to exit the new nuclear
7 construction business. Westinghouse told us that it is
8 actively pursuing sales of additional AP1000 units.
9 Success in this project is therefore key to its business
10 plan globally. For that reason, Westinghouse was
11 willing to release CB&I, take full contractual
12 responsibility for this project, and hire the Fluor
13 Company to be its on-site construction subcontractor.
14 Given our company's very positive history with Fluor,
15 this was welcome news.
16 The proposed restructuring also required SCE&G and
17 Santee Cooper to release CB&I from its corporate
18 guarantee for the project. This gave us a unique
19 opportunity to renegotiate important terms of the EPC
20 contract. Through these negotiations, SCE&G was able to
21 obtain from Westinghouse a number of very valuable
22 changes to the EPC contract.
23 One: Under the amendment, Westinghouse is subject
24 to liquidated damages that are approximately four times
25 larger than what existed at the time and that are tied

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1 to current completion dates for the units or to the
2 deadline for qualifying for the federal production tax
3 credits. Those credits are estimated to be worth
4 approximately $2.2 billion to our customers.
5 Two: The amendment resolved all but a small number
6 of the existing payment disputes with the consortium on
7 very reasonable terms, as Mr. Byrne will testify.
8 Three: The amendment eliminated calendar-based
9 progress payments to Westinghouse, going forward.
10 Future payments will be based entirely on demonstrated
11 construction progress.
12 Four: The amendment eliminated the opportunity for
13 the parties to sue each other during construction, and
14 created a dispute resolution board to hear future claims
15 economically and efficiently.
16 Five: The amendment provides the EPC contract terms
17 related to change in law and other matters to limit
18 Westinghouse's right to request future change orders.
19 Six: SCE&G also obtained from Westinghouse the
20 option, subject to future change orders, to transfer all
21 but a limited amount of remaining EPC costs to the
22 fixed-price cost category. A fixed cost of $3.345
23 billion covers EPC invoices after June 30, 2015. This
24 reflects a cost increase of approximately $505.5
25 million, compared to the costs approved in the prior

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1 Commission order. On June 30, 2016, with Santee
2 Cooper's authorization, we executed the fixed-price
3 option, subject to Commission approval here.
4 The amendment also sets new guarantees of
5 substantial completion dates for the units as of August
6 31, 2019, and 2020. This is a delay of approximately
7 two and a half months for each unit from the schedule
8 previously presented to the Commission.
9 Before you today is a request for approval of an
10 updated construction schedule and capital-cost schedule
11 that reflect these changes. In addition, the new
12 schedules also reflect 11 individual change orders
13 negotiated with Westinghouse, and adjustments and
14 owner's costs associated principally with the schedule
15 changes and additional oversight of the project. These
16 schedules also reflect the fact that, by changing the
17 guaranteed substantial completion dates in the EPC
18 contract, the credit previously reflected for liquidated
19 damage to be paid by Westinghouse has been reversed.
20 In sum, the current anticipated capital cost of the
21 project is increased by $1.361 billion in future
22 dollars, compared to the original anticipated cost of
23 the project approved in Docket 2008-196-E. This is an
24 increase since 2008 of approximately 21 percent.
25 The cost associated with each of these items is

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1 shown here — and I have Chart B, which should be up on
2 the screen.
3 [Reference: Presentation Slide Marsh 1]
4 — which is a summary of the cost adjustments. The
5 costs of the EPC contract include an amendment cost of
6 $137.5 million, the additional costs associated with the
7 fixed-price option of $505.5 million, a reversal of the
8 liquidated damages reduction that was in the last case
9 as we set new guaranteed substantial completion dates of
10 $85.5 million, the costs associated with the 11 change
11 orders I mentioned earlier of $52.5 million, which
12 brings the total EPC cost changes to $781.1 million.
13 The change in owner's costs I discussed earlier is
14 $20.8 million, which brings the total request for the
15 EPC and owner's costs to $801.9 million.
16 Added to that, some escalation of $2.3 million and
17 associated costs of allowance for funds used during
18 construction, AFUDC, depicted here as $42.4 million,
19 which brings the increase in gross construction costs in
20 current dollars to $846.6 million.
21 SCE&G remains fully committed to successfully
22 completing this project and to the value it will provide
23 customers over its useful life. The units represent
24 2234 megawatts of efficient and non-emitting base-load
25 generation that will serve the people of South Carolina

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for 60 years or more. With the units in service, SCE&G projects it will have reduced its 2021 carbon emissions by 54 percent, compared to the 2005 levels.

Solar and renewable energy resources and energy efficiency will play an increasingly important role in SCE&G's generation mix going forward. SCE&G was an active participant in drafting and passing the South Carolina Distributed Energy Resources Act. We are well on the way to full achievement of the legislatively established DER goals, and those goals are fully reflected in all of our capacity and generation forecasts. The same is true of the Commission-approved energy efficiency goals established in SCE&G's demand-side management program. However, renewable resources and energy efficiency cannot displace the need for reliable, dispatchable base-load generation that the units represent. The new units will make a decisive contribution to the ability of SCE&G and the State to comply with future goals for reducing CO_2 emissions.

The units also represent valuable diversification away from overreliance on fossil fuels. In 2021, we estimate that fossil-fuel generation will represent only 39 percent of our energy production, down from 75 percent in 2015. Sixty percent of the energy serving SCE&G's customers will come from non-emitting sources.

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1 This change is primarily due to the new units. Through
2 DER, DSM, and the construction of these units, South
3 Carolina is effectively integrating its environmental
4 and generation strategy to create a balanced generation
5 portfolio for the long term. As Dr. Lynch will testify,
6 completing the units remains the lowest-cost alternative
7 for meeting the needs of SCE&G's customers for base-load
8 generating capacity.
9 SCE&G is asking the Commission to approve the
10 updated cost forecast and construction schedule for the
11 units, as presented in the Petition, and to rule that
12 the exercise of the fixed-price option is reasonable and
13 prudent, and approve it as such.
14 In addition, SCE&G requests that the Commission
15 find that SCE&G's management and development of the
16 project continues to be reasonable and prudent in all
17 respects. I'm actively involved in overseeing this
18 project and testify that the adjustments presented here
19 are reasonable, prudent, and fully justified under the
20 standards of the Base Load Review Act.
21 That concludes my summary.
22 **MR. BURGESS**: Thank you, Mr. Marsh.
23 [PURSUANT TO PREVIOUS INSTRUCTION, THE
24 PREFILED DIRECT TESTIMONY OF KEVIN B.
25 MARSH FOLLOWS AT PGS 43-81]

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DIRECT TESTIMONY

OF

KEVIN B. MARSH

ON BEHALF OF

SOUTH CAROLINA ELECTRIC & GAS COMPANY

DOCKET NO. 2016-223-E

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND POSITION.

A. My name is Kevin Marsh and my business address is 220 Operation Way, Cayce, South Carolina. I am the Chairman and Chief Executive Officer of SCANA Corporation ("SCANA") and South Carolina Electric & Gas Company ("SCE&G" or the "Company").

Q. DESCRIBE YOUR EDUCATIONAL BACKGROUND AND BUSINESS EXPERIENCE.

A. I am a graduate, magna cum laude, of the University of Georgia, with a Bachelor of Business Administration degree with a major in accounting. Prior to joining SCE&G, I was employed by the public accounting firm of Deloitte, Haskins & Sells, now known as Deloitte & Touche, L.L.P. I joined SCE&G in 1984 and, since that time, have served as Controller, Vice President of Corporate Planning, Vice President of Finance, and Treasurer. From 1996 to 2006, I served as Senior Vice President and Chief Financial Officer ("CFO") of SCE&G and SCANA. From 2001-2003, while serving as CFO of SCE&G and SCANA, I also served as

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President and Chief Operating Officer of PSNC Energy, a SCANA subsidiary, in North Carolina. In May 2006, I was named President and Chief Operating Officer of SCE&G. In early 2011, I was elected President and Chief Operating Officer of SCANA, and I became Chairman and Chief Executive Officer of SCANA on December 1, 2011.

Q. HAVE YOU EVER TESTIFIED BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA ("COMMISSION")?

A. Yes. I have testified in a number of different proceedings.

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

A. In the Petition, the Company requests that the Commission approve an updated construction schedule and schedule of forecasted capital costs for the project to construct V.C. Summer Nuclear Units 2 and 3 (the "Units"). Those schedules are based on the October 27, 2015 Amendment (the "Amendment") to the Engineering, Procurement and Construction Agreement (the "EPC Contract") under which the Units are being built. My testimony explains the unique commercial opportunity that led to the negotiation of that Amendment and certain key terms that we were able to secure from Westinghouse Electric Company, LLC ("Westinghouse") at that time. I also support the request contained in the Petition that the Commission approve the exercise of the option granted in the Amendment to transfer nearly all the remaining scopes of work to be done under the EPC Contract to the Fixed Price category as that term is used in the EPC Contract. I also

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discuss the value of the Units to SCE&G's customers and to its plan for creating a balanced generation portfolio to supply its customers' electric demands for the coming years.

Q. WHAT OTHER WITNESSES ARE PRESENTING DIRECT TESTIMONY ON BEHALF OF THE COMPANY?

A. The other witnesses presenting direct testimony on behalf of the Company are Mr. Stephen A. Byrne, Mr. Jimmy E. Addison, Mr. W. Keller Kissam, Dr. Joseph M. Lynch, and Mr. Kevin R. Kochems.

1. Mr. Byrne is the President for Generation and Transmission and Chief Operating Officer of SCE&G. His testimony reviews the current status of the construction of the Units. He presents the updated construction schedule that incorporates the new Guaranteed Substantial Completion Dates ("GSCDs") for the Units and analyses of the key provision of the Amendment. His testimony also discusses the transition from Chicago Bridge & Iron ("CB&I") to Fluor Corporation ("Fluor") as construction manager for the project. Mr. Byrne further testifies concerning the most significant change orders that are incorporated in the updated cost schedules for the Units as well as the changes in Owner's costs associated with the Amendment.

2. Mr. Addison is Executive Vice President and Chief Financial Officer for SCANA and SCE&G. He will testify concerning the reaction of the financial markets to the project and to the Amendment, SCE&G's experience in financing the

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Units and how this proceeding fits within the structure of the Base Load Review Act ("BLRA").

3. Mr. Kissam is President, Retail Operations for SCE&G. Mr. Kissam will provide an update on the construction of transmission facilities needed to integrate the Units onto SCE&G's grid and to deliver the power from them safely and reliably to customers.

4. Dr. Lynch is Manager of Resource Planning at SCANA. He will testify concerning two studies. One is a sensitivity study showing that under the great majority of foreseeable circumstances, exercising the option to transfer nearly all the remaining scopes of work under the EPC Contract to the Fixed Price cost category will reduce the cost of the project to SCE&G's customers and its partner, Santee Cooper. The second study updates previous studies showing that even considering historically low natural gas prices, completing the Units remains the lowest cost option for meeting the future generation needs of SCE&G's customers.

5. Mr. Kochems is Manager of Nuclear Financial Administration at SCANA. He sponsors the current capital cost schedule for the project and presents accounting, budgeting and forecasting information supporting the reasonableness and prudency of the adjustments in cost forecasts. Mr. Kochems also testifies in further detail concerning change orders contained in the current cost forecasts and the key drivers of the changes in the Owner's cost forecast.

All Company witnesses testify in support of the reasonableness and prudency of the updated construction schedule and the related schedule of capital costs it

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represents. From my knowledge of the project and my perspective as SCE&G's Chief Executive Officer, I can affirmatively testify, as I have testified in prior proceedings, that SCE&G is performing its role as project owner in a reasonable, prudent, and cost-effective manner. The other witnesses are providing similar testimony about the project from their particular areas of expertise.

Q. PLEASE PROVIDE AN OVERVIEW OF THE REGULATORY HISTORY OF THE PROJECT.

A. In 2005, SCE&G began to evaluate alternatives to meet its customers' need for additional base load capacity in the coming years. In this evaluation, the Company took account of its aging fleet of coal-fired units, the volatility in global fossil-fuel markets, and the increasingly stringent environmental regulations being imposed on fossil-fuel generation. In its evaluation, the Company sought proposals from three suppliers of nuclear generation units. The evaluation of all alternatives resulted in the Company signing an EPC Contract on May 23, 2008, after two and one-half years of negotiations. The EPC Contract was with a consortium (the "Consortium") comprising Westinghouse and the Shaw Group, which was subsequently acquired by CB&I.

On May 30, 2008, the Company filed a Combined Application under the BLRA seeking review by the Commission and the South Carolina Office of Regulatory Staff ("ORS") of the prudency of the project and the reasonableness of the EPC Contract. The cost schedule presented to the Commission in 2008 also included a reasonable forecast of owner's contingency for the project. SCE&G's

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share of the total anticipated cost was $6.3 billion in future dollars.[1] In December 2008, the Commission held nearly three weeks of hearings and took evidence from 22 expert witnesses about the project, the contractors, the EPC Contract and risks of construction.

Q. WHAT WAS THE RESULT OF THOSE PROCEEDINGS?

A. On March 2, 2009, the Commission issued Order No. 2009-104(A) approving the prudency of the project and the schedules presented by the Company. The South Carolina Supreme Court reviewed the Commission's determinations and ruled that "based on the overwhelming amount of evidence in the record, the Commission's determination that SCE&G considered all forms of viable energy generation, and concluded that nuclear energy was the least costly alternative source, is supported by substantial evidence." *Friends of Earth v. Pub. Serv. Comm'n*, 387 S.C. 360, 369, 692 S.E.2d 910, 915 (2010). In a related case, *S.C. Energy Users Comm. v. S.C. Pub. Serv. Comm'n*, 388 S.C. 486, 697 S.E.2d 587 (2010), the Court ruled that costs which were not identified and itemized to specific expense items—specifically, owner's contingency costs—could not be included in the Commission-approved cost schedule for the Units. In denying contingencies, the Court recognized that the BLRA allows the Company to return to the Commission to seek approval of updates in cost and construction schedules as the Company is doing here.

[1] Unless otherwise specified, all cost figures in this testimony are stated in 2007 dollars and reflect SCE&G's share of the cost of the Units.

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Q. PLEASE DESCRIBE THE COST AND SCHEDULE UPDATES SINCE ORDER NO. 2009-104(A) WAS ISSUED.

A. Since 2009, SCE&G has appeared before the Commission four times to update the cost and construction schedules for the Units.

1. In 2009, the Commission updated the construction schedule to reflect a site-specific integrated construction schedule for the project which the Consortium had recently completed. The 2009 update changed the timing of cash flows for the project, and did not change un-escalated costs in 2007 dollars. However, due to changes in escalation, the total forecasted cost for the Units in future dollars increased from $6.3 billion to $6.8 billion.
2. A 2010 update removed un-itemized owner's contingency from the cost schedule in response to the decision in *S.C. Energy Users Comm. v. S.C. Pub. Serv. Comm'n, supra*. The Company also identified approximately $174 million in costs that previously would have been covered by the owner's contingency. The approved cost of the project dropped from $6.8 billion to $5.8 billion in future dollars.
3. In 2012, the Commission updated the capital cost forecasts and construction schedule. The cost forecasts were based on a settlement between SCE&G and the Consortium for cost increases associated with:
    a. The delay in the Combined Operating License ("COL") issued by the Nuclear Regulatory Commission (the "NRC");

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b. Westinghouse's redesign of the AP1000 Shield Building;

c. The redesign by the Consortium of certain structural modules to be used in the Units; and

d. The discovery of unanticipated rock conditions in the Unit 2 Nuclear Island ("NI") foundation area.

The Commission also updated the anticipated cost schedules to reflect more detailed operations and maintenance planning; new safety standards issued after the Fukushima event; several specific EPC Contract change orders and other matters. The anticipated cost for the Units, however, remained relatively unchanged due to an off-setting decline in escalation rates. The South Carolina Supreme Court affirmed the resulting order in all respects. *S.C. Energy Users Comm. v. S.C. Elec. & Gas*, 410 S.C. 348, 764 S.E. 2d 913 (2014).

4. In 2015, the Commission updated the construction and cost schedules to reflect new completion dates for the Units of June 19, 2019, and June 16, 2020, and an updated construction cost estimate of $6.8 billion in future dollars. No party appealed this order.

Chart A, below, summarizes the history of these adjustments.

[Chart A begins on the following page]

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CHART A

Forecast Item	Order No. 2009-104(A)	Order No. 2010-12	Order No. 2011-345	Order No. 2012-884	Order No. 2015-661	Proposed Dkt. No. 2016-223-E
Gross Construction (future dollars)	$6.313	$6.875	$5.787	$5.755	$6.827	$7.674
Difference from Order No. 2009-104(A)	--	$0.562	(-$0.526)	(-$0.558)	$0.514	$1.361

Q. PLEASE DESCRIBE THE ELEMENTS OF THE INCREASE IN THE CAPITAL COST FORECAST AND CONSTRUCTION SCHEDULE FOR THE UNITS THAT ARE PRESENTED IN THE PETITION.

A. The changes proposed in the Petition fall into four principal categories:

a. Changes in construction schedule and costs associated with the Amendment and with exercise of the option to transfer nearly all remaining scopes of work to the Fixed Price cost category under the EPC Contract;

b. Updated Owner's costs associated with new GSCDs for the Units, certain Unit 2 and 3 switchyard costs and other changes principally associated with the changes in the project due to the Amendment; and

c. Costs associated with eleven change orders that were not resolved through the Amendment.

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These cost forecasts also reflect the reversal of the liquidated damages credits that were included in the prior capital cost schedule approved by Order No. 2015-661. The Amendment substitutes a new schedule of liquidated damages that are tied to the new GSCDs.

Chart B shows the breakdown of the changes in capital cost that are reflected in the Petition:

CHART B

	SUMMARY OF COST ADJUSTMENTS ($000,000)	
	EPC Contract Cost	
1	Amendment	137.5
2	Fixed Price option	505.5
3	Liquidated Damages (LDs) (Reverse Credit)	85.5
4	Change Orders	52.5
5	**Total EPC Cost Changes**	**781.1**
	Owner's Costs	
6	Principally Associated with Amendment	20.8
7	**Total Request (EPC and Owner's Costs)**	**801.9**
8	Escalation	2.3
9	AFUDC	42.4
10	**Increase in Gross Construction Cost (Current $)**	**846.6**

Note: Totals may not add due to rounding

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Q. HOW DOES THE CURRENT ANTICIPATED COST OF THE PROJECT COMPARE TO THE ORIGINAL ANTICIPATED COST OF THE PROJECT?

A. As shown in Chart A, the current anticipated capital cost of the project has increased by $1.361 billion in future dollars compared to the original anticipated cost of the project approved in Docket 2008-196-E.

THE 2015 EPC CONTRACT AMENDMENT

Q. PLEASE DESCRIBE THE EVENTS LEADING UP TO THE SIGNING OF THE AMENDMENT TO THE EPC CONTRACT.

A. Over the last several years, SCE&G and its partner, Santee Cooper, have put increasing pressure on the Consortium to improve construction efficiencies and correct supply chain problems particularly as related to submodule fabrication and fabrication of other components. Initially, we sought to increase pressure on the Consortium through techniques such as increased Quality Assurance and Quality Control (QA/QC) staffing and heightened levels of QA/QC inspections and audits on-site and at key suppliers' locations worldwide. SCE&G posted full-time QA/QC inspectors at the most important suppliers' off-site facilities. We conducted regular oversight meetings with the Consortium. We regularly and very emphatically escalated issues of concern to senior levels within the Consortium and followed up on those issues. We were supported in this effort by our partner, Santee Cooper,

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and Southern Nuclear Company ("SNC") which is constructing two AP1000 units at its Vogtle site in Georgia.

However, in the years leading up to the Amendment negotiations, we became increasingly frustrated with the results the Consortium was achieving. In July 2014, we began to withhold large payments for calendar-based EPC payments where we did not believe sufficient progress had been made to support the amount of the required payments. We also returned invoices unpaid where they reflected additional costs caused by delay or other inefficiency (like additional storage and maintenance cost for equipment stored on site).

Furthermore, under the EPC Contract, SCE&G and Santee Cooper were required to pay actual prices for Craft Labor and supporting indirect labor (*i.e.*, on-site labor to support direct craft workers) and associated materials and supplies. As the project progressed, we became very concerned with poor labor productivity and poor efficiency ratios for indirect labor costs. In June 2015, we began re-computing invoices for these expenses as if the project had met projected productivity and efficiency factors on which earlier project budgets had been based. We disputed the amounts that exceeded the recomputed invoices based on the assertion that the failure to meet the initial projections constituted a failure to use "Good Industry Practices" as required by the EPC Contract. The Consortium countered that the additional costs were the inevitable result of the first-of-a-kind nature of the Units, the lack of a mature nuclear supply chain for new construction at the start of the project, and the cost of building nuclear units under the new NRC regulatory

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structure which requires strict adherence to the letter of pre-approved design documents, and formal license amendment requests to justify even minor deviations. The Consortium asserted its right to payment on these grounds. We nonetheless held our position.

In our last proceeding before this Commission, we committed to you that we would continue to negotiate with the Consortium to reduce these costs and to resolve these matters. After the July 2015 BLRA update hearing, we continued our efforts to negotiate a resolution with the Consortium. At that time, it became increasingly apparent that disagreements between Westinghouse and CB&I were impeding our attempts to negotiate a settlement with them jointly. In our discussions, we sensed a distinct lack of cooperation and agreement between the Consortium partners. It became obvious to us that there were commercial disputes between those two companies that were causing relationships to deteriorate. But because the Consortium documents are confidential to us, we did not have a window into those disputes. However, it was clear that the Consortium was not unified in addressing the challenges facing the project.

Outside of our direct negotiations with the Consortium, it became clear that the Consortium partners were in dispute about key matters, such as who was responsible to pay for the schedule mitigation plans of certain subcontractors and who would pay the subcontractors' costs for making late-in-the-process design changes in certain components and submodules. These disputes were threatening efforts to maintain and improve the project schedule.

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During the first week of September 2015, Westinghouse and CB&I requested a meeting with us and Santee Cooper. At the meeting, CB&I communicated to us its desire to exit the project and refocus its business on other areas. Under its new direction, CB&I would continue to offer nuclear maintenance and refueling services to the industry, but they no longer wanted to be in the nuclear-power-plant construction business. CB&I further stated its belief that the negotiations between the Consortium, SCE&G and Santee Cooper had stalled and we were headed toward litigation over the costs that SCE&G and Santee Cooper were disputing. The Consortium representatives told us that the litigation related to the two AP1000 units SNC is constructing at the Vogtle site in Georgia had been very expensive, time-consuming, and distracting to the orderly progress of the project. CB&I expressed its belief that it would be in the best interest of all parties if CB&I were to exit the project and a different path forward could be found.

At that juncture, Westinghouse and CB&I told us that they had tentatively resolved their internal disputes through an agreement which would allow CB&I to exit the Consortium. As they explained further, for CB&I to exit the Consortium, SCE&G, Santee Cooper, SNC and the other owners of the Vogtle project, would need to agree to release CB&I from its parental guarantees to the AP1000 projects. As part of the agreement, Toshiba, as the parent company of Westinghouse, would remain responsible for the full parental guarantee for the projects.

At that point, CB&I was excused from the meeting, and SCE&G and Santee Cooper continued the meeting with Westinghouse. Westinghouse explained the

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value of the AP1000 unit to its business plans and its need to successfully complete our project and the Georgia project to protect their opportunities to market the AP1000 unit in the United States and around the world. To that end, Westinghouse told us that they had negotiated with CB&I for the purchase of Stone & Webster and all of its nuclear construction assets. Stone & Webster is the specific corporate entity within CB&I that holds CB&I's membership in the Consortium.

Westinghouse further explained that Fluor had expressed an interest in developing a long-term business relationship with Westinghouse related to AP1000 projects and other nuclear construction. Once the acquisition of Stone & Webster was complete, Westinghouse said that it planned to engage Fluor as a subcontractor to Westinghouse to manage the two existing U.S. construction projects.

This was very welcome news to us. Fluor is a company with deep South Carolina roots and is imminently respected for its ability to manage electric generation construction projects and other mega-projects. As Mr. Byrne will testify, SCE&G has had extensive and very positive experience with Fluor.

Q. WHAT OPPORTUNITY DID SCE&G SEE TO ADVANCE THE INTERESTS OF ITS CUSTOMERS IN THESE NEGOTIATIONS?

A. As I described earlier, for Westinghouse and CB&I to proceed with their plans, it was necessary for SCE&G and Santee Cooper to provide a release of the CB&I parental guarantee of the EPC Contract. At this point, we realized we had a unique, short-term opportunity to negotiate significant benefits for our customers.

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Clearly, part of that negotiation needed to be a resolution of the existing contractual disputes so that CB&I could exit the project. But we also saw the opportunity to push for other changes in the EPC Contract to reduce price risk, reduce opportunities for future disputes, and focus Westinghouse very clearly on the need to finish the Units in a timely manner. All of these things, along with the restructuring of the Consortium, would provide great value to our customers.

From the first week of September 2015 until we announced our agreement to amend the EPC contract on October 27th, the senior leadership team of SCE&G and Westinghouse were involved in intensive negotiations. They often lasted more than 12 hours a day, and often carried through seven days a week. We were in constant communication with our partner, Santee Cooper. These were complex negotiations in which multiple parties had to reach an agreement simultaneously.

Q. PLEASE DESCRIBE SEVERAL OF THE KEY POINTS BENEFITING YOUR CUSTOMERS THAT YOU WERE ABLE TO NEGOTIATE WITH WESTINGHOUSE.

A. Mr. Byrne will testify as to the specifics of what was negotiated. Three principal benefits stand out.

New Liquidated Damages: The federal tax credits that are available to the project are worth a total of $2.2 billion to customers. Both of our plants must produce power before the end of 2020 to qualify for the full amount of these credits. The GSCD for Unit 2 is now 16 months ahead of that deadline and the GSCD for

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Unit 3 is four months ahead of it. These are tight windows, so we wanted to focus Westinghouse very keenly on meeting these deadlines.

In the negotiations, we secured from Westinghouse new liquidated damages that are four times larger than those contained in the original EPC Contract. Westinghouse is now at risk for up to $371.8 million or $185.9 million per Unit. The prior contract included a capacity bonus that would have been paid to Westinghouse if the Units were able to produce more power than was contractually guaranteed as measured by production during the first 18 months of operation. We were able to eliminate that capacity bonus. The new completion incentives are tied directly to the receipt of the federal Production Tax Credits for the Units.

Price Certainty: The EPC Contract contains four categories of prices. A Target Price applies in categories where SCE&G pays the Consortium's actual cost for labor, services and materials provided. These categories include direct and indirect construction labor. The Time and Materials category includes the costs of material and services that Westinghouse provides to support SCE&G in its role as the Owner of the project with responsibility for things like license fees, sales taxes, import duties, and stocking of spare parts. Firm Price items have prices that are fixed in 2007 dollars but are subject to escalation at stated or indexed rates. Costs in the Fixed Price category are fixed without escalation or other adjustment apart from change orders.

Westinghouse did not initially present us with a Fixed Price option, but during the negotiation we asked them, "What would it cost us to fix the remaining

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costs on the project?" We were successful in the resulting negotiations and obtained the right to transfer the remaining costs in the Target, Time and Materials and Firm categories to the Fixed Price category. This right applies to invoices to be paid after June 30, 2015. Future change orders would be in addition to these amounts. The only exception is approximately $38.3 million in Time and Materials costs which SCE&G believes it can more economically manage itself rather than have Westinghouse set a price.

The resulting cost increase, in future dollars, is approximately $505.5 million. We think that was a very good result for our customers because it minimizes SCE&G's exposure to future cost increases and shifts multiple categories of price risk to Westinghouse.

Mr. Byrne and Dr. Lynch provide detailed testimony concerning the value of the Fixed Price option and the magnitude of likely savings it will provide for our customers over the remaining life of the project. With Santee Cooper's authorization in hand, we executed the option documents on July 1, 2016, subject to Commission approval in this proceeding. In making the decision that SCE&G would proceed to exercise the Fixed Price Option, my management team and I carefully evaluated the same data and information that is referenced in the Company's testimony in this proceeding. We concluded that it convincingly confirmed the value of executing the option.

Reduction in Future Disputes: Resolving current disputes with the Consortium is important. But limiting the opportunity for future disputes that might

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disrupt the project is equally as important. The Fixed Price option has reduced the opportunities for disputes by providing a clearly stated price for the remaining work. In addition, calendar-based payments are being eliminated. Going forward, the payment of these Fixed Price invoices will be tied to Westinghouse accomplishing specific construction milestones. The combination of these two changes will greatly reduce the likelihood of disputes over future invoices.

Westinghouse may still be entitled to change orders where changes are directed by SCE&G and Santee Cooper as the Owner, or are the result of changes in circumstances beyond Westinghouse's control. This is very common in EPC contracts for large projects. Several categories of uncontrollable circumstances are listed in the EPC Contract. Change in law, which includes changes in regulation, is one of those categories. Several major commercial disputes have been due to Westinghouse trying to take a very expansive view of what constitutes a change in law or regulation. SCE&G has resisted that interpretation.

To avoid future disputes, the Amendment establishes that to justify a change order, a change in law or regulation must be embodied in a formal, written regulatory pronouncement, not in an interpretation or ad hoc NRC staff determination. This may seem like a small change, but it will go a long way to reduce future disputes. Similarly, the Amendment also makes it clear that all changes in the design of the AP1000 unit, up to and including the 19th revision to the Design Control Documents (DCD Rev.19), which was issued in 2011, are not the subject of potential change orders. In addition, the creation of a dispute

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resolution board, and the elimination of the right to bring suit on any disputes until after the project is complete, further reduces the likelihood that future disputes will distract or derail the project. Together, these changes will make the commercial aspects of the project much easier to manage going forward.

Effectively and efficiently managing a project of this magnitude requires candid and transparent communication between all of the parties on the site and in the supply chain. People across the project need to be able to raise difficult issues and discuss them openly. When commercial disputes and the risk of litigation hang over a project, they stifle the candor and transparency needed for success. In negotiating the Amendment, we sought to reduce the likelihood of future disputes and dispel entirely the threat of litigation while the project was on-going. The terms we were able to obtain will greatly improve our ability to successfully manage this project going forward which in turn will create enormous benefits for the project and our customers.

Q. WHAT DID SCE&G PAY FOR ALL OF THESE BENEFITS?

A. The increase in EPC Contract cost that was required to secure all of these benefits and to resolve practically all outstanding disputes between the parties was $137.5 million. As Mr. Byrne and Mr. Kochems testify, we have computed a reasonable estimate of the value to the Consortium of the quantifiable claims that the Amendment resolved. The value of the Consortium's quantifiable claims, net of a reasonable estimate of the value of our claims against the Consortium, is $224.4 million. In making this calculation, we did not estimate the value of claims by the

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Consortium against us which were not readily quantifiable based on the information available from the Consortium. For that reason, the $224.4 million figure only quantifies the value of 12 of the 30 specific change order requests or other commercial issues that were listed on Exhibit A to the Amendment. In addition, at the time of the negotiations, Westinghouse had issued 35 additional notices of change or other claims that were not included among the 30 items specifically listed in Exhibit A. The potential value of these claims was significant and would increase the value of the Consortium's claims against us if they were quantified. However, because we did not have data to definitively quantify these claims, they were not assigned a value in our computation.

Q. GIVEN THAT CHANGE ORDERS REMAIN POSSIBLE UNDER THE OPTION, WHY DO YOU REFER TO THIS AS A FIXED PRICE OPTION?

A. Referring to this as a Fixed Price option follows the language used in the EPC Contract and the Amendment. The Amendment specifically grants us the option to transfer practically all remaining EPC costs to the "Fixed Price" cost category. This language is in keeping with standard nomenclature in the construction industry. A fixed price contract does not mean a contract where change orders entitling the contractor for additional compensation for uncontrollable circumstances are disallowed. Such change orders are an accepted feature of fixed price provisions in large construction contracts.

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Q. WHERE DO THINGS STAND TODAY WITH REGARD TO THE FIXED PRICE OPTION?

A. Eight months have elapsed since we negotiated the option. During that time, NND staff, supported by the Santee Cooper staff and SNC personnel, have worked closely alongside Fluor to evaluate the project work flows and review the mitigation plans that will be required to meet the construction schedule for the Units. Those mitigation plans will involve expanding the production capabilities at component suppliers, increasing the work force on site in Jenkinsville, adding overtime, and adding a full night shift with over 1,000 workers. These mitigation plans will come at a cost, particularly in additional direct and indirect labor expenses over the life of the project. But for the option, those expenses would be Target Price costs and would be passed directly on to us.

As Mr. Byrne and Dr. Lynch will testify, based on what we have learned during the months since the Amendment was signed, and based on careful analysis of likely cost shifts, we believe it is very much in our customers' interests that we execute the option to fix certain prices within the EPC Contract. Fixing these costs will bring great value to the project and to our customers. For that reason, on May 24, 2016, we gave notice to Westinghouse that SCE&G intended to exercise the option to move substantially all EPC Contract cost into the Fixed Price category. On June 30, 2016, we received formal authorization from Santee Cooper's board to execute the option and immediately gave notice to Westinghouse as the Amendment requires. Regulatory approval by the Commission is also a condition of the option

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and Santee Cooper has conditioned its authorization to exercise that option on that approval.

BENEFITS FROM CONSTRUCTING THE UNITS

Q. PLEASE EXPLAIN THE BENEFIT TO SCE&G'S SYSTEM AND CUSTOMERS FROM CONTINUING CONSTRUCTION OF THE UNITS.

A. SCE&G and Santee Cooper decided to build these Units to capture the value of adding 2,234 MW of efficient and non-emitting, base-load generation to serve the people of South Carolina. With the Units in service, SCE&G projects that it will have reduced its 2021 carbon dioxide ("CO_2") emissions by 54% compared to their 2005 levels, and 34% compared to 1995 levels. Chart C shows the forecasted reduction in CO_2 emissions in millions of tons.

[Chart C begins on the following page]

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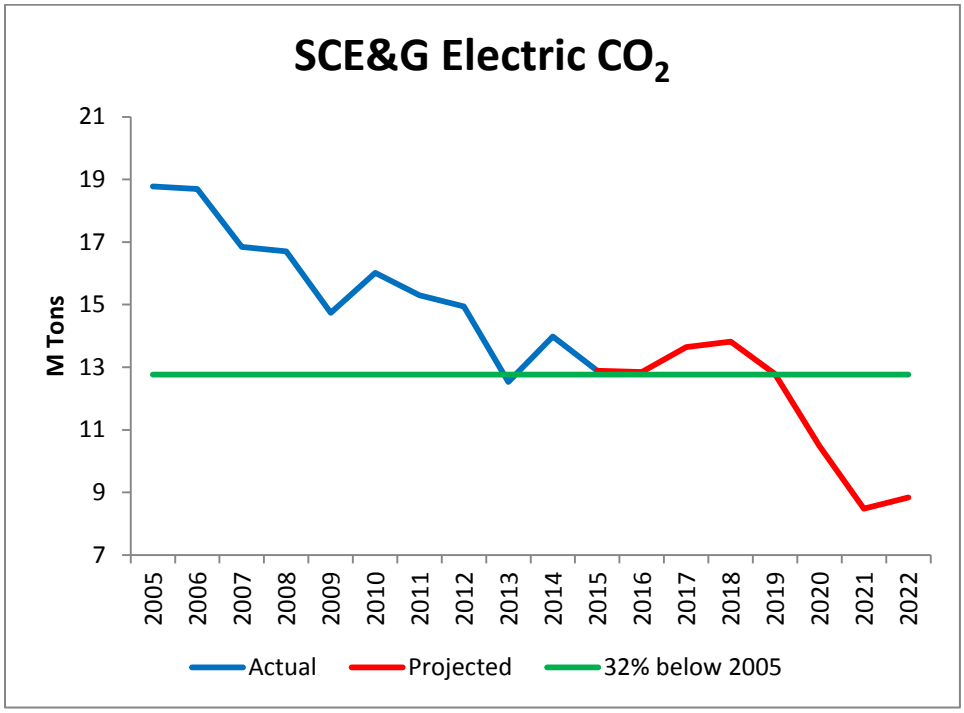
Chart C
SCE&G's Forecasted CO_2 Emissions



There have also been immediate environmental benefits from the decision to build the Units. In 2008, the Company committed to evaluate whether building the Units might allow it to retire smaller coal units. The Company has followed through on this commitment. Since 2008, SCE&G has retired or converted to natural gas 730 MW of smaller coal generating facilities. Canadys Units 1, 2 and 3 have been taken out of service. Urquhart Unit 3 has been converted to gas generation only. McMeekin Units 1 and 2 have been repowered with natural gas as of April 15, 2016. They may be taken out of service altogether when the Units come on line. SCE&G plans to bridge the gap between these retirements and the completion of the new nuclear Units through interim capacity purchases.

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Q. HOW DOES THE ENVIRONMENTAL PROTECTION AGENCY'S ("EPA") CLEAN POWER PLAN AFFECT THE VALUE OF THE UNITS?

A. EPA's proposed Clean Power Plan was issued in June 2014. The accompanying Clean Power Plan regulations were published on August 3, 2015, but were stayed by order of the United States Supreme Court pending judicial review.

The Clean Power Plan is based on Section 111(d) of the Clean Air Act which governs existing generating units. In that plan, EPA has computed a target carbon intensity rate for each state's fleet of existing large power plants. The Clean Power Plan leaves it to the states to decide how to achieve mandated reductions and how to allocate those reductions among plant operators.

Under the Clean Power Plan as originally proposed, EPA treated the Units as if they were fully operational during the baseline year of 2012, providing carbon-free generation at a 90% capacity factor. EPA then computed carbon emission reduction targets for South Carolina based on that artificially reduced level of baseline emissions. SCE&G, Santee Cooper, the Electric Cooperatives of South Carolina, Inc., Central Electric Cooperative, Inc., and others sought to have this changed so that the reductions in carbon emissions from the Units would be available to be counted as part of the State's action plan for meeting its carbon reduction targets. This approach was consistent with SCE&G's purposes and justification for building the Units and the Commission's acceptance of that justification as reflected in Order No. 2009-104(A). The Commission's language in Order No. 2009-104(A) was key for supporting the South Carolina position with

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EPA. Using that language, a broad-based effort by South Carolina's public, private and electric cooperative energy providers, elected officials and business leaders was successful in convincing EPA to reverse its original position. EPA's change in position provided a major benefit for all of the people of the State of South Carolina. If the Clean Power Plan is implemented as currently formulated, the construction of the Units will reduce CO_2 compliance costs for the State dramatically.

Q. WHAT ARE THE SPECIFIC LIMITS BEING PROPOSED FOR SOUTH CAROLINA?

A. That target carbon intensity rate is expressed in pounds of carbon per megawatt hour of electricity generated (lb/MWh). EPA is proposing that South Carolina reduce its discharges from its actual 2012 carbon intensity of 1,791 lb/MWh to 1,156 lb/MWh, a 35% reduction. Compliance would be phased-in beginning in 2022. How these statewide targets will be allocated among generators is undecided. However, we believe that the new Units will make a decisive contribution to the ability of SCE&G and the State to comply with these goals.

Q. HOW DOES THE CLEAN POWER PLAN AFFECT THE VALUE OF THE UNITS TO SCE&G'S CUSTOMERS?

A. It is not clear how the proposed EPA regulations may change through litigation, or how the State will allocate the required reductions among affected power plant owners. However, for South Carolina to meet its targets efficiently, it will be critically important to complete the Units. There is no other source of non-emitting, dispatchable, base load power available to replace the generation

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represented by the Units. Generation sources that produce any air emissions are now under intense regulatory pressure. There is no reason to assume that this trend will not continue over the long term. Adding non-emitting nuclear generation has tremendous value in the current environmental context to all electric customers in the State.

Q. WHAT ABOUT OTHER NON-EMITTING TECHNOLOGIES?

A. Solar and renewable resources and energy efficiency will play an increasingly important role in SCE&G's generation mix going forward. SCE&G was an active participant in the group that formulated the South Carolina Distributed Energy Resources ("DER") Act and advocated the adoption of it. The Act sets legislatively-approved targets for utility scale and customer scale DER installations by January 1, 2021. Although it is now less than a year after the Commission approved the Company's initial DER programs, SCE&G has already signed contracts or is finalizing contracts that will meet the full target for utility-scale DER as soon as construction of the new solar farms they envision are complete. The Company has also approved reservations for individual customer solar installations that represent 25% of the customer-scale DER target.

The achievement of the legislatively-established DER goals is fully reflected in all of our capacity and generation forecasts. The same is true of the energy efficiency goals established in SCE&G's Demand Side Management ("DSM") program as approved by this Commission. However, with current technologies,

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renewable resources and energy efficiency cannot displace the need for reliable, dispatchable base load generation.

Because of EPA regulations limiting carbon discharges, it is practically impossible to permit new coal generation. The only dispatchable, base load alternative to nuclear generation today is combined-cycle natural gas generation. Natural gas generation involves lower levels of CO_2, NO_x, and SO_x emissions than coal. However, nuclear generation remains the only base load resource that is entirely non-emitting with respect to these air emissions.

Q. WHAT IS SCE&G'S PLAN TO REDUCE ITS CO_2 EMISSIONS?

A. As the Company's witnesses testified in 2008, one of SCE&G's long-term goals in choosing to use new nuclear generation was to create a system with a majority of its energy being supplied from non-emitting sources. Chart D shows how that plan stands today.

[Chart D begins on the following page]

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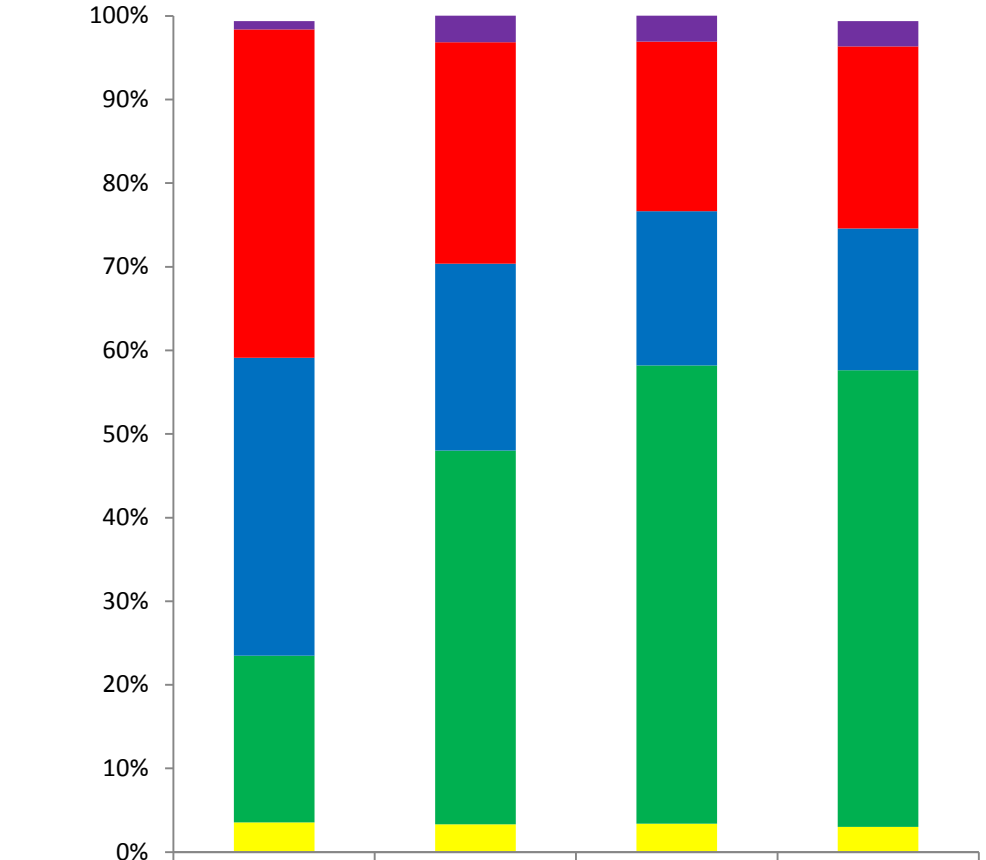
Chart D

SCE&G's Current and Forecasted Generation Mix



	2015	2020	2021	2022
Alt. Sources	1%	4%	4%	3%
Coal	39%	26%	20%	22%
Gas	36%	22%	18%	17%
Nuclear	20%	45%	55%	55%
Hydro	4%	3%	3%	3%

In 2015, 24.5% of SCE&G generation of energy was from non-emitting facilities. (Approximately one-half of the Alternative Resources listed in Chart D are non-emitting. The remainder is biomass.) In 2021, which is the first full year that both Units 2 and 3 will be on line, we estimate that 60% of the energy serving SCE&G's customers will come from non-emitting sources. SCE&G is on track to

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achieve its goal to create a generating system with markedly reduced levels of CO_2 emissions and reduced exposure to the risk and costs associated with them.

Q. IN 2008, DIVERSIFICATION OF FUEL SOURCES WAS AN IMPORTANT GOAL FOR SCE&G. IS THAT TRUE TODAY?

A. The Company testified in 2008 that diversification of fuel sources was an important reason why adding nuclear generation would provide value to SCE&G's customers. That continues to be the case today.

SCE&G's current capacity mix is weighted 71% towards fossil fuel, with coal representing 33% of that capacity, and natural gas representing 38%. In large part because of the addition of nuclear generation, SCE&G will have a well-balanced generation system in 2021 with 26% of its capacity in coal units, 30% of its capacity in natural gas units, 29% of its capacity in nuclear units and 15% of its capacity in hydro/biomass/solar facilities. In 2021, the three principal fuel sources, nuclear, coal and natural gas, will each represent a significant and balanced component of capacity. Chart E shows this capacity mix in a graphic form.

[Chart E begins on the following page]

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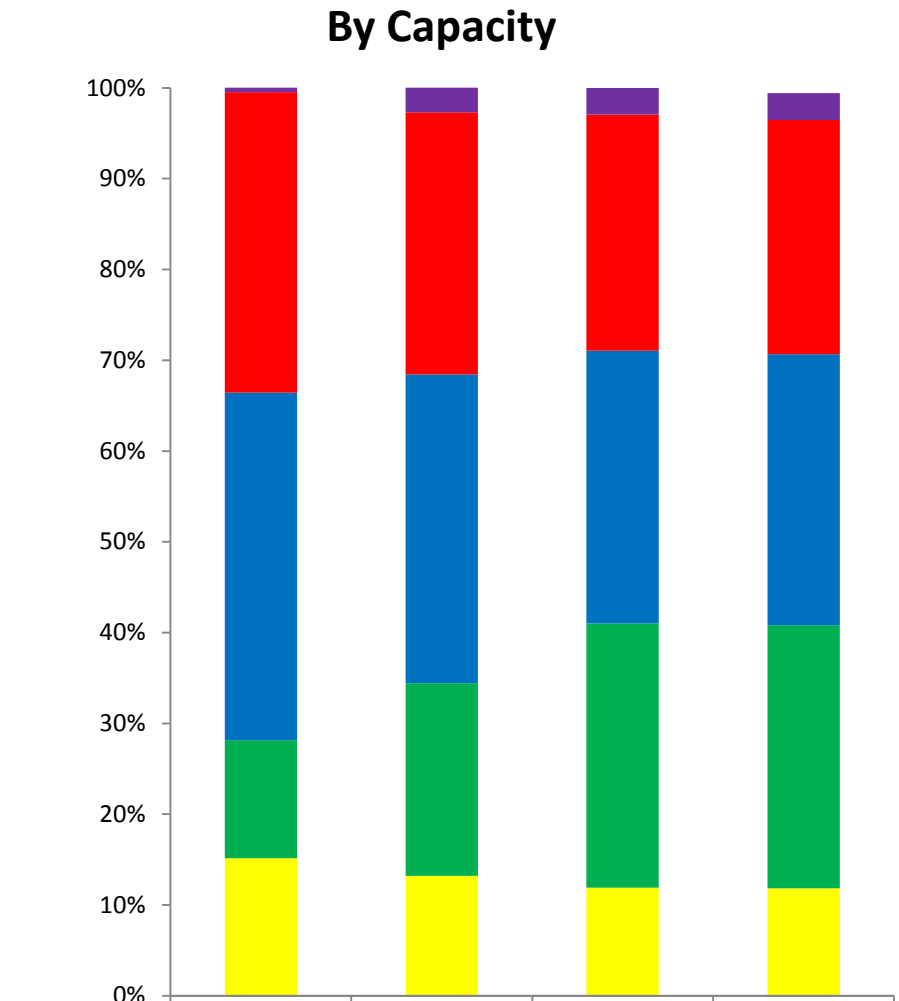
Chart E
SCE&G's Current and Forecasted Capacity Mix



	2015	2020	2021	2022
Alt. Sources	1%	3%	3%	3%
Coal	33%	29%	26%	26%
Gas	38%	34%	30%	30%
Nuclear	13%	21%	29%	29%
Hydro	15%	13%	12%	12%

Creating this balanced mix of capacity will give SCE&G operating flexibility to respond to changing market conditions and environmental regulations. I am not aware of a cost effective way today to create this long-term flexibility other than by adding new nuclear capacity. This is particularly true now that adding new coal

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capacity is no longer feasible. If SCE&G were to meet its 2020-2021 base load generation needs by adding new natural gas generation, then fossil fuels (natural gas, oil, and coal) would account for approximately 75% of SCE&G's generation in 2021, with gas alone representing 49% of its generation. Given the increasing environmental pressures on coal and the technological limitations on relying on renewables for base load capacity, under any reasonable scenario the system's reliance on natural gas is likely to go up steadily in the years following 2021. Without the new nuclear capacity represented by the Units, SCE&G's system would likely be locked into a significantly unbalanced generation portfolio with increasing reliance on natural gas generation today and in the decades to come.

On the other hand, adding nuclear capacity creates a balanced generation portfolio. As was the case in 2008, this continues to be an important reason that building these Units provides value to our customers.

Q. DO CURRENT LOW NATURAL GAS PRICES CHANGE THE VALUE THAT THE UNITS WILL PROVIDE TO CUSTOMERS?

A. Hydraulic fracturing, or "fracking," has reduced the cost and increased the supply of natural gas. This will likely be the case for some years in the future. However, there are efforts underway to limit fracking based on environmental concerns. Predictions of future natural gas prices are notoriously unreliable over the long-term and can be impacted by many factors. The planning horizon for determining the value of a nuclear unit is 60 years or more. The lesson of history is that fossil fuel prices will change dramatically and unexpectedly over that long a

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time. Therefore, prudent utility generation plans seek to create balanced systems that can respond as prices fluctuate over time and are not overly dependent on any one fuel source. As discussed above, that is what SCE&G's generation plan seeks to do.

Volatility has been the hallmark of natural gas prices over the course of my career in the energy industry. I am unaware of any reason that would cause me to believe that the volatility of natural gas has the potential to change or that gas prices will not be equally volatile over the 60 years or more that the Units will be in service.

At present, low prices are leading to increasing reliance on natural gas as a fuel throughout our economy. There are limits to the amount of new load that can be met economically through renewables, and those limits will one day be reached. Practically all new base-load demand is being met through a single fuel, natural gas. Moreover, low domestic prices and political risks related to supplies of Russian natural gas to Europe and the Baltic States are leading to increased natural gas exports in the form of liquefied natural gas ("LNG"). World markets continue to value exportable LNG at approximately double the domestic price of natural gas in the United States. Low natural gas prices are resulting in reduced drilling for new sources of supply which eventually will limit supply.

It is difficult to determine how long natural gas prices can remain so low. But there is every reason to expect that U.S. natural gas prices may begin to respond in the coming years to the pressures of increased domestic demand, reduced drilling and exploration activity, increased LNG exports and potential environmental limits

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on the industry. When that happens, natural gas prices may look quite different than they do today.

Furthermore, gas supplies are not economically relevant if they cannot be delivered to the plants and customers that need them. A record number of new pipeline projects have been proposed to supply fracked gas to the markets where it is needed. These projects are attracting intense and well organized opposition from environmentalists and landowners. Several important projects have been abandoned. This level of opposition will limit effective gas supply and raise delivery prices which are a significant component of the burner-tip price of natural gas. If they are completed, the cost of these projects will greatly increase the cost of new gas transportation capacity.

SCE&G continues to believe that over the long planning horizon that is involved when procuring base load generation units, the unbalanced reliance on any single fuel source is dangerous from both a cost and a reliability standpoint. In past BLRA proceedings, I have testified that over the long-term, fossil fuel prices will change unpredictably.

Q. HOW ARE THESE ISSUES PLAYING OUT NATIONALLY?

A. What I hear from my colleagues in the industry is that they are increasingly aware of the gap between their state's environmental strategy and its generation strategy and that the gap is expanding. .

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Q. PLEASE EXPLAIN.

A. Across the country, environmental strategy is causing the early retirement of coal plants and pushing the industry into almost exclusive reliance on natural gas to replace them. In some cases, short-sighted market structures are causing early retirements of nuclear stations which adds to this problem. As a result, generation portfolios are becoming subject to highly concentrated risks related to the supply, costs and CO_2 impacts of natural gas. These risks include the regulatory and environmental risk associated with the extensive new pipeline infrastructure that must be built to deliver the natural gas supplies where they are needed. Furthermore, exclusive reliance on natural gas generation may be of increasingly limited value for reducing baseload CO_2 emissions long-term, particularly once the older coal plants available to be retired have been retired. It was interesting to note that these realizations seem to be causing some environmental groups to reassess the need to close existing nuclear plants. See the article in the *Wall Street Journal*, on June 16, 2016, "Environmental Groups Change Tune on Nuclear Power: Focus on climate change has raised profile of reactors, now viewed as reliable, carbon-free source of energy."

For these reasons, there is increasing realization in the industry of the risks that result when generation portfolios become imbalanced in just the way that ours would have become imbalanced without construction of the Units. My counterparts in the industry are fully aware of the challenges of nuclear construction and the costs

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involved. What is changing is that the long-term costs of not investing in nuclear are becoming more apparent as the industry evolves.

For these reasons, there is an increasing recognition that South Carolina and its regulatory structure have gotten it right. We are creating a balanced generation portfolio for this state which integrates our environmental and generation strategy by adding 2,234 MW of efficient and non-emitting, nuclear generation to the state's base-load fleet. This is possible due in large part to South Carolina's BLRA, a statute which has few counterparts nationwide. In addition, our DER statute provides a reasonable and well-structured path for adding additional solar and other alternative generation sources to our supply mix. It is a well-thought out statute that was drafted and adopted consensually, one of the few if not the only such statutes in the nation. Our DSM programs are providing for appropriate and significant investments in energy efficiency programs.

For these reasons, there is a growing recognition that South Carolina is on the path to achieve a level of alignment between environmental and generation strategy that is not seen in most states. We are increasingly seen by others as building our state's energy infrastructure in the right way for the long-term.

Q. WHAT IS YOUR CONCLUSION AS TO THE VALUE THAT NEW NUCLEAR GENERATION BRINGS TO YOUR CUSTOMERS AND TO THE STATE OF SOUTH CAROLINA?

A. SCE&G continues to pursue the generation plan that it presented to this Commission in 2008. That strategy remains fundamentally sound. When SCE&G

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came before the Commission in 2008, we presented a detailed overview of the risks and challenges of building a nuclear plant. We showed then that the benefits to our customers from new nuclear capacity far outweighed these risks and challenges.

We are now nine years into a thirteen year construction project. The project team has overcome many of the first-of-a-kind challenges presented by this project. Furthermore, the environmental imperatives of reducing CO_2 emissions are greater than ever. The risks of building a system with an imbalanced reliance on fossil fuels for dispatchable base load capacity is certainly no less than it was in 2008.

As Dr. Lynch testifies, the Company has updated its modeling of the cost of completing the Units compared to other alternatives. That modeling demonstrates that even with today's low natural gas prices –which I believe are not sustainable over the long run—completing the Units remains the lowest cost alternative for meeting the pressing need of SCE&G's customers for base load generating capacity. Accordingly, the financial benefits of completing the Units are clear.

In light of these facts, we believe that the logical and prudent choice is to proceed with the construction plan and apply the BLRA as written. As Mr. Addison will testify, the BLRA is the basis on which the project has been successfully financed to date. It will be the basis for all future financings. The BLRA is the basis on which SCE&G maintains the creditworthiness necessary to continue this project. Deviating from the consistent application of the BLRA would put the financial plan for completing the Units at grave risk. As a result, the financial community could deny SCE&G access to capital on reasonable terms, which would increase the cost

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of the project to customers dramatically. Such a result could make completing the Units financially impossible which would be a great loss to our customers, to our partner, Santee Cooper, and to our state.

My senior management team and I are directly involved in the management and oversight of the project and in interacting with Westinghouse and Fluor and their senior leadership teams. We are dealing with the issues aggressively and at the highest levels. The challenges we are facing are consistent with the risk we identified in our filings in 2008. The important point is that these challenges do not in any way outweigh the long-term benefits of adding this new nuclear capacity to our system.

The construction phase we are in today is temporary. If we stay the course with construction and with regulation, I am confident that the Units will be built and will provide reliable, non-emitting base load power to our customers for 60 years or more. It is my opinion based on 38 years of experience in this industry that the value of the new nuclear capacity under construction today remains much greater than any challenges we have encountered, or are likely to encounter during construction of the project.

Q. WHAT ARE YOU ASKING THE COMMISSION TO DO?

A. SCE&G is asking the Commission to approve the updated cost forecast and construction schedule for the Units as presented in the Petition in this matter and in the testimony of Mr. Byrne and Mr. Kochems. SCE&G requests that the Commission find that the Amendment reflects a reasonable and prudent revision of

the EPC Contract which the Commission reviewed and affirmed as reasonable and prudent in Order No. 2009-104(A). SCE&G requests the Commission to rule that the exercise of the Fixed Price option is reasonable and prudent and approve it as such. Moreover, SCE&G requests that the Commission find that SCE&G's management and development of the project continues to be reasonable and prudent in all respects.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes. It does.

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BY MR. BURGESS:

Q Have you also prepared or caused to be prepared and prefiled in this docket nine pages of settlement testimony?

A Yes, I did.

Q And are there any changes or corrections required of your settlement testimony?

A There is one change on page one, line 20. The date indicated is September 6, 2016, and it should be September 1, 2016.

Q Are there any other changes or corrections required, Mr. Marsh?

A No, there are not.

Q With that change, if I asked you the same questions contained in your settlement testimony, would your answers be the same?

A Yes, they would.

MR. BURGESS: Mr. Chairman, at this time, we would move into the evidence of record the prefiled settlement testimony of Mr. Marsh, as corrected from the stand.

CHAIRMAN WHITFIELD: Mr. Marsh's prefiled settlement testimony, as corrected, will be entered into the record.

[See pgs 87-95]

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1 **MR. BURGESS**: Thank you, Mr. Chairman.
2 **BY MR. BURGESS:**
3 **Q** Mr. Marsh, have you prepared a summary of your
4 settlement testimony?
5 **A** Yes, I have.
6 **Q** Would you please deliver that?
7 **A** Glad to.
8 My settlement testimony supports the adoption by
9 the Commission of the settlement dated September 1,
10 2016, which was entered into between ORS, SCE&G, Frank
11 Knapp, the South Carolina Energy Users Committee,
12 Central Electric Power Cooperative, Incorporated, and
13 The Electric Cooperatives of South Carolina,
14 Incorporated, or the settling parties.
15 The settlement is the result of persistent and very
16 effective work by ORS and its Executive Director, Dukes
17 Scott, to bring a diverse group of parties to agree on a
18 consensus approach for resolving this matter.
19 Accomplishing this settlement was a difficult task. The
20 settlement presented here supports the best interests of
21 customers and of the State. It also signals to
22 financial markets that regulation in South Carolina is
23 predictable, reasonable, and fair. This supports the
24 company's ability to raise capital and complete this
25 project on reasonable terms, which directly benefits our

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1 customers.
2 In the settlement, SCE&G has agreed not to file new
3 petitions to update the BLRA capital-cost schedules for
4 the units until January 28, 2019. SCE&G also agreed
5 that, until January 28, 2019, it will not include in any
6 of its revised-rate filings any capital costs greater
7 than those approved in this docket.
8 SCE&G also agreed to place a $20 million cap on the
9 BLRA recovery for amounts associated with the items
10 listed in Exhibit C to the amendment of the EPC
11 agreement. These were the disputed items which the
12 parties were not in a position to resolve when the
13 amendment was concluded. This $20 million cap provides
14 the settling parties assurance that the additional costs
15 of the Exhibit C items will not exceed a reasonable and
16 quantified amount. Not included in this $20 million cap
17 is the cost of two change orders, both related to plant
18 security system integration and plant layout security,
19 Phase 3, which have been quantified and included in the
20 filings here.
21 In the settlement, SCE&G has also agreed that it
22 will not seek BLRA recovery for increases in owner's
23 costs associated with any transfer of scopes of work
24 from fixed-cost categories under the EPC contract
25 owner's cost categories, except where the work will be

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1 done under a fixed-price agreement which is less than or
2 equal to the credit provided by Westinghouse. This
3 provision provides assurance that the value to customers
4 of the fixed price will not be lost if items are
5 transferred to owner's cost categories.
6 In the settlement, SCE&G also agreed to use a lower
7 return on equity, or ROE, to compute future revised-
8 rates requests than was otherwise allowed. If the
9 settlement is adopted, the company will use a 10.25
10 percent ROE in computing revised rates filed after
11 January 1, 2017. SCE&G had previously agreed to use a
12 10.5 percent ROE for the remainder of the project.
13 Based on my contacts with the financial community, this
14 reduction in the ROE is justified, but only in the
15 context of the settlement and the benefits the
16 settlement represents.
17 One of Director Scott's key objectives in
18 negotiating the settlement was to create additional
19 assurances that the cost protections established through
20 the option would be preserved for the benefit of
21 customers. As described in my testimony, the settlement
22 tracks the language and structure of the option and the
23 EPC contract, and includes provisions to ensure that
24 they are enforced as written.
25 The settlement has been submitted as an exhibit in

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1 this docket. Other terms it contains are set forth
2 there, and are reasonable and appropriate. The company
3 recommends the Commission adopt the terms of the
4 settlement in its final order in this proceeding.
5 **MR. BURGESS**: Thank you, Mr. Marsh.
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23 [PURSUANT TO PREVIOUS INSTRUCTION, THE
24 PREFILED SETTLEMENT TESTIMONY {W/CORRECTION} OF
25 KEVIN B. MARSH FOLLOWS AT PGS 87-95]

The correction noted below reflects testimony given during the hearing in this matter.

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SETTLEMENT TESTIMONY

OF

KEVIN B. MARSH

ON BEHALF OF

SOUTH CAROLINA ELECTRIC & GAS COMPANY

DOCKET NO. 2016-223-E

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND POSITION.

A. My name is Kevin Marsh and my business address is 220 Operation Way, Cayce, South Carolina. I am the Chairman and Chief Executive Officer of SCANA Corporation and South Carolina Electric & Gas Company ("SCE&G" or the "Company").

Q. ARE YOU THE SAME KEVIN MARSH WHO HAS PROVIDED DIRECT TESTIMONY IN THIS DOCKET?

A. I am.

Q. WHAT IS THE PURPOSE OF YOUR SETTLEMENT TESTIMONY?

A. The purpose of my settlement testimony is to support the adoption by the Public Service Commission of South Carolina ("Commission") of the Settlement Agreement ("Settlement") dated September ~~6~~ 1, 2016, which was entered into between the South Carolina Office of Regulatory Staff ("ORS"), SCE&G, Frank Knapp, Jr., the South Carolina Energy Users Committee,

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Central Electric Power Cooperative, Inc., and the Electric Cooperatives of South Carolina, Inc. (the "Settling Parties"). I also discuss the origins of the Settlement, its benefits to customers and the State of South Carolina, and certain terms it contains.

Q. PLEASE EXPLAIN THE ORIGINS OF THE SETTLEMENT.

A. The Settlement is the result of persistent and very effective work by ORS and its Executive Director, C. Dukes Scott. Under Director Scott's leadership, ORS brought a diverse group of parties into agreement around a consensus approach for resolving this matter. Given the magnitude of the issues in this case and the diverse interests of the parties, accomplishing this Settlement was a very difficult task.

While the achievement of consensus in this proceeding was unusually challenging, the fact that ORS and Director Scott were able to do so is no anomaly, but is a continuation of the success achieved by ORS in reaching settlements in prior BLRA proceedings and other proceedings. The settlement negotiated in this proceeding is a testament to the leadership of ORS as negotiators and consensus builders and the credibility and trust developed by Mr. Scott with all the key players involved in these matters. The Settlement achieved here supports the best interests of customers and of the State and benefits all interested parties.

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Q. WHY ARE SETTLEMENTS IN MATTERS LIKE THESE BENEFICIAL FOR CUSTOMERS AND THE STATE?

A. As the Commission is aware, capital costs are a major component of operating a utility system. A significant portion of funding for large capital projects comes from the financial markets. Financial markets value certainty and predictability when making capital investments. Conversely, where they perceive risk and uncertainty, they charge higher rates for capital which ultimately results in higher costs to the utility and to customers. Settlements in matters such as these that reasonably balance the interest of major parties signal to markets that regulation is fair and predictable and that discord and animosity are not part of the regulatory culture in a jurisdiction. Markets reward those jurisdictions by making capital available on more reasonable terms. Reasonable capital costs reduce pressure on rates for consumers.

Q. PLEASE EXPLAIN SCE&G'S REASONS FOR ENTERING INTO THE SETTLEMENT.

A. In the filing, SCE&G proposed specific adjustments to the construction schedules and capital cost schedules for the V.C. Summer Units 2 & 3 (the "Units"). Through our pre-filed direct testimony, we presented evidence that the proposed adjustments were reasonable, were amply justified by the evidence and were in no way the result of imprudence on the Company's part, which is the legal standard in these matters. We specifically showed that the 2015 Amendment to the EPC Contract (the "Amendment")

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and the exercise of the fixed price option agreement contained in the Amendment (the "Option") create tremendous value for our customers and the State and will reduce the cost of the Units significantly compared to what they would have been without the Amendment or Option. Nonetheless, there were differences in opinion on some matters. Director Scott came to us and asked if we would participate in a settlement process with ORS and other parties. The answer was yes.

Q. PLEASE DESCRIBE THE CONCESSIONS CONTAINED IN THE SETTLEMENT THAT RELATE TO THE INCLUSION OF COSTS NOT REFLECTED IN THIS DOCKET IN FUTURE BLRA DOCKETS.

A. There were three groups of concessions that are related to the timing or inclusion in future BLRA proceedings of costs not reflected in this docket:

- **The Moratorium** –In the Settlement, SCE&G agreed not to file new petitions to update the BLRA capital cost schedules for the Units until January 28, 2019. SCE&G also agreed that until January 28, 2019, it will not include in its revised rates filings any capital costs greater than those approved in this docket (both points collectively constitute the "Moratorium"). The January 28, 2019 end date for the Moratorium corresponds to the date on which SCE&G would expect to make its final revised rates filing prior to Unit 2 going into service.

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Accordingly, the Moratorium means that SCE&G will not include any future increases in costs for the project in revised rates until Unit 2 is entering service. In fact, the Settlement also provides that the end date for the Moratorium will track the completion date for Unit 2 and will be extended if the completion date is extended. This provision encourages SCE&G to limit cost increases going forward since the financing costs associated with future cost increases will not be recoverable under the BLRA until Unit 2 is nearing completion.

- **Caps on Exhibit C Costs** –SCE&G has agreed to place a $20 million cap on any BLRA recovery for amounts associated with the items listed as unresolved matters on Exhibit C to the Amendment. These are the scopes of work which the parties were not in a position to resolve at the time the Amendment was concluded. Not included in this $20 million cap is the cost of two change orders that were listed on Exhibit C but have been resolved as indicated in the Settlement, specifically the change orders related to Plant Security Systems Integration and Plant Layout Security, Phase 3. This $20 million cap applies to BLRA filings both before and after the Moratorium expires and provides the Settling Parties assurance that the additional

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costs of the Exhibit C items will not exceed a reasonable and quantified amount.

- **Transfers of Fixed EPC Cost Items to Owner's Cost** – SCE&G has agreed that it will not seek BLRA recovery for any increase in Owner's costs associated with transfer of scopes of work from Fixed Cost Categories under the EPC Contract to Owner's costs categories. However, this prohibition will not apply if the scope of work transferred is to be completed under a fixed price agreement which is less than or equal to the credit (reduction) to the fixed EPC Contract price provided by Westinghouse as a result of the transfer. This provision provides the Settling Parties assurance that transfers of EPC Costs to Owner's costs will not result in cost increases in categories that are now subject to fixed prices under the Option.

Q. PLEASE DESCRIBE THE CONCESSIONS RELATED TO THE RETURN ON EQUITY USED IN COMPUTING FUTURE REVISED RATES FILINGS.

A. Director Scott asked the Company if it would be willing --in support of a settlement-- to voluntarily agree to use a lower return on equity ("ROE") to compute future revised rates requests. The initial BLRA order for the Units, Order No. 2009-104(A), set an ROE for the life of the project at

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11.0%. To support a settlement in Docket No. 2015-103-E, SCE&G voluntarily agreed to compute revised rates after 2015 using an ROE of 10.5%. As a part of the Settlement in this proceeding, the Company has agreed --if the Settlement is adopted-- to use a 10.25% ROE in computing revised rates filed after January 1, 2017. Based on the Company's contacts with the financial community, the reduction in ROE to this 10.25% level for future revised rates filings would not be justified outside of a Settlement and the benefits it provides as discussed above, but is feasible in the context of a Settlement.

Q. PLEASE DESCRIBE THE PROVISIONS OF THE SETTLEMENT RELATED TO FURTHER SECURING THE COST PROTECTIONS PROVIDED UNDER THE TERMS OF THE OPTION WITH WESTINGHOUSE.

A. One of Director Scott's key objectives in negotiating the Settlement was to create additional assurances that the cost protections established through the Option would be preserved for the benefit of customers. In response, SCE&G agreed to provisions to fix the price to consumers of the EPC Contract costs according to the terms of the Settlement.

Q. PLEASE EXPLAIN HOW THIS WORKS.

A. Under the Option, project costs can increase due to signed change orders allowable under the terms of the EPC Contract, changes in Transmission costs, changes in certain Time and Materials costs as listed in

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the Amendment, costs associated with decisions of the Dispute Resolution Board that is established under the Amendment, certain changes in Owner's costs and changes in Exhibit C costs. (For BLRA purposes, changes in the latter two cost items are subject to the limitations imposed by the Settlement, as described above.) The Settlement recognizes that cost increases outside of these categories could violate the terms of the Option.

Q. WHAT IS THE REASON FOR INCLUDING THIS PROVISION IN THE SETTLEMENT?

A. We understand that this provision, much like the limitation on certain changes in Owner's costs and Exhibit C costs, is intended to give assurance to customers and the public that the Option will be enforced as written. I would note, however, that the Settlement does not authorize or approve any future costs or cost increases. All additional future costs that are proposed for BLRA approval or revised rates recovery, including those that may be included in future BLRA filings under the terms of the Settlement, must be reviewed by ORS and approved by the Commission under the terms of the BLRA before they can be considered in setting revised rates.

Q. ARE THE CONCESSIONS SCE&G IS MAKING IN THE SETTLEMENT CONSISTENT WITH THE TERMS OF THE BLRA?

A. Yes, they are. The timing of update dockets under S.C. Code Ann. § 58-33-270(E) and the amount of capital costs included in any revised rates filings under S.C. Code Ann. § 58-33-280 are discretionary with the utility.

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In agreeing to use a lower ROE in computing revised rates, SCE&G is forgoing its statutory right to compute revised rates using the ROE previously approved by the Commission. Allowable capital costs of the Units not included in revised rates filings will continue to accrue allowance for funds used during construction, otherwise known as "AFUDC". However, SCE&G will not have cash earnings to support the financing cost associated with these amounts while they are outside of revised rates.

Q. WHAT ARE YOU ASKING THE COMMISSION TO DO?

A. SCE&G is asking the Commission to approve the Settlement and the relief requested in the petition in the proceeding as modified by the Settlement.

Q. DOES THIS CONCLUDE YOUR SETTLEMENT TESTIMONY?

A. Yes. It does.

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1 **MR. BURGESS**: Mr. Chairman, under the
2 settlement agreement, the settling parties have
3 agreed not to cross-examine each other's witnesses.
4 Therefore, I present Mr. Marsh to the Commission
5 for questioning, as well as the other parties for
6 questioning.
7 **CHAIRMAN WHITFIELD**: Thank you, Mr. Burgess.
8 Given that note, I will start with you, Ms.
9 Wright. Any questions of this witness?
10 **MS. WRIGHT**: I do.
11 **CROSS EXAMINATION**
12 **BY MS. WRIGHT**:
13 **Q** Mr. Marsh.
14 **A** Good morning.
15 **Q** Good morning. Can you tell us what your yearly salary
16 is?
17 **A** My annual salary is set in three components. I have a
18 base salary of approximately $1.2 million. Then there's
19 short-term incentives and long-term incentives placed on
20 top of that, based on goals set by the Board of
21 Directors.
22 **Q** So, approximately, how much do you bring in a year?
23 **A** Well, it depends on whether or not we achieve the goals
24 that are set. The number reported in the proxy last
25 year was $5,733,258.

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1 **Q** That was what I was getting at.
2 **CHAIRMAN WHITFIELD**: I'm sorry, Ms. Wright.
3 I'm not sure if it's you, Mr. Marsh, or you, but if
4 both of you could speak clearly into the mic. I
5 think the folks in the back cannot hear.
6 **WITNESS**: [Indicating.] Is that better?
7 **CHAIRMAN WHITFIELD**: Is that better, back
8 there?
9 **MS. WRIGHT**: Can you hear me?
10 **CHAIRMAN WHITFIELD**: I think it's you, Mr.
11 Marsh, if you'll pull the mic a little closer.
12 **WITNESS**: All right [indicating].
13 **BY MS. WRIGHT:**
14 **Q** The reason I ask that, are you receiving a salary from
15 SCANA and SCE&G?
16 **A** No. I receive compensation for my work as Chairman of
17 SCANA only. Those dollars, as appropriate, are
18 allocated to the operating companies based on the time
19 and effort I spend on their behalf.
20 **Q** Okay.
21 **A** But it's one payment.
22 **Q** Are you one of the CEOs that are involved in receiving
23 salary or receiving payment for work done toward these
24 nuclear sites?
25 **A** I have responsibility for the plants as part of my —

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1 **Q** Okay.
2 **A** — responsibilities, yes.
3 **Q** Okay. Did you attend a meeting back on November 19th,
4 in 2015, here at the PSC, called the *ex parte?*
5 **A** Yes, I did.
6 **Q** Okay. And for those who are here that don't understand
7 what "*ex parte*" means, what does that mean to you?
8 **A** Well, generally, that's a presentation to the Commission
9 given by the company, to share some information with
10 them —
11 **Q** By one party.
12 **A** By one party.
13 **Q** But not the other parties. None of the other parties
14 are involved; just the one party can have a meeting with
15 the Public Service Commission to talk to them?
16 **A** That's correct. And in that case, we were sharing
17 information about the settlement agreement that had been
18 reached with Westinghouse, and —
19 **Q** Right. At that time, it wasn't reached; at that time,
20 you were talking about it.
21 **A** No, it had been signed at that time.
22 **Q** Oh, it had been signed at that time?
23 **A** It was signed October 27, 2015.
24 **Q** And this was in — excuse me. This was in November?
25 **A** That's correct.

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1 **Q** All right. In your statement in the *ex parte,* you spoke
2 about disputed costs, that you saw a lack of cooperation
3 — excuse me. The pollen is driving me nuts. You were
4 having a problem — and when I refer to "you" I don't
5 refer to you as Mr. Marsh; I refer to you as SCE&G or
6 SCANA or, actually, I'm talking about your position in
7 regards to the nuclear reactor sites, okay?
8 **A** Okay.
9 **Q** You were having problems with Westinghouse and disputes
10 that you saw or had with construction; am my right?
11 **A** Yeah, we had noticed, in the hearings we had before the
12 Commission in July 2015, that there were disputes
13 between Westinghouse and CB&I, the contractor on-site,
14 or —
15 **Q** But the disputes that you were discussing — that's not
16 what I'm talking about. I'm not talking by
17 Westinghouse's disputes with CB&I. I'm talking about
18 you trying to come to terms with Westinghouse. Maybe
19 the best thing would be to get straight, who did you
20 hire to be the builder for these two nuclear units in
21 Jenkinsville?
22 **A** We entered into a contract with the consortium.
23 **Q** And who was the consortium?
24 **A** It was Westinghouse and CB&I. At the time we were at
25 the Commission initially, the consortium was comprised

1 of Westinghouse and Shaw.
2 **Q** Right.
3 **A** Shaw sold their portion of the business to CB&I —
4 **Q** So —
5 **A** — so they took over that position.
6 **Q** So it started out —
7 **CHAIRMAN WHITFIELD**: Ms. Wright, I'm sorry.
8 If you could let him finish answering the question.
9 Our court reporter's having a hard time —
10 **MS. WRIGHT**: Oh, I'm so sorry, for your sake.
11 Okay.
12 **BY MS. WRIGHT:**
13 **Q** What I want to know is, the consortium started out with
14 Westinghouse and Shaw.
15 **A** That's correct.
16 **Q** Then Shaw left, and Westinghouse brought in CB&I?
17 **A** No. CB&I purchased Shaw, so they assumed the
18 responsibilities —
19 **Q** Oh, so it's —
20 **A** — that Shaw had —
21 **Q** — the same company. It's —
22 **A** — as part of the consortium.
23 **Q** — just one purchased the other.
24 **A** That's correct.
25 **Q** Okay. All right. So now we have a consortium of two?

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1 **A** That's correct.
2 **Q** CB&I and Westinghouse. And Westinghouse and CB&I are
3 having problems. But we're having problems, too; SCE&G
4 is having problems at the site. We're having problems
5 with major errors happening, construction errors. Is
6 that correct?
7 **A** There were a number of issues that caused issues in the
8 plant construction. The largest one was probably the
9 manufacture or the fabrication of the submodules which
10 was being done by CB&I at their plant site in Lake
11 Charles, trying to make sure they met the quality
12 control standards that we expected for the work to go
13 into the nuclear plants, so —
14 **Q** Okay.
15 **A** — that was one of the issues we had with them.
16 **Q** Okay. I understand that. But weren't there
17 construction errors happening at the site, too?
18 **A** Well, there were challenges on the construction site, as
19 there are with any project of this size.
20 **Q** Okay. I didn't use the term "challenge." I said, were
21 there errors made on-site, construction errors made on-
22 site, that had to be corrected and that you were going
23 to Westinghouse — or, let's say the consortium, because
24 CB&I is still in on this at that point. Didn't you go
25 to them and tell them that "It's not our responsibility

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to pay for those corrections of the errors that the construction company made on-site"? Did you not?

A If we felt that what they had done was not in compliance with the contract, we absolutely did raise that as an issue with them and challenged whether or not that was appropriate to be billed to us under the terms of the contract.

Q Mr. Marsh, if you were building a house and you hired a contractor, and that contractor — you don't know how to build a house, so you go to a contractor and you pick out a contractor you think knows what they're doing, and they hire the subcontractors who do the actual construction. Your contractor is not out there hammering the nails; he's hiring people he trusts to do a good job. What if that plumber came in and ran the plumbing for the toilet into the kitchen? Would you be expected to pay to repair that change? You can call it a design change if you want to, but would you be expected, as the homeowner, to pay those repairs?

A As I said earlier, if it was not in compliance with the contract or if it were a home — if I were building a home and they ran something that was not supposed to be in the kitchen into the kitchen, I would complain about that and take appropriate —

Q No. Complain —

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CHAIRMAN WHITFIELD: Ms. Wright, if you can slow it down just a little bit, and —

MS. WRIGHT: I'm sorry. I'm not a lawyer, and I have problems with patience because —

CHAIRMAN WHITFIELD: I understand.

MS. WRIGHT: Okay.

CHAIRMAN WHITFIELD: But I need you to slow —

MS. WRIGHT: All right.

CHAIRMAN WHITFIELD: — it down, and one question at a time, and —

MS. WRIGHT: Well, this is kind of the same question; he's just avoiding the answer.

CHAIRMAN WHITFIELD: I need you to ask questions.

MS. WRIGHT: All right.

WITNESS: Can I finish my answer?

CHAIRMAN WHITFIELD: And let him answer.

MS. WRIGHT: Okay.

WITNESS: As I was saying, I would certainly complain to the contractor and tell them that I did not believe it was appropriate for me to pay for something that was not done consistent with the contract. If that was not consistent with the contract — and you can characterize that as an error, if that's the term you want to use, but

we're paying in accordance with what was designated in the contract.

BY MS. WRIGHT:

Q I just don't understand why you cannot understand, or — I can understand. I totally understand why you're trying to avoid what I'm trying to find out. There were errors made by the construction company that —

CHAIRMAN WHITFIELD: Ms. Wright, you're going to have to stick to asking questions, and —

BY MS. WRIGHT:

Q Were there not —

CHAIRMAN WHITFIELD: — not testifying.

BY MS. WRIGHT:

Q Were there not errors made on the site by the construction company, that were not on the blueprints of that nuclear plant?

A The construction of the plant is very detailed, very complicated, and involves thousands of regulations that govern how that plant's supposed to be designed and constructed. We have people on-site, quality control oversight, to make sure if something's done that's not in compliance with the contract or that we believe was in error — not consistent with the contract — that we would challenge that. Many times it's not clear whether it completely complies with a specific regulation.

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1 We've got NRC oversight on the project; they have
2 inspectors. If they raise questions, we will stop the
3 work to make sure it's being done the right way, and
4 it's cleared by the NRC before we continue with
5 construction.
6 **Q** Okay. I heard you say, "We will stop the work." Did
7 you stop the work when the holes were drilled through
8 the base of one of the nuclear reactors, all the way to
9 the dirt? Did you stop that build?
10 **A** I don't think that was an exact characterization of the
11 issue we had. I don't think we drilled all the way to
12 the dirt. I'll let Mr. Byrne address that, because he's
13 more familiar —
14 **Q** I don't have —
15 **A** — with it than —
16 **Q** — the location in the report that the ORS turned in, but
17 that — that's — I could not believe it when I read that.
18 **A** Well, it was not —
19 **Q** They drilled the holes for the rebar — and I need to
20 finish my question, too.
21 **CHAIRMAN WHITFIELD**: Well, you're going to
22 have to show some courteousness to him. We demand
23 courteousness in here, and you need to let him
24 answer the question.
25 **MS. WRIGHT**: But I was asking a question.

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CHAIRMAN WHITFIELD: You need to let him finish his answer, Ms. Wright.

BY MS. WRIGHT:

Q Finish your answer, please.

A I thought I heard you say they drilled through the bottom of the reactor to the —

Q No.

A — dirt.

Q The base. There was a base construction that was gone on, and the holes were drilled all the way to the dirt. They were only supposed to be drilled so far down in, to accommodate rebar that was to be put in, and they went all the way to the dirt, and then I don't know how it was fixed, whether it was repaired —

MR. BURGESS: Mr. Chairman, I would object to this. Ms. Wright is consistently testifying here. If she would just simply ask Mr. Marsh a question, he'll deliver a response, and then she can ask her next question.

CHAIRMAN WHITFIELD: Sustained, Mr. Burgess.

Ms. Wright, you've been warned, and I ask you to stick to questions and not be argumentative with the witness, and just to stick to your questions. Let him answer, please.

MS. WRIGHT: I'll try.

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1 **CHAIRMAN WHITFIELD**: This is your last
2 warning.
3 **MS. WRIGHT**: I would like to get some answers
4 to my questions.
5 **BY MS. WRIGHT**:
6 **Q** So, the questions that you were asked in that *ex parte*,
7 that you had disputes with Westinghouse and CB&I, they
8 had nothing to do with the problems that Westinghouse
9 and CB&I had with each other, did they?
10 **A** I believe the issues we talked about in the July hearing
11 and also when we came back in the *ex parte* in November
12 had to do with our relationship with Westinghouse and
13 CB&I. We had indicated in the July hearing that there
14 were a number of issues that were in dispute that we
15 continued to try to resolve with the consortium in a
16 favorable manner for customers. We felt like the
17 amendment to the EPC contract that was signed with
18 Westinghouse in October gave us a chance to resolve
19 those issues, and our effort in November was to update
20 the Commission as quickly as possible as to what had
21 happened, because they showed a keen interest and
22 encouraged us to work extremely hard to resolve those
23 issues at the hearing in July. So that's what we were
24 discussing with the Commission in November.
25 **Q** But isn't it true that, in the *ex parte*, you were

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1 talking about disputes and costs that you had been
2 withholding payments, because these disputes in costs
3 and these disputes in situations that were going on at
4 the site, you weren't paying them; is that correct?
5 **A** Well, that was not a secret. We talked about that in
6 July and talked about it again in November.
7 **Q** Did I say something about it being a secret?
8 **A** No, but I made my comment.
9 **Q** But my question is, did you ever get the money for those
10 costs that were in dispute?
11 **A** Those items were settled at less than the disputed
12 amounts, in the settlement agreement that was signed
13 with Westinghouse in October 2015.
14 **Q** So, for less money, then, you're telling me, you settled
15 for less money than the costs that you were disputing at
16 the time of the *ex parte*?
17 **A** We had a variety of issues that were in dispute. Some
18 of those had been quantified at the time; there were
19 others that had not been quantified at the time. But we
20 believe the settlement we reached with Westinghouse in
21 October was a very meaningful resolution of that issue
22 in our favor.
23 **Q** Could I ask you if those disputes that you had — no, I'm
24 not going to say. What were the disputes? Did they
25 have any relationship to delays and fees and warranty

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1 extensions that had been missed because of the delays?
2 **A** There's a list of those — you may have them — in my
3 testimony.
4 **Q** I'm talking about the *ex parte*. Is that what — the
5 disputes you had at that time?
6 **A** I don't recall specifically if we went through each one
7 of those issues. I just don't recall, exactly.
8 **Q** Okay. And when Westinghouse said that they wanted CB&I
9 to step out of the room, did not — at that time, didn't
10 they say to you that they wanted to — they wanted to
11 allow CB&I to leave?
12 **A** Well, they met with us together at first. At the
13 beginning of the meeting, CB&I informed us that they
14 thought it was appropriate for them to exit the nuclear
15 construction business. They had been in discussions
16 with Westinghouse to figure out what it would take for
17 them to accomplish that, because there were disputes
18 between Westinghouse and CB&I — all of which I'm not
19 aware — that had to do with cost responsibility for
20 issues at the plant, changes associated with design cost
21 implications of —
22 **Q** Isn't —
23 **A** — construction. And then when CB&I left the room,
24 Westinghouse informed us that they had made
25 arrangements, if CB&I were to successfully leave the

1 project, to bring in Fluor Corporation.
2 **Q** Right. But doesn't it seem to you that, perhaps, CB&I
3 was wanting to get out of building nuclear systems
4 simply because there was a possibility of litigation
5 from SCE&G for the costs? Who hired — go ahead. Answer
6 that question.
7 **A** Yes. CB&I told us that they felt like the path we were
8 on would likely lead to litigation on the contract.
9 They wanted to avoid that, if possible, and wanted us to
10 pursue the negotiations of allowing them to exit the
11 contract.
12 **Q** I'm trying to figure out how to word this next question.
13 **CHAIRMAN WHITFIELD**: Take your time.
14 **BY MS. WRIGHT:**
15 **Q** When — who hired the contractors who were actually at
16 the site? Who hired them? Was that Westinghouse, or
17 CB&I?
18 **A** CB&I was the primary contractor. They had
19 responsibility for hiring all the subcontractors on the
20 site.
21 **Q** That's what I thought. And who was the actual
22 contractor at the site, at the time?
23 **A** At what time?
24 **Q** At the time of the disputes?
25 **A** Well, disputes had gone on for a number of years, but

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generally it was CB&I at the time we were negotiating last summer.

Q Who is the construction company?

A CB&I.

Q They're the contractor. Was CB&I — did they — was it their particular employees that were out there doing the nailing and the hammering and the —

A They are the general contractor and —

Q Right.

A — they hire the appropriate number of subcontractors to do the work. They're on record —

Q So who is the —

A — as being the contractor.

Q Who is the construction company, is what I'm asking you.

A CB&I. They are the contractor.

Q Who is Stone & Webster, in relation to this build?

A Stone & Webster is a wholly-owned subsidiary of Shaw, that CB&I acquired as part of the merger and acquisition of assets from Shaw Company.

Q But at the time of these disputes, was it Stone & Webster that was the construction company that were doing the build?

A The actual contract's probably with Stone & Webster, but it was under the control of Chicago Bridge & Iron.

Q Stone & Webster is who I was trying to ask you about.

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1 **A** Okay.
2 **Q** Now, when CB&I left and you agreed to the settlement and
3 this amendment, CB&I is gone — they are gone, and Fluor
4 is there — where is Stone & Webster? Because they were
5 with CB&I, remember? Now, where are they now?
6 **A** Stone & Webster was acquired — when Westinghouse
7 purchased the nuclear construction operations from CB&I,
8 that included Stone & Webster.
9 **Q** So we still have that same construction company on the
10 site right now?
11 **A** Well, legally, that's the construction company, but that
12 work has been turned over to Fluor Corporation. They've
13 been hired as the contractor —
14 **Q** And Fluor is —
15 **A** — on-site.
16 **Q** — with Westinghouse?
17 **A** Fluor has been hired by Westinghouse to do the work.
18 **Q** So we have the same construction company we have had all
19 along under a different contractor, but under the same
20 contractor — major contractor, Westinghouse?
21 **A** Stone & Webster is the legal entity that was originally
22 with Shaw. Then it was sold to CB&I.
23 **Q** Right, so they were with CB&I at that time.
24 **A** Right, and then it was transferred to Westinghouse.
25 Stone & Webster does not have people on-site doing the

1 work. They have engaged, in this case, Fluor
2 Corporation — or, previously, they engaged CB&I to do
3 the work, or CB&I is the parent company of Stone &
4 Webster at the time.
5 **Q** Right. Right. So, ultimately, it comes down to the
6 fact that, if there were construction errors similar to
7 the thing that I'm talking about with the toilet being
8 put in the kitchen, the construction errors that were
9 made on this site would be ultimately Westinghouse's
10 responsibility, and Westinghouse, had they not, refused
11 responsibility for that, and that's why you went into
12 this?
13 **A** I'm not sure I understand your question. I want to
14 answer, but I'm not sure I understand it. Westinghouse,
15 at the time they were part of the consortium with
16 Chicago Bridge & Iron, would have responsibility as a
17 partner in that consortium. They would both have
18 responsibility, because we had guarantees from
19 Westinghouse and Chicago Bridge & Iron. But under the
20 new arrangement, the guarantees are with Westinghouse
21 and Westinghouse's parent company, Toshiba.
22 **Q** Right.
23 **A** So we don't have guarantees from Fluor Corporation. All
24 of that now would fall to Westinghouse.
25 **Q** So Westinghouse ultimately is the responsible party.

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1 **A** Under the new agreement, that is correct. Under the
2 amended agreement.
3 **Q** And who was the responsible party before CB&I left?
4 **A** Well, it would've been the consortium, which consisted
5 of CB&I and Westinghouse.
6 **Q** Right, okay. All right. So, during this working out of
7 this amendment that you have agreed to with
8 Westinghouse, and this agreement that is a new contract
9 — you might as well call it a contract. It's not an
10 amendment; it is a contract. You are going into a
11 contract. Just because one of the parties is the same
12 doesn't make it the same contract.
13 **MR. BURGESS**: Mr. Chairman, with all due
14 respect to Ms. Wright, and I understand she's not
15 an attorney —
16 **MS. WRIGHT**: No, I'm not.
17 **MR. BURGESS**: — but she continues to testify —
18 **MS. WRIGHT**: I have to lay groundwork for my
19 question.
20 **MR. BURGESS**: I'd ask that she ask a question.
21 **MS. WRIGHT**: I have to lay a groundwork for my
22 questions.
23 **CHAIRMAN WHITFIELD**: I'll note Mr. Burgess's
24 objection. Once again, stick to the questions, Ms.
25 Wright.

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1 **MS. WRIGHT**: Okay.
2 **BY MS. WRIGHT:**
3 **Q** So you settled for less money for those disputes, from
4 Westinghouse, under this new contract, correct?
5 **A** It was an amendment to the existing EPC contract. That
6 contract is still in place. This was an amendment to
7 the contract. That is, part of that amendment, we did
8 settle the majority of the outstanding issues with
9 Westinghouse.
10 **Q** Okay. Did you change some of the owners that were in
11 the contract?
12 **A** Well, the contract was signed initially by the
13 consortium, so when we entered into the contract, as
14 part of that agreement, we agreed to release CB&I from
15 the contract and their guarantee under that contract,
16 and Westinghouse assumed the responsibility of CB&I
17 under the amended contract. So we released CB&I and
18 Westinghouse assumed full responsibility for the
19 contract.
20 **Q** All right. You've gone ahead with this amendment, this
21 contract change, before you even came to the Public
22 Service Commission, correct?
23 **A** We signed the amended agreement to the EPC contract.
24 And as we did that, which is why we were here in
25 November, as part of that contract amendment we had the

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1 option to select to move the remaining costs of the
2 construction to the fixed-price category, so we wanted
3 to inform the Commission of that. And we told them that
4 we would be evaluating that option, and once we
5 determined what we believed was the best path forward,
6 we would be back at the Commission to update them on our
7 decision and seek approval, whichever direction we went,
8 which is what has led to this hearing.
9 **Q** Could you tell me, do you know what you all offered to
10 the PSC when you first came here in 2008 that the price
11 of this thing would be?
12 **A** In 2008, the price that was included in the contract was
13 about $6.3 billion.
14 **Q** Uh-huh. And how much has it gone to, right now?
15 **A** It has gone up from that amount about — let me get my
16 number and give you the right numbers here [indicating].
17 It has gone from the 6.3 to $7.6 billion, about a $1.3
18 billion increase.
19 **Q** Right. Well, it's 7.68 by your figures that I got
20 somewhere else, which is almost $7.7 —
21 **A** I think it was six —
22 **Q** — billion.
23 **A** It was a little bit higher than that, and it's gone down
24 as a result of the settlement. I've got $7.658 billion.
25 **Q** One of the statements on the *ex parte* — I want to go

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1 back to that — when CB&I was asked to leave the room,
2 didn't Westinghouse say that they needed to have this
3 construction site — they wanted to alleviate some of
4 these problems that were happening because they needed
5 to have a better — the world needed to see them in a
6 better light at building this? I want to see — I wrote
7 down what you said. Didn't they say that to you, in
8 that meeting? Didn't they say that this had a bearing
9 on how these AP1000s would be viewed and how they would
10 be able to go forward with their business of selling
11 them?
12 **A** They told us that completing the plants here and at the
13 Vogtle site in Georgia was very important, because they
14 did have plans to sell these plants worldwide. It was
15 important for them to finish these projects and show
16 that they would operate as well as the projects —
17 **Q** So isn't —
18 **A** — in China.
19 **Q** — it true that they didn't want bad press; they needed
20 to have good press. They needed to have this stuff
21 taken care of.
22 **A** They didn't talk about press. They talked about their
23 desire to finish the plants because their long-term
24 business plan was to sell more of the AP1000s worldwide.
25 **Q** Well, yeah. I use the word "press" because I'm not a

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1 lawyer, but —
2 **CHAIRMAN WHITFIELD**: Ms. Wright, he answered
3 the question.
4 **MS. WRIGHT**: Okay.
5 **BY MS. WRIGHT:**
6 **Q** All right. So, now, no one has taken responsibility for
7 the payments on those errors that were made, have they?
8 **A** I don't know what errors you're referring to. We have
9 oversight on the project. We know what standards it's
10 supposed to be built to, and we're working very hard to
11 hold them to those standards. And where we have had
12 disputes, we've resolved those as part of the ongoing
13 process.
14 **Q** Right now, how much do you say that the increase has
15 been on the customers' bills for their charges that have
16 been increased on their electric bills?
17 **A** If you'll bear with me for just a minute, I —
18 **Q** I will.
19 **A** — have that information [indicating].
20 Based on the Base Load Review Act increases put in
21 place to date, a customer's bills have gone up about
22 16.8 percent.
23 **Q** I've got my electric bill from September of 2008, and
24 I've got my electric bill from September 2016. My bill
25 has gone up 34 percent. Can you explain why that would

be?

A I don't know what's in your electric bill or what the weather patterns were for those months, or other factors that might impact your specific bill, but I've got the rate increases we have requested for the Base Load Review increases since we started, and through today it's 16.8 percent that's been approved by the Commission.

Q I understand what you're saying, but I understand what 800 kilowatts of electricity — the fees for the first 800 — are, back in '08, and what they are now.

CHAIRMAN WHITFIELD: Ms. Wright, I need a question. I need a question.

BY MS. WRIGHT:

Q My question is —

CHAIRMAN WHITFIELD: You're testifying, and I need a question.

MS. WRIGHT: I'm sorry.

BY MS. WRIGHT:

Q My question is, how can my figures be so far off from yours?

A You know, the numbers I have here are overall increases. In the specific rates, there are other factors that could impact your bill. The cost of fuel is an adjustment that's made on an annual basis by the

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Commission. Fuel costs go up and they go down, so there's likely some changes in fuel costs since 2008.

Q Mr. Marsh, by allowing these charges, these costs that I'm having a problem with, by allowing them to be written off, as it were, how is that considered prudent for the ratepayers?

A I'm not sure what you mean by "written off."

Q You said that you settled your — didn't you say that you settled your disputes by a much less amount than the amount you were asking for to begin with?

A Well, we didn't know the exact amount of the total disputes. That's why there was a dispute; we couldn't agree on all of the issues. Of those we could quantify, we've attempted to quantify in our testimony in this hearing. And the settlement amount we reached was substantially less than that, even though we agree the total amount of the dispute was likely much greater.

Q All right. When you began building these — in 2008, when you came here to speak to the Public Service Commission to get permission to do this, wasn't one of the big pushes for how much it was going to lower our carbon footprint in South Carolina?

A That's correct.

Q My next question is, why have you not discussed how much of a footprint for nuclear waste you are going to be

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creating?

A We have plans to comply with all the regulations to store the nuclear waste that will come from the plant. The nuclear fuel that will be used at the plant over its useful life can be stored on-site, if the government does not follow through with its obligation and take the fuel over the long term.

Q How many years?

A For the operating life of the plant? It would be —

Q No, no.

A — about 60 years.

Q No. How many years on-site do you have storage for, for these two units that you're building?

A We have enough space on-site to store the fuel for the life of the plants.

Q My understanding, it's only for 18 years. You have for 60 years' worth of room — you're telling us that you have 60 years' worth of — for two plants, you have 60 years' worth of space on-site for your nuclear waste that you're going to generate out of these plants?

A For the spent fuel.

Q Okay. What about — you're telling me that, on this site, that there is 60 years' worth of space on that site?

A That is our belief today, yes.

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1 **Q** Okay. How much fuel is going to be — how much nuclear
2 waste is going to be produced out of one of these units,
3 a year?
4 **A** I'm going to let Mr. Byrne address those specific
5 questions —
6 **Q** Okay.
7 **A** — on the waste. I don't want to reach too far out of my
8 expertise, but —
9 **Q** Okay. All right.
10 **A** — he'll be happy to address those questions with you.
11 **MS. WRIGHT**: Then I'm finished. Thank you,
12 very much.
13 **CHAIRMAN WHITFIELD**: Thank you, Ms. Wright.
14 Mr. Holman.
15 **MR. HOLMAN**: No questions — oh, I'm sorry. I
16 don't have any questions. Ms. Thompson may.
17 **CHAIRMAN WHITFIELD**: Ms. Thompson?
18 **MS. THOMPSON**: Yes. Thank you, Mr. Chair.
19 **CHAIRMAN WHITFIELD**: Come forward.
20 [Discussion off the record]
21 Ms. Thompson, we're ready. We're going to
22 resume for a little bit longer. I don't know how
23 long you have, but we're going to go a few more
24 minutes and then break for lunch.
25 **MS. THOMPSON**: Thank you, Mr. Chairman. I

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1 don't have too many questions.
2 **CHAIRMAN WHITFIELD**: Thank you, then. You may
3 proceed, Ms. Thompson.
4 **MS. THOMPSON**: Thank you.
5 **CROSS EXAMINATION**
6 **BY MS. THOMPSON**:
7 **Q** Good afternoon, Mr. Marsh.
8 **A** Good afternoon.
9 **Q** I'm Gudrun Thompson, representing the South Carolina
10 Coastal Conservation League.
11 Mr. Marsh, in this proceeding, the company is
12 asking the Commission to approve an approximately $831
13 million increase in the construction costs for the V.C.
14 Summer units; is that right?
15 **A** That's correct, in connection with the amendment we
16 signed with Westinghouse.
17 **Q** And the company can recover its financing costs for the
18 Summer units from customers while the project is under
19 construction, correct?
20 **A** Under the Base Load Review Act that was passed, I
21 believe, in 2007, we are allowed to bring revised rates
22 to the Commission, no sooner than on an annual basis, to
23 seek recovery for financing costs associated with debt
24 and equity that's been issued to finance the plants,
25 that's correct.

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Q And, in fact, the company has already been authorized to charge customers over $1 billion due to the — to cover the financing costs of construction of the units, correct?

A I don't know, actually, that amount, but we have been billing those dollars since we started construction of the project in 2008.

MS. THOMPSON: Mr. Chairman I actually have a couple of cross-examination exhibits to pass out. May I approach the witness?

CHAIRMAN WHITFIELD: Yes, ma'am.

BY MS. THOMPSON:

Q [Indicating.]

A [Indicating.]

CHAIRMAN WHITFIELD: Ms. Thompson, do you intend to enter this into the record?

MS. THOMPSON: Yes, I do, Mr. Chairman.

CHAIRMAN WHITFIELD: Do you have copies for us, then?

MS. THOMPSON: I do, yes. I'll just wait for the Commission to receive copies.

[Documents distributed]

Mr. Chairman, I would like to have the exhibit that is three lines and begins with "SCE&G's residential customers..." marked as CCL Marsh

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1 Cross-Examination Exhibit 1, and the exhibit that
2 begins "SCE&G has submitted..." I'd like to have
3 that marked as CCL Marsh Cross-Examination Exhibit
4 2.
5 **CHAIRMAN WHITFIELD**: I'm going to take both of
6 your Exhibits 1 and 2 and enter them in as a
7 composite exhibit, as Hearing Exhibit No. 5.
8 **MR. BURGESS**: Mr. Chairman, if I might be
9 heard on this matter? I heard her ask that they be
10 marked for identification purposes; I did not hear
11 her move them into the record at this time. And I
12 would like to understand — and maybe she plans to
13 do this with the witness — as far as who prepared
14 these, where these came from, because we certainly
15 do not know. This is not Mr. Marsh's work product,
16 so I'd like to hear, on that point, before we would
17 be willing not to voice an objection on including
18 this into the record.
19 **CHAIRMAN WHITFIELD**: Objection so noted, Mr.
20 Burgess.
21 [WHEREUPON, Hearing Exhibit No. 5 was
22 marked for identification.]
23 And, Ms. Thompson, your response?
24 **MS. THOMPSON**: Thank you, Mr. Chairman.
25 <

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1 **BY MS. THOMPSON:**
2 **Q** Mr. Marsh, have you had a chance to familiarize yourself
3 with these two exhibits? I'll just ask you about the
4 first one, the one that begins "SCE&G's residential
5 customers, served on Rate 8..." Have you had a moment
6 to look over that?
7 **A** Yes, I have.
8 **Q** Do you recognize this document?
9 **A** I don't, specifically. My experience tells me this
10 looks like it may be a response to an interrogatory or
11 question we may have responded to. I don't know that
12 for sure.
13 **Q** I will represent to you that this is a document that was
14 downloaded from the Office of Regulatory Staff website,
15 which was posted on ORS's homepage. Would you accept
16 that, subject to check?
17 **A** Subject to check, yes.
18 **Q** And going back to my question, this first document in
19 Hearing Exhibit 5 states that, for the average
20 residential customer who is using 1000 kilowatt-hours a
21 month, the average bill is $143.67 per month; is that
22 correct?
23 **A** That's correct.
24 **Q** And of that amount, $23.17 — or 16.13 percent — of the
25 bill is attributable to the Base Load Review Act?

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1 **A** That's what the document states.
2 **Q** Does that sound correct to you, subject to check?
3 **A** Subject to check, it doesn't sound out of line, but I
4 just don't know exactly.
5 **Q** Thank you. I would ask you to turn, Mr. Marsh, to the
6 second page of Hearing Exhibit 5, and this exhibit
7 states that SCE&G has submitted a revised-rates filing,
8 and that is in Docket 2016-224-E, correct? But it
9 doesn't state the docket number.
10 **A** I don't know the docket number, specifically.
11 **Q** But the company has submitted a revised-rates filing,
12 correct?
13 **A** We did submit a revised-rates filing for the $74
14 million. Although, I believe that has been adjusted,
15 based on updated construction expenditures, and I think
16 the $74 million now is down to $64 million due to
17 adjustments that were made based on the ORS review.
18 **Q** Thank you for that correction. And bear in mind that
19 this figure has been updated. At the time that this
20 document was prepared, if the request for revised rates
21 was approved, over $27 of the average residential
22 customer's $148 electricity bill would be from
23 construction of the units, correct?
24 **A** That's what this states, yes.
25 **Q** So that would be reduced somewhat under the amended

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1 revised-rates filing?
2 **A** That's correct.
3 **Q** Mr. Marsh, have you read any of the hundreds of comments
4 that have been submitted by SCE&G customers in this
5 proceeding?
6 **A** No. I get comments from customers on — I won't say a
7 daily basis, but quite often. I've reviewed a variety
8 of comments. I have seen some of the comments that come
9 in. I can't say I've read all of the comments. I
10 understand customers are concerned about the nuclear
11 plants; they're concerned about the cost increases. And
12 I'm certain we'll hear from customers tonight and I'll
13 be here to hear those comments directly from the
14 customers who testify tonight.
15 **Q** Would you agree that many of those customers have stated
16 that they're having trouble paying their electricity
17 bills?
18 **A** Certainly there are those that do say that in their
19 comments.
20 **Q** Would you agree that energy efficiency programs, like
21 the programs that the company currently offers, can help
22 customers to reduce their electricity bills?
23 **A** If they are effective and done properly, certainly they
24 have the opportunity to help them reduce their bills.
25 **Q** Okay. Would you agree that the company's programs are

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1 effective and are being done properly?
2 **A** We've had a variety of programs over the years. Some
3 have been more effective than others. Those that
4 haven't been as effective, we've eliminated from the
5 program, and tried to include those that do provide
6 positive results. And we do believe that they're
7 helping customers, yes, that's correct.
8 **Q** And you state in your testimony — and it's in your
9 direct testimony on page seven[sic],lines seven through
10 eight — that renewable resources and energy efficiency
11 will play an increasingly important role in SCE&G's
12 generation mix, going forward. I'll let you get there.
13 It's page 27, line seven through eight.
14 **A** [Indicating.] Yes.
15 **Q** But, in fact, SCE&G projects that its EE savings
16 actually will decrease in coming years. Does the
17 company not project decreases?
18 **A** Decreases in the spending? Or effectiveness?
19 **Q** Decreases in the energy savings, so the megawatt-hours
20 saved by the programs.
21 **A** I don't know the specifics on that. We'll have someone
22 who can testify to that, specifically, but what we're
23 talking about here are the benefits of solar — renewable
24 energy resources and the energy efficiency playing an
25 important role, not just energy efficiency.

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1 **Q** May I ask, Mr. Marsh, who would be the best company
2 witness to ask about that?
3 **A** Mr. Kissam.
4 **MS. THOMPSON**: Okay. Thank you, Mr. Marsh.
5 That's all the questions I have.
6 At this time, I'd like to move Hearing Exhibit
7 1 into the record, without — Hearing Exhibit 5.
8 **CHAIRMAN WHITFIELD**: Hearing Exhibit 5 were
9 your two exhibits.
10 Mr. Burgess, I'm sorry for my premature
11 inclusion. Do you still have an objection?
12 **MR. BURGESS**: We'll have no objection.
13 **CHAIRMAN WHITFIELD**: Thank you. Then it will
14 be entered in as Hearing Exhibit No. 5.
15 [WHEREUPON, Exhibit No. 5 was received in
16 evidence.]
17 **MS. THOMPSON**: And thank you, Mr. Chairman.
18 **CHAIRMAN WHITFIELD**: And, thank you, Ms.
19 Thompson.
20 We are going to take an hour break, at this
21 time, for lunch. I'll see you back at 1:20.
22 [WHEREUPON, the witness stood aside.]
23 [WHEREUPON, the lunch recess was
24 taken from 12:15 to 1:25 p.m., after
25 which time Mr. Knapp was excused from

the hearing.]

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1 A F T E R N O O N P R O C E E D I N G S
2 THEREUPON came,
3 **K E V I N B . M A R S H ,**
4 resumed the stand as a witness on behalf of the Petitioner,
5 South Carolina Electric & Gas Company, who, having been
6 previously duly affirmed, was examined and testified as
7 follows:
8 **CHAIRMAN WHITFIELD**: Please be seated. We'll
9 resume this hearing.
10 The Commission will go today until 5:15, at
11 which time we will break in time to allow people to
12 sign up and get people in for the public hearing at
13 6 p.m. We realize tomorrow presents a lot of
14 challenges in a lot of ways, so, depending on the
15 length of the public hearing tonight, we may resume
16 after the public hearing if it's not too long.
17 We're going to try to get as much done today as we
18 can.
19 So, with that, Mr. Marsh, you're still on the
20 stand. Mr. Guild, you are up.
21 **MR. GUILD**: Thank you, Mr. Chairman.
22 **CROSS EXAMINATION**
23 **BY MR. GUILD**:
24 **Q** Good afternoon, Mr. Marsh. How are you?
25 **A** I'm doing fine, thank you.

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1 **Q** So, are you familiar with the settlement agreement that
2 the company and other parties entered into and proposed
3 for adoption by the Commission?
4 **CHAIRMAN WHITFIELD**: I'm sorry, Mr. Guild.
5 Could you put on a Lavalier, or just get closer to
6 the mic?
7 **MR. GUILD**: Or just not wander, Mr. Chairman,
8 how about that?
9 [Laughter]
10 **CHAIRMAN WHITFIELD**: Either one. We know
11 you're pretty audible, but we would like you to be
12 mic'd up. You want to just — you want a Lavalier?
13 **MR. GUILD**: I'll just work with this, if you
14 don't mind.
15 **CHAIRMAN WHITFIELD**: That's great. Thank you.
16 **MR. GUILD**: Thank you, sir.
17 **BY MR. GUILD:**
18 **Q** You are familiar with the settlement agreement?
19 **A** Yes, I am.
20 **Q** Have you read it?
21 **A** Yes.
22 **Q** Did you participate in the negotiation of that
23 agreement?
24 **A** I was involved in that process, yes, I was.
25 **Q** Did you understand from the Office of Regulatory Staff

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1 that they had substantial concerns about Westinghouse's
2 ability to meet the terms of that revised contract that
3 you entered into with Westinghouse?
4 **A** I know they have expressed concerns that Westinghouse
5 would fulfill its commitments, and they asked us
6 questions about that, and also I think they asked
7 questions of people on-site, as they did their review of
8 the activities.
9 **Q** Right. And a key portion of the settlement agreement
10 with Westinghouse was the so-called fixed-price option
11 which the company has elected to pursue, and which you
12 ask this Commission to approve.
13 **A** That's correct.
14 **Q** And the fixed-price option, in short, commits
15 Westinghouse to deliver the units by dates certain, at a
16 substantially fixed price, that did not exist prior to
17 the exercise of that option?
18 **A** Yeah, there were a number of things that were adjusted
19 in the EPC contract as a result of the amendment, one of
20 which was to remove the bulk of the remaining costs to
21 be spent to the fixed-price category, as well as move
22 the guaranteed substantial completion dates to August
23 2019 for Unit 2 and August 2020 for Unit 3.
24 **Q** Right. And in order to take advantage of that fixed-
25 price option, you were obligated — "you," the company

1 were obligated — to pay Westinghouse $550 million; is
2 that correct?
3 **A** It was $505 million.
4 **Q** Excuse me, 505. I stand corrected. And that $505
5 million is a substantial portion of the $850-odd million
6 you're asking the Commission to approve in this
7 proceeding, correct?
8 **A** That's correct.
9 **Q** Notwithstanding those commitments by Westinghouse to
10 deliver a substantially fixed-price contract and
11 completion by specific dates, ORS still expressed
12 reservations and concerns that Westinghouse would be
13 able to meet those commitments; isn't that correct?
14 **A** I think they have their concerns. I believe with their
15 meetings on-site, they got themselves comfortable with
16 the contract based on the changes that were made,
17 specifically on the additional liquidated damages that
18 would help cover some of the costs if they were not able
19 to finish the contract on time, and other issues.
20 **Q** Well, let's just take that one example. Liquidated
21 damages — in your summary, you said you negotiated for
22 liquidated damages, and I think you said four times the
23 previous quantum of liquidated damages under the revised
24 contract; is that correct?
25 **A** That's correct.

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1 **Q** All right. And do I recall that that amounted to a
2 number that was $137 million, maximum liquidated
3 damages? Do I have that correct?
4 **A** I think that's correct, subject to check [indicating].
5 Talking about the new, or the old?
6 **Q** The new.
7 **A** Yeah, the new liquidated damages are $185,900,000 per
8 unit, or $371,000,800 total, for both units.
9 **Q** That's the new.
10 **A** Yeah.
11 **Q** And that $185 million per unit compares to a benefit to
12 ratepayers of how much, if the units meet the deadline
13 for the production tax credits?
14 **A** I'm not sure I understand your question.
15 **Q** How much — what is the value you place on the production
16 tax credits, per unit?
17 **A** Well, the production tax credits on the units in total
18 are about $2.2 billion in value, so it would be about
19 $1.1 billion per plant.
20 **Q** All right. So, Westinghouse, if it doesn't deliver the
21 units by the deadline for production tax credits, would
22 suffer $185 million, approximate, penalty in liquidated
23 damages, but ratepayers would lose the balance of $1
24 billion plus, per unit, correct?
25 **A** No. The liquidated damages include penalties for not

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1 meeting the production tax credit deadline, as well as
2 just finishing the construction by the guaranteed
3 substantial completion dates.
4 **Q** Yes, but you get my point. The difference is between
5 $1.1 billion and $185 million. Westinghouse is not
6 going to hold ratepayers harmless for failure to meet
7 the deadline to be eligible for production tax credits,
8 are they?
9 **A** Not specifically that amount, but we did negotiate to
10 the higher liquidated damages price.
11 **Q** All right, sir. Now, the terms of art that have been
12 used in the various documents include a number that I
13 just want to clarify. The generally — the GSCD, tell me
14 what that stands for again?
15 **A** Guaranteed substantial completion date.
16 **Q** All right. And is that the same date as commercial
17 operation?
18 **A** No. That's the date by which they have to have the
19 plants completed and turned over to us in operating
20 order. There's probably some debate about what is the
21 technical commercial operation date. I know many times
22 that's the date that the Commission has actually
23 approved the units to go into service and you start
24 recovering operating costs and having depreciation and
25 the other costs associated with operating the plants,

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1 but that could change; that's not a hard and fast rule
2 for commercial operation.
3 **Q** Well, why does the settlement agreement use the term
4 "commercial operation date"?
5 **A** That's the term we used with Westinghouse; from a
6 construction perspective, it needs to be ready to go
7 into commercial operation. So, for that term, it would
8 be the dates they're ready to go into service and
9 operate, but that might be different from the actual
10 date that the Commission might decide is the commercial-
11 operating for ratemaking purposes.
12 **Q** And what's the date that's significant in terms of
13 eligibility for production tax credits?
14 **A** The units have to be on-line and in service by end of
15 December 2020.
16 **Q** And is that the same thing as commercial operation?
17 **A** Again, there could be some interpretation around that
18 number. I don't know that the tax code is specific in
19 using the term "commercial operation," but they have to
20 be in operation. I know some have taken the opinion
21 that it's the date that you start testing the units that
22 they would qualify for production tax credits. I don't
23 think that question has been absolutely answered. But
24 they have to, clearly, be working and in operating order
25 by the end of December of 2020.

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1 **Q** They have to be generating electricity —
2 **A** Yes.
3 **Q** — to be eligible for production tax credits, and they're
4 not producing if they're not producing electricity,
5 correct?
6 **A** That would be correct, because you earn the tax credits
7 based on the megawatts that are produced.
8 **Q** How much of a gap in time might there be between the
9 generally — the GSCD and the date at which production
10 tax credits are vested, shall we say?
11 **A** I think once the units go into operation, we would earn
12 the right to start recording the credits and recovering
13 the credits on the tax return.
14 **Q** Well, I got that part. But the question is, what's the
15 gap between the GSCD, if any, and the date on which you
16 start booking production tax credits?
17 **A** I don't know that that exact date has been determined.
18 It might take an interpretation of the IRS and the
19 Treasury rules. But, clearly, when they go into
20 operation, we have eight years to collect the full value
21 of the credits. I would expect that to be no later than
22 the end of the year they go into operation.
23 **Q** Well, this is pretty important stuff for the Commission.
24 Have you told the Commission what the variation is among
25 those terms of art: the GSCD, the commercial operation

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1 date, the date for eligibility for production tax
2 credits?
3 **A** Well, I think the important point is that we qualify for
4 the credits. I expect there to be a very short period
5 of time from when the units are released from
6 Westinghouse to the company and they would go into
7 commercial operation, from a regulatory perspective. I
8 don't think that's a large gap in time. But even if it
9 were several months, there's no loss of credits that you
10 would qualify for. You would start earning credits very
11 quickly.
12 **Q** Well, you start earning those credits only if the units
13 go into operation by that deadline, the deadlines that
14 are statutory at this point.
15 **A** That's correct.
16 **Q** And so, they might deliver you a GSCD but not
17 eligibility for production tax credits, since there
18 might be — as you just said — a several-month gap
19 between those two dates?
20 **A** No, I think once they deliver the units to us, we would
21 be in a position to qualify for the credits.
22 **Q** As of that same date?
23 **A** I don't know if it's that specific date, or after we've
24 operated the units for a period of time, or we come back
25 to the Commission, but I believe they would qualify for

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1 the tax credits if they're completed by the end of
2 December 2020.
3 **Q** So what's the maximum lag between the outside of those
4 several terms of art, those dates? What could it be,
5 Mr. Marsh, the maximum lag between GSCD and eligibility
6 for production tax credits? A month? Two months? A
7 day?
8 **A** I don't know that there would be a lag, as I discussed
9 earlier, but if there were a lag, I think it would be a
10 very short period of time.
11 **Q** How short is very short?
12 **A** I don't think it'd be longer than a couple of months,
13 but I don't know that specifically.
14 **Q** Okay. Now, under the renegotiated agreement with
15 Westinghouse, they have promised to deliver units
16 complete — GSCD-complete — by what two dates, just to
17 remind us, please?
18 **A** August of 2019 for Unit 2, and August of 2020 for Unit
19 3.
20 **Q** All right. And the production tax credit eligibility
21 expires December 31, 2020; is that correct?
22 **A** That's correct.
23 **Q** All right. So if you're confident that Westinghouse is
24 going to deliver both units months before the expiration
25 of the production tax credits, why do you care whether

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1 or not the production tax credits are extended by act of
2 Congress?
3 **A** Well, I think it would be prudent to make sure you do
4 everything you can to protect the credits. It was clear
5 to me, when we had our proceeding last July before the
6 Commission and had a new capital-cost schedule approved
7 at that time, the Commission admonished us and
8 encouraged us to take every step possible to protect the
9 value of those credits for customers, so, certainly, I
10 would do that.
11 **Q** So you are actively pursuing extension of the production
12 tax credit deadline?
13 **A** We're working with other groups to, primarily — well,
14 first of all, secure the value of the credits for the
15 public power companies that are also invested in our
16 units — Santee Cooper — as well as those public power
17 companies that are invested in the Georgia Power units.
18 Under the current interpretation of the law, they're not
19 able to monetize tax credits that we believe they are
20 entitled to. So we've been working with a group to help
21 encourage the legislature in Washington — Congress — to
22 change the laws to allow them to qualify, and at the
23 same time consider extending the deadline for the
24 credits.
25 **Q** So, as of right now, your 45 percent co-owner, Santee

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1 Cooper, and the co-op customers who buy power from
2 Santee Cooper, they wouldn't benefit from the production
3 tax credits?
4 **A** Under the current interpretation, that's true.
5 **Q** Without additional eligibility language being amended to
6 the bill, as well as extending the legislation?
7 **A** Yeah. And I don't think it was Congress's intent to
8 exclude them, intentionally. When they passed the
9 production tax credit legislation, I believe the intent
10 was to encourage new nuclear production in the country.
11 The method they chose was to do it through a production
12 tax credit, but if you pay taxes, that's easily done; if
13 you don't have the ability to secure those credits
14 through income tax returns, you have to look for another
15 alternative to try to value, securitize, to get the
16 value of those credits on your books. So that's what
17 we're trying to do with the changes in the law.
18 **Q** So, as nonprofits, as contrasted with SCANA or SCE&G,
19 which are profit-making corporations, the co-ops simply
20 don't have availability to production tax credits, then.
21 **A** Not the way the law is structured today.
22 **Q** Well, it's a little late in the game to try to change
23 the law. Did that not occur to Santee Cooper and the
24 co-ops until just now?
25 **A** You know, the law was passed before we made the decision

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1 to build the new nuclear plants. That was passed, I
2 believe, in the Energy Act of 2005. And at that time,
3 we had not made the decision to build the new nuclear
4 plants. I'm not sure it was clear, under the
5 interpretations, that they would not be allowed to take
6 the value of the credits or secure the value of the
7 credits, but it certainly became clear as time went on
8 and we began to discuss it further.
9 **Q** Well, I just don't quite get that. So, the 2005 Energy
10 Act provides for production tax credits and expires
11 2020, for new nuclear production.
12 **A** Right.
13 **Q** All right. I think in the 2007 or '8 timeframe, you
14 were starting to make the deals with the Westinghouse
15 consortium for these plants. 2009 was the Commission
16 approval, under the Base Load Act, of your initial
17 request for approval, correct?
18 **A** That's correct.
19 **Q** So now fast-forward. It's 2016. Between 2005 and 2016,
20 didn't it occur to Santee Cooper and the co-ops, or
21 SCE&G, that the 45 percent ownership interest wasn't
22 going to be benefited by production tax credits?
23 **A** I think what I said, it wasn't clear at that time. Many
24 times, when Congress or Treasury will pass a law that
25 impacts the tax code, the law is passed and then over a

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1 period of years they come back and draft the detailed
2 regulations that would actually lay out, specifically,
3 how those tax credits would be applied. So at the time
4 we made the decision to build the plants in 2008 and
5 came to the Commission for approval, I don't think it
6 was clear in the regulations that were out at that time
7 as to whether or not they would qualify. So, over time,
8 we have sought to meet with representatives from
9 Treasury and tried to get a decision on that issue. And
10 it's our belief at this time it needs to be clarified in
11 the law, to make sure it's clear that they can receive
12 the value of those credits.
13 **Q** I see. Well, I mean, just to a person who, unlike
14 Donald Trump, is not sophisticated in tax law, I can
15 only say, if you don't pay any tax because you're a
16 nonprofit cooperative, what's the mystery about how you
17 could possibly be eligible for a tax credit? What's the
18 mystery?
19 **A** Well, I don't think it's a mystery. Tax credits are
20 allocated and assigned. If you don't have the ability
21 to utilize those tax credits yourself, you might be able
22 to sell those to an entity that does pay taxes for maybe
23 a slightly reduced rate, to secure the benefit of those
24 tax credits.
25 **Q** And was that Santee Cooper's plan, was to broker their

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1 tax credits to a third party?
2 **A** I can't speak to their plans, specifically, but
3 certainly that's an option that they believe would be
4 available to them. But until the tax regulations were
5 actually detailed and it was quantified, we weren't able
6 to make that determination.
7 **Q** So Mr. Marsh, do your efforts to extend the production
8 tax credit deadline reflect uncertainty on your part of
9 whether Westinghouse will meet the generally — GSCD
10 dates that they are now committed to under the revised
11 contract?
12 **A** I think it represents prudence on our part. You've got
13 a deadline of December 31, 2020. We have the second new
14 unit that's not scheduled to come on-line until August
15 of 2020. The Commission has encouraged us to do
16 everything we can in our power to try to secure the
17 value of those credits. If we were to finish the second
18 new unit, for example, on January 15, 2021, 15 days past
19 the deadline, that would cause our customers, under the
20 current law, to lose $1.1 billion in tax credits. I
21 think it's prudent for us to try to work with Congress
22 to extend the deadline, so we can protect the value for
23 customers in South Carolina.
24 **Q** We appreciate it. Now, are you familiar with the fact
25 that ORS has stated that, absent the Guarantee — capital

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1 G — embodied in the proposed settlement agreement by the
2 company and some of the parties here — absent that
3 Guarantee, ORS could not support the $505.5 million
4 associated with exercise of the fixed-price option?
5 **A** I know in our discussion with ORS, they wanted certainty
6 that we would fulfill the obligations that were set
7 forth in the settlement agreement with Westinghouse and
8 the EPC amendment, and we have committed to living up to
9 our word and following, you know, to the T, the letter
10 of the changes that were made in the EPC contract with
11 respect to the costs.
12 **Q** ORS Witness Gary Jones' direct testimony, page 13, line
13 18, and I quote, "Absent such a guarantee from SCE&G,
14 ORS could not support the $505.5 million cost associated
15 with the option period," close quote. You aware of that
16 testimony?
17 **A** Yes, that's Mr. Jones' testimony.
18 **Q** Are you aware also that Mr. Jones expressed specific
19 concern about the Westinghouse Electric Corporation's
20 ability to absorb the potential financial losses that
21 your own Witness Dr. Lynch projects are possible if
22 productivity and production are not significantly
23 improved in completing the project?
24 **A** Yes, I understand he testified to that.
25 **Q** And that, using a base case — not the most extreme case,

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1 but a base case — Dr. Lynch projects that Westinghouse
2 may be subject to as much as $855 million in additional
3 losses that it would have to absorb, in order to deliver
4 the fixed-price units under the amended contract?
5 **A** Well, that number sounds right, but let me check it from
6 my notes [indicating].
7 **Q** Sure.
8 **A** I think he gave a range, under his base case, of $364
9 million to $981 million.
10 **Q** That's a bigger number; I'll take that. Now, if
11 Westinghouse were faced with the prospect of absorbing
12 either my number, $855 million, or your number, $981
13 million, what do you expect Westinghouse would do,
14 facing that loss?
15 **A** You know, based on their discussions with us when they
16 came to meet with us in September of last year, and
17 their concerns of being able to sell the AP1000
18 worldwide, I would expect them to absorb those losses.
19 **Q** So your expectation and the basis for your
20 recommendation that this Commission approve these
21 values, these cost increases, is based on the assumption
22 that Westinghouse would absorb as much as an $881
23 million loss? Is that the number you stated?
24 **A** Well, 981.
25 **Q** I'm sorry, 981. A $981 million loss. You assume, for

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1 purposes of your recommendation to this Commission, that
2 Westinghouse is going to eat $981 million in losses.
3 **A** Based on the fixed-price option expressed in the
4 contract that we signed in October of last year, I
5 would, yes.
6 **Q** All right. Now, let me ask you to just assume,
7 hypothetically, that Westinghouse, facing the prospect
8 of losses of that order of magnitude — $855 million, the
9 number I recall, or $981 million — ask you to assume
10 that Westinghouse walks from the deal. Westinghouse
11 looks at those magnitude of losses and says, "We cannot
12 comply with this contract," and they abandon the
13 project. What happens then, Mr. Marsh?
14 **A** Well, I don't know that they assume the losses will be
15 that high. That's a decision that we made, based on our
16 evaluation of current productivity rates and labor
17 rates. I don't know that they believe that. But,
18 certainly, they would have to make a decision based, you
19 know, on their contractual commitment of what they
20 thought they could deliver on the project.
21 **Q** Well, that doesn't really respond to my question. Let
22 me try again, and maybe slightly modify it. If
23 Westinghouse faces losses of that magnitude — $981
24 million, $855 million, that order of magnitude — what's
25 the likelihood that Westinghouse would simply abandon

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1 their contractual obligations and walk away from the
2 project?
3 **A** I can't speak to how they would evaluate that, other
4 than what they communicated to us. We have known since
5 this project started that this is a loss leader for
6 them, since it was one of the first AP1000s being built,
7 especially in the United States. Even though they had
8 four plants being constructed in China, they said it was
9 a significant value to them to finish these plants, that
10 they could sell these plants worldwide and other places,
11 hopefully, in the United States over the long term.
12 **Q** All right.
13 **A** So I believe they're committed to the AP1000. They want
14 to finish these projects. It's my belief — I can't
15 speak for Westinghouse, but it's my belief they
16 understand they would incur some losses in doing that,
17 and that's part of their long-term business plan for
18 selling the AP1000.
19 **Q** Okay. What contingencies, if any, has SCE&G evaluated
20 if, indeed, Westinghouse, facing those magnitude of
21 losses — $800-$900-plus million dollars — if they simply
22 went bankrupt and abandoned this contract and this
23 project? What is your contingency, what do you do then,
24 Mr. Marsh?
25 **A** Well, we have a parental guarantee to stand behind the

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1 project from Toshiba, Westinghouse's parent. We also
2 have taken provisions, which we actually put in the
3 contract in 2008, looking forward in case this event
4 were to occur, and it would allow them to transfer all
5 of the intellectual property and design and information
6 we would need to hire a contractor and finish the plants
7 ourselves.
8 **Q** All right. So the contingency would be Westinghouse
9 walks from the deal, Toshiba — the parent — doesn't
10 backstand that contract; you would then inherit the
11 completion of the project with the intellectual property
12 you require to do so. Correct?
13 **A** That's an option we would have available to us.
14 **Q** All right. Now, ORS says, because of those very
15 concerns that Westinghouse may not be able to absorb the
16 magnitude of losses we've just been discussing, that
17 your own Dr. Lynch, in his sensitivity analysis,
18 identified a base-case range of potential losses to
19 Westinghouse. ORS says, "We still have such concern
20 that Westinghouse may not be able to suffer those
21 losses, that we will not sign this agreement without
22 SCE&G/SCANA guaranteeing the fixed price." That's what
23 they said, isn't it?
24 **A** What we've said in the agreement was that we would live
25 up to the terms stated in the amendment to the EPC

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1 contract.
2 **Q** Maybe you didn't hear me. ORS's Witness Mr. Jones says
3 — and I quote — "Absent such a guarantee from SCE&G, ORS
4 could not support the $505.5 million cost associated
5 with the option," the fixed-price option. That's their
6 testimony, isn't it?
7 **A** Well, I can't speak for Mr. Jones. That's his
8 testimony. I know, based on all the testimony provided
9 in the case — we've worked with Mr. Jones, ORS, and the
10 other parties, to reach a settlement agreement. And
11 what the settlement agreement says, that we presented
12 the Commission, is that we will live up to the
13 obligations we agreed to in the amendment to the EPC
14 contract we signed with Westinghouse in September —
15 excuse me — October 2015.
16 **Q** All right. Now, Mr. Jones and ORS use the term
17 "guarantee" — in fact, they put a big capital G,
18 "Guarantee" to it. Where in the settlement agreement is
19 the proviso that is the Guarantee, Mr. Marsh?
20 **A** I don't know that the word "guarantee" appears in the
21 settlement agreement. I think if you take the agreement
22 as a whole, what we have done is we've committed to
23 living up to the amendment we signed to the EPC
24 contract. That's the commitment the company has made.
25 That's what was agreed to in the settlement agreement.

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1 **Q** Well, we can agree, can't we, that the word "guarantee"
2 appears nowhere in the settlement agreement. I'm
3 holding it; I'd be happy to have you examine it.
4 **A** I don't recall that word specifically being there. I've
5 read it within the last week, but I don't recall that.
6 **Q** Well, do take a moment and scan it again [indicating].
7 **A** [Indicating.]
8 **Q** And do let me know if you find the word "guarantee"
9 anywhere — either a capital-G Guarantee or a little-G
10 guarantee. I would submit to you it's not in there.
11 **A** I'll be glad to read it; it's a fairly long document.
12 You want me to read that?
13 **Q** Whatever time it takes for you to find the "guarantee"
14 provision in the proposed settlement agreement.
15 **A** What I said was, I don't know that "guarantee" is in
16 here, but taken as a whole, what we agreed to do was to
17 live up to the commitments we made in the agreement.
18 **Q** Will you accept, subject to check — and your lawyer can
19 certainly correct me — that the word "guarantee" appears
20 nowhere in the settlement agreement, Mr. Marsh?
21 **A** I'll accept that, subject to check, rather than reading
22 the whole agreement now.
23 **Q** And, in fact, your settlement testimony nowhere uses the
24 word "guarantee," do you?
25 **A** I don't think in my testimony it's in there.

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1 **Q** So ORS tells the Commission we have a guarantee, but you
2 don't call it a guarantee and the agreement doesn't call
3 it a guarantee. You call it a moratorium. Isn't that
4 the term of art you use?
5 **A** The moratorium is just one part of the commitment in the
6 settlement agreement.
7 **Q** Yes, but you use the term "moratorium" in your
8 settlement testimony, don't you?
9 **A** That is one part of the settlement agreement, yes.
10 **Q** All right. And the moratorium, it's not a guarantee. A
11 moratorium is a temporary matter, a delay, a suspension.
12 It's by definition impermanent, a moratorium is, isn't
13 it?
14 **A** For those specific costs subject to the moratorium, yes,
15 but there was a lot more in the settlement agreement
16 than just the moratorium.
17 **Q** Yes, indeed. Now, do you have your settlement testimony
18 in front of you?
19 **A** Yes, I do. Let me flip to it [indicating]. I have it.
20 **Q** Okay. Turn to page eight, please — eight or nine. You
21 have a question at line 18, page eight: Are the
22 concessions SCE&G is making in the settlement consistent
23 with the terms of the BLRA? And you go on and explain
24 how, in your opinion, it is, correct?
25 **A** Yes.

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1 **Q** All right. Turn to page nine, please.
2 **A** [Indicating].
3 **Q** I want you to read, beginning at line three, to the
4 completion of that answer for me, please.
5 **A** You want me to start with the first sentence or the
6 middle of the sentence?
7 **Q** The word "allowable," please.
8 **A** Okay. "Allowable capital costs of the units not
9 included in revised-rates filings will continue to
10 accrue allowance for funds used during construction,
11 otherwise known as AFUDC. However, SCE&G will not have
12 cash earnings to support the financing cost associated
13 with these amounts while they are outside of revised
14 rates."
15 **Q** I must say, Mr. Marsh, I was scratching my head after I
16 read that language. I thought I had it clearly
17 understood, having read the settlement agreement and
18 your previous testimony and ORS's testimony, and then
19 you threw me a curveball — and that one is a curveball.
20 So, first of all, what are allowable capital costs of
21 the units not included in revised-rate filings? What is
22 that?
23 **A** As part of the amendment to the EPC contract that was
24 signed with Westinghouse, there are certain cases under
25 which costs could be added to the project. An example

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1 would be if there's a change in law or a change in
2 regulation that's not known today but was necessary to
3 comply with NRC regulations — for example, to build the
4 plants in a safe manner. If there were such a change in
5 law that resulted in additional costs associated with
6 the plants, we would agree to withhold bringing those
7 costs to the Commission for consideration for a three-
8 year period, and during which time they would earn the
9 allowance for funds used during construction.
10 **Q** All right. So they wouldn't be passed on to ratepayers
11 now, under the BLRA, during that moratorium period,
12 correct?
13 **A** Well, no costs are passed on to consumers under the
14 BLRA.
15 **Q** The financing —
16 **A** Financing —
17 **Q** — of those costs.
18 **A** — costs, yes.
19 **Q** So you would forgo the financing of those additional
20 capital costs, whatever they might be, for a period of
21 time, but you would continue to book AFUDC for those
22 additional costs — that's what you're saying here,
23 correct?
24 **A** That's correct.
25 **Q** And then at the point when the plant goes in rate base,

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you're going to come back and ask ratepayers to pay for the whole kit and caboodle, aren't you, including those additional capital costs?

A What we have said is we would not bring anything back to the Commission for three years. If there were a cost adjustment under the amendment, we would defer bringing that cost to the Commission, and then bring it to the Commission under the BLRA or other appropriate ratemaking filing for them to consider those costs.

Q And you'd ask ratepayers to pay for those additional capital costs that you didn't include under the BLRA, but you did include in the capital costs of the plant when it comes on-line.

A If they were deemed necessary under rules and regulations that had changed, and they were prudent costs to complete the plant, to comply with the regulations to be able to operate the plant, yes, we would bring those back to the Commission and I think those would be legitimate costs for customers.

Q So when you're saying there's a fixed-price contract, now, and ORS says they accept SCE&G's guarantee of that fixed-price contract, your wiggle room still includes the fact that you're going to add capital costs to the plant, which you're going to come back and ask this Commission be passed on to ratepayers, and, in the

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1 meantime, AFUDC is going to be accruing and charged to
2 ratepayers for those extra costs. Those aren't fixed
3 costs, are they?
4 **A** Well, they're fixed under the EPC amendment, subject to
5 certain stipulations that could cause changes in the
6 costs, for example, based on changes in rules and
7 regulations of the federal government.
8 **Q** All right. And how much of those additional — your
9 language — allowable capital costs not included in
10 revised-rate filings, how much are those allowable
11 capital costs going to be, Mr. Marsh?
12 **A** I don't have any on that list right now.
13 **Q** What's your estimate of what they're going to be? What
14 order of magnitude is not fixed-price but will be added
15 when the plants go into rate base and will be added to
16 accrue AFUDC in the meantime?
17 **A** I don't have anything other than what's included in the
18 filing here. I'm not aware of any that would require us
19 to come to the Commission and ask these be included in
20 the costs.
21 **Q** What do you project those costs? Just so we'll know
22 what "fixed price" really means here, what additional
23 costs are sort of lurking out there that are going to
24 get added to rate base and accrue AFUDC in the meantime?
25 **A** If I knew what those costs were today, I would need to

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1 include those in the filing with the Commission, and I'm
2 not aware of those costs today.
3 **Q** Do you have an estimate at all?
4 **A** I don't have an estimate, because I don't know of any
5 cost that would rise to that level to be included in a
6 filing.
7 **Q** Now, the example that you just used of change of law,
8 that's one of the non-fixed items that could change and
9 could add additional capital costs to the plant,
10 correct?
11 **A** Yes.
12 **Q** And you renegotiated — you're proud of this; part of the
13 renegotiated contract with Westinghouse was changing the
14 definition of "change of law." Correct?
15 **A** Correct.
16 **Q** And I've got that language here. It's your response to
17 ORS's Interrogatory 1-20. You have the old language
18 under the existing contract and the new language under
19 the renegotiated contract.
20 **CHAIRMAN WHITFIELD**: Mr. Guild, I'm sorry, I
21 need you to kind of keep back closer to the mic.
22 **MR. GUILD**: I'm sorry.
23 **CHAIRMAN WHITFIELD**: We have some folks in the
24 back and they can't hear you, and we want you to be
25 heard.

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1 **MR. GUILD**: I apologize.
2 **BY MR. GUILD:**
3 **Q** I have that language that you presented to ORS in front
4 of me. Are you familiar, generally, with what got
5 changed in the renegotiated version of the change-of-law
6 provision of your EPC contract?
7 **A** Yes, we wanted to make sure that changes weren't being
8 allowed that would increase costs, that were based on
9 interpretation of existing regulations, and moved to try
10 to narrow the definition of a change of law to something
11 that was written or promulgated by an appropriate
12 authority.
13 **Q** And can we agree that the most substantial or
14 significant change in that provision — the change-of-law
15 provision — specifies NRC changes that were in dispute
16 with Westinghouse up until the renegotiated contract?
17 **A** Yes, they were significant, which is one of the reasons
18 we also updated the design reference documents from DCD-
19 16, or maybe it was -15, to DCD-19.
20 **Q** DCD-19 is the current version of the design control
21 document that is the standard to which the plant is to
22 be built, correct?
23 **A** That's correct.
24 **Q** But somehow you had a contract with Westinghouse that
25 didn't even require them to deliver a nuclear plant to

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1 comply with the most recent revision to the design;
2 isn't that correct?
3 **A** The contract was signed in 2008 with Westinghouse, and
4 DCD-15 at the time was the design document in play.
5 **Q** Right, but you couldn't have gotten a license for DCD-
6 15, -16, or -17, because you've got DCD-19 as the
7 current design. They wouldn't let you operate a plant
8 until it met current NRC and company design control
9 document requirements; isn't that true?
10 **A** You have to meet the latest design document
11 requirements.
12 **Q** All right. But Westinghouse dug their heels in and
13 said, "That's a change of law. Making us comply with
14 NRC regulations in the current design, that's a change
15 of law," and they fought with you about that. You had a
16 long-standing dispute with Westinghouse about their
17 interpretation of "change of law" to not require them to
18 meet current NRC standards; isn't that right?
19 **A** There was a lot of discussion when the initial contract
20 was signed in 2008. Mr. Byrne may recall some of the
21 more details, but I recall a lot of that centered around
22 the shield building work that had to be done. We
23 anticipated and we believed we understood what would be
24 required to be done. The NRC, when it issued its final
25 guidelines, it certainly came out with rules that were

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1 different than were in place in 2008, and we needed to
2 comply with those, so there was some disagreement at
3 that point who was responsible for those costs.
4 **Q** And what's the status of those disputes with
5 Westinghouse to this day? Are we now — have we resolved
6 all of the disputes about the interpretation of the
7 change-of-law provision under the contract, as it
8 relates to NRC requirements?
9 **A** We believe they were resolved in the 2015 amendment we
10 signed with Westinghouse in October of 2015, unless
11 there's another change in law, a written change in law
12 or a written change in regulation.
13 **Q** Are any of those matters relating to NRC requirements
14 now pending before your Dispute Resolution Board?
15 **A** I don't believe so. Those have to do with the
16 assignment of cost to individual milestone payments
17 under the contract.
18 **MR. GUILD**: One moment, Mr. Chairman. Excuse
19 me.
20 [Brief pause]
21 **BY MR. GUILD:**
22 **Q** Can we agree the pertinent language in the revised
23 change-of-law provision in the contract that you just
24 renegotiated — I'll read the change. "'Change in law'
25 occurs only in cases of (a) the formal written adoption

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by a government authority of a new statute, regulation, requirement, or code that did not exist as of the date of the October '15 amendment, or (b) where the NRC is the involved government authority, the NRC's official issuance or promulgation, after the date of the October 2015 amendment, of a final or official version of a regulatory guide (NUREG), branch technical division, standard review plan, interim staff guidance, bulletins, orders, or written directives in which NRC acknowledges a new regulatory requirement or a change to an existing requirement that did not apply before the date of the October '15 amendment." Do you agree that's the current provision?

A That sounds like the language. I will trust you read that correctly.

Q I stumbled a little bit, but if you want to just confirm that that's the pertinent provision [indicating].

A [Indicating.] This is our Response 1-20 to the Office of Regulatory Staff information request. This looks like it's been taken out of the 2015 amendment and contract.

Q In the second paragraph, and single spaced, is the current version?

A Both of those appear to be correct.

Q Can you just confirm I read the substance of that correctly?

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1 **A** Yes.
2 **Q** Westinghouse had taken the position up until that
3 renegotiated provision that, essentially, NRC was
4 changing its standards in holding you to more stringent
5 code requirements, more stringent interpretations of
6 their existing regulations; isn't that the substance of
7 their position?
8 **A** I'm going to — I'm going to let Mr. Byrne answer some of
9 the detailed questions on the construction, but I can
10 tell you, from my knowledge, these plants are being
11 built under Part 52, under which the plants are designed
12 on initial approval by the NRC, as opposed to the old
13 regulations where plants were approved and then you
14 would build the plants and, if you made design changes
15 along the way, they would ultimately be approved at the
16 end of the project. Under the current project, you
17 can't move forward with the next step until you've
18 completed the first step and it absolutely meets the
19 design specifications that are in the document DCD-19.
20 So there were a number of issues that came up and
21 interpretations of the regulations, or what exactly had
22 to be done in terms of the construction application,
23 that caused significant disagreement in a variety of
24 areas. Mr. Byrne can address those with you in detail.
25 But that gave rise to a lot of the contention we had

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1 with Westinghouse: who was responsible for paying for
2 those changes, or the costs of making modifications to
3 changes, or exactly what needed to be done. You might
4 have to file a license amendment request before you
5 could go forward, and there were disagreements over
6 whose financial responsibility that would be. That was
7 the basis for a lot of the disagreements we had under
8 the contract.
9 **Q** Can we agree that, during the course of those disputes,
10 Westinghouse took what we can both agree were
11 unreasonable positions with regard to a change of law in
12 order to meet NRC licensing requirements?
13 **A** We certainly felt like they were not correct, which is
14 why we challenged them.
15 **Q** And you rewrote the provision, and you're confident
16 you'll no longer have any more disputes with
17 Westinghouse about what the change-of-law provision
18 means?
19 **A** We did our best to clarify it, to the best extent we
20 could, to minimize any disagreements in the future.
21 **Q** But to the extent that you're wrong and Westinghouse
22 continues to fight you on these things, you wind up
23 incurring additional capital costs, those would fall
24 into the category of those additional capital costs —
25 for which you book AFUDC — you'd defer charging

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ratepayers under the BLRA for financing costs, but you reserve the right to add them into rate base once the plant comes on-line.

A That's not correct. If there were disagreement, before we would pay any additional costs, we have a provision in the EPC amendment that requires us to go to a Dispute Resolution Board, a board of three independent attorneys, who would look at the issues, make a judgment determination on whether or not those costs were appropriate, and we would abide by the decision of the Dispute Resolution Board. That was an effort to attempt to avoid disputes going to court during the remainder of the contract.

If that dispute is in excess of $5 million over the life of the — any individual issue that's over $5 million that's decided by the Dispute Resolution Board, that's on a 100 percent basis; we would reserve the right to sue for those costs at the end of the contract. So if we went to the Dispute Resolution Board and they ruled in our favor, we would not pay the cost. There would not be anything on our books, and it would not accrue AFUDC. If we went to the Dispute Resolution Board and they ruled against us, we would pay for those costs under the amended EPC contract. We would accrue those costs, and we would make a determination based on

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1 our review of the decision and whether or not that was
2 significant enough for us to take forward to a court of
3 law once the plant comes on-line.
4 **Q** But, Mr. Byrne — Mr. Marsh, excuse me, you're missing
5 the point of your own exception to the fixed-price
6 contract, because one of the elements that is not fixed
7 is costs that accrue to the project when the Dispute
8 Resolution Board rules against you and you have to bear
9 those costs. Isn't that the case?
10 **A** Well, if they fall into one of the categories that would
11 be in addition to the fixed-price cost and it was ruled
12 on by the Dispute Resolution Board, yes, those would be
13 additional costs.
14 **Q** So my point really is, you've been fighting for years
15 with Westinghouse about the change-of-law provision.
16 You renegotiated it, to my view, to provide the obvious:
17 got to meet NRC requirements. You and Westinghouse get
18 in a fight tomorrow about the very same issue,
19 Westinghouse wins before the Dispute Resolution Board,
20 and that's a non-fixed additional cost that you will
21 then charge to ratepayers when the plant goes on-line.
22 Right?
23 **A** If it's a cost that was an exception to the amendment
24 and it would ultimately be ruled by the DRB, that would
25 be the case. We believe we have isolated and minimized

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1 the opportunity for that to happen by clearly defining
2 the changes that result from changes in law or changes
3 in regulation that were not in place at the time we
4 signed the amendment. So we expect those to be minimal.
5 **Q** All right. Now you said you'd been assured by
6 Westinghouse that they're going to honor this contract
7 and deliver a project at the price committed to by the
8 dates included in the EPC contract, correct?
9 **A** They communicated to us a desire to finish the project
10 because it fits into their long-term sale of the AP1000.
11 **CHAIRMAN WHITFIELD**: Mr. Guild.
12 **MR. GUILD**: Yes, sir.
13 **CHAIRMAN WHITFIELD**: I'm assuming you've got a
14 little more questioning?
15 **MR. GUILD**: I do.
16 **CHAIRMAN WHITFIELD**: Why don't you let us put
17 a Lavalier on you? I'm sure Mr. Elliott, who is an
18 expert with those Lavaliers, will be glad to fit
19 you with one.
20 [Laughter]
21 **MR. GUILD**: I've obviously failed the test.
22 **CHAIRMAN WHITFIELD**: Yeah, you have. Let's
23 mic you up, if you're going to be a few more — are
24 you going to be a few more minutes?
25 **MR. GUILD**: I'm afraid that's true, yes.

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1 **CHAIRMAN WHITFIELD**: It won't take but a
2 second, and we should have one up here.
3 [Brief pause]
4 **MR. GUILD**: All right. How's that, Mr.
5 Chairman?
6 **CHAIRMAN WHITFIELD**: That's good. I can see
7 you're a pacer, and I don't want to stop you.
8 **MR. GUILD**: I've been pacing. I'm sorry.
9 **CHAIRMAN WHITFIELD**: We've got you mic'd up
10 now, and I think everybody can hear you.
11 **BY MR. GUILD:**
12 **Q** All right, Mr. Marsh. So, Westinghouse assures you
13 they're going to comply, and if Westinghouse faces a
14 substantial hit, as your Dr. Lynch suggests they might,
15 $800-$900 million, Toshiba will backstop them. You're
16 confident of that?
17 **A** I don't know that those numbers would be what
18 Westinghouse would agree to. I believe their position
19 would be they can take efforts to minimize those costs.
20 Our study was done based on what they had been able to
21 deliver on project performance, to date, so that we
22 could minimize the risks to our customers, despite what
23 they might do.
24 **Q** I know. Dr. Lynch says, "This fixed-price option's a
25 good deal and here's why it's a good deal: We think the

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1 price to actually complete the project may be, under a
2 base case, as much as $800-$900 million more than it
3 would be under the existing EPC contract. That's a good
4 deal for us." That's what he says, right?
5 **A** That's what he says.
6 **Q** Okay. So, if it's a good deal for you, it's a bad deal
7 for Westinghouse. They're facing $800-$900 million
8 under your base-case cost shifting to Westinghouse. And
9 if Westinghouse doesn't deliver, who's their parent
10 corporation?
11 **A** Toshiba.
12 **Q** They own 87 percent of Westinghouse, right?
13 **A** I believe that's correct.
14 **Q** They bought into the domestic nuclear business, the
15 AP1000, because they thought there was going to be a
16 nuclear renaissance back when they did this, correct?
17 **A** I can't speak for them, but they certainly had
18 confidence in Westinghouse.
19 **Q** And they thought they were going to be building new
20 nuclear plants all over the world, including the United
21 States. Some 18 utilities were going to build them,
22 right?
23 **A** Well, there are new nuclear plants planned all over the
24 world.
25 **Q** Well, but there are only two left in the United States,

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1 you and then the Southern Company, Georgia Power,
2 correct?
3 **A** You know, that's the case at this time; we're the only
4 ones that have active construction projects going on.
5 But there are a number of utilities that have continued
6 their licensing process with the NRC, who plan to secure
7 those licenses and make their decisions at a later date.
8 I know Duke Energy, which is also before this Commission
9 on a regular basis, has two AP1000s in their Integrated
10 Resource Plan.
11 **Q** Yep, and they spent $500 million thinking about building
12 those things, but they're not going to build them unless
13 they get as good a deal in North Carolina as SCANA has
14 in South Carolina. They've said that, haven't they?
15 **A** I don't recall exactly what they've said.
16 **Q** They said they need a base load review act in North
17 Carolina, so the ratepayers there will pay the price of
18 carrying the capital costs of a nuclear plant, and if
19 they don't get as good a deal in North Carolina, they're
20 not going to build. That's what they've said, isn't it?
21 Words to that effect?
22 **A** I don't know, but the Base Load Review Act is a great
23 way to build long-lived assets; it saves customers money
24 over the long term, and I think it's a great bill.
25 **Q** Well, as Dr. Wilder, the retired Dean of the Economics

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1 School at USC said, you've got a forced loan from all of
2 your customers and, sure, it's a good deal because we
3 loaned you money with no collateral and no promise of
4 being repaid.
5 **A** I don't think that's correct. I heard his comments this
6 morning, and I understand his concerns. But, you know,
7 the loans for this project come from the financial
8 markets, and the investments of the equity have come
9 from the financial markets. There's a cost associated
10 with raising the capital to build the plants. And what
11 we have done is we've asked consumers, under the Base
12 Load Review Act provisions, to pay for that cost of
13 financing while the plants are being built, and, in
14 return for that, they're going to save billions of
15 dollars over the life of the plant. That statement has
16 been challenged in the years we've been building the
17 plants. ORS did an independent review of the savings of
18 those provisions of the Base Load Review Act, and it
19 turned out to be accurate. So I support the Base Load
20 Review Act; I believe it's doing what it was designed to
21 do, working for the long-term benefit of customers.
22 **Q** Well, ORS may have rethought that position by the time
23 they got to this case, Mr. Marsh, but we'll save that
24 debate for another time. But you're counting on
25 Toshiba, the 87 percent owner of the domestic

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1 Westinghouse Company, backstopping the deal if they're
2 faced with an $800-$900 million loss. Are you aware
3 that Toshiba is under investigation by the US Justice
4 Department and the Securities and Exchange Commission
5 for potential accounting fraud at their Westinghouse
6 nuclear subsidiary in the United States?
7 **A** I understand a review is taking place from issues that
8 were raised late last fall, regarding some of their
9 financial disclosures and their recording of losses
10 associated with a number of their businesses. They have
11 been hurt financially from doing that. They have come
12 out and announced a plan to restructure the company and
13 some of the core financial businesses to improve their
14 financial position. They have been doing that. They
15 have followed through with commitments they have made to
16 restructure the business. The business, at this point,
17 appears to be doing a lot better than it was last fall.
18 I believe they just recorded sales and profits up 100
19 percent from where they were this time last year, and
20 their stock price appears to be recovering.
21 **Q** Well, good, but you know they were sanctioned the
22 largest penalty in Japanese history for that accounting
23 fraud, and that their CEO resigned as a result of that.
24 You know those two things?
25 **A** I understand they were penalized. I don't know if it

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1 was the largest penalty, but I do understand the CEO
2 resigned. And we made, you know, conversations with the
3 leadership of the team in Japan because we had concerns.
4 It would be natural to have concerns if a company is the
5 parent company of the subsidiary that's building your
6 nuclear plants. I can't sit here today and tell you
7 that I'm not concerned. You know, we have to monitor
8 that situation and try to evaluate, you know, what is
9 their financial condition, do we need to try to take any
10 additional steps, and we watch it very carefully. Every
11 time something happens with them or the financial
12 markets, we're aware of it. We talk to all the
13 resources we have, whether it's the legislative angle,
14 contacts on Wall Street, to the rating agencies, to try
15 to understand as much as we can about their financial
16 situation, because we need them to be healthy because
17 they are the backstop for these plants. And I can't sit
18 here today and tell you that I'm not concerned, but it's
19 just not enough to be concerned; we have to monitor what
20 takes place and try to position ourselves to take over
21 these plants if something were to go wrong and the worst
22 thing happened and they couldn't backstop the plants,
23 which is why we've taken the effort that was in our
24 contract to secure the intellectual property rights of
25 all the information we would need for the design and to

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1 complete construction of the plants.
2 **Q** Did you understand that the accounting fraud that was
3 the subject of that investigation had to do with the
4 hiding of $1.3 billion in losses at its US nuclear
5 operation. Westinghouse.
6 **A** Yeah. As an old accountant, that disappoints me
7 greatly. I think accountants should do the work right
8 and do it correctly. I'm disappointed in the fact it
9 wasn't caught by the accounting firms that audited the
10 companies. Yes, I'm disappointed. It upsets me.
11 **Q** All right. And it largely had to do with the failed
12 Levy Nuclear Plant in Florida; that was an AP1000
13 project, wasn't it?
14 **A** That was a project that was canceled, yes.
15 **Q** It was canceled at great loss to the ratepayers of
16 Florida, by the utility in Florida, and evidently, to
17 Toshiba, enough to hide $1.3 billion in losses
18 associated with that project. Did you know that?
19 **A** I don't know that it was specifically on the Levy
20 project. but I know it related to the nuclear business.
21 **Q** Which included, of course, the V.C. Summer Units 2
22 and 3.
23 **A** That would be part of the Westinghouse nuclear business.
24 **Q** Now, you're concerned about Toshiba's *bona fides* and
25 backstopping, if they could, Westinghouse, if

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1 Westinghouse faced significant losses as your Dr. Lynch
2 said they might. But, you know, I asked you a question
3 in discovery, Mr. Marsh. I asked you for documents
4 trying to figure out what you had done to find out about
5 Toshiba's *bona fides*. Question 8: All documents related
6 to the analysis and evaluation of the accuracy and
7 completeness of the books, records, financial
8 statements, accounting practices, and reports, or other
9 representations by Westinghouse Electric Company,
10 Incorporated, its parent company, Toshiba, or any other
11 of their agents or affiliates, including but not limited
12 to any information regarding any inquiry or
13 investigation by the US Justice Department, the US
14 Securities and Exchange Commission, or any other
15 government entity regarding fraud, misrepresentation, or
16 the accuracy of statements by Westinghouse or Toshiba.
17 And do you know what your company's answer was?
18 "SCE&G is not in possession of any documents responsive
19 to this request." So if you're so interested, how come
20 you have absolutely not a single piece of paper
21 reflecting any curiosity about Westinghouse and their
22 fraud?
23 **A** I believe we responded with a presentation we did
24 receive from Toshiba's management team. I recall seeing
25 that in one of the responses where they presented with

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1 us — presented to us their plan for recovery of their
2 business to put themselves back on strong financial
3 footing. The other documents with respect to the
4 filings by the SEC or other agencies, those are not
5 SCE&G's documents; those are Westinghouse documents.
6 It's not a publicly reporting company, so we don't have
7 access to Westinghouse's books and records.
8 **Q** Mr. Marsh, all I —
9 **CHAIRMAN WHITFIELD**: Mr. Guild, I hate to stop
10 you here, but I think we've lost your mic. If you
11 could check it or let Mr. Richardson check it for
12 you.
13 **MR. GUILD**: Bill, help me. Has it died?
14 **MR. RICHARDSON**: It's turned off.
15 **MR. GUILD**: Oh, sabotage.
16 [Laughter]
17 **CHAIRMAN WHITFIELD**: I think you got excited
18 and bumped it.
19 **MR. GUILD**: A little electrical current there.
20 I promise I'll stand right here [indicating], okay?
21 [Laughter]
22 **BY MR. GUILD:**
23 **Q** Mr. Marsh, you just told me — will you accept my
24 representation to you that, as I read it, that you
25 represented to the Sierra Club in response to formal

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1 legal discovery that you had not a single document
2 responsive to that request? Not a single document.
3 Will you accept that that was your company's response?
4 **A** If that was our response to the document, I accept that.
5 **Q** So where is this Toshiba presentation that you now claim
6 allayed your fears?
7 **A** I remember seeing that in my witness preparation. I
8 don't recall exactly whose response it went to, but I
9 believe it was there.
10 **MR. GUILD**: Well, I would appreciate it if you
11 would share it, Counsel, and provide that document,
12 which obviously is now responsive to my request.
13 Mr. Chairman, may I ask that Counsel for the
14 company agree to produce the document?
15 **MR. BURGESS**: Mr. Chairman, we'll be happy to
16 go back and reread Mr. Guild's discovery demands to
17 us and, to the extent that the presentation Mr.
18 Marsh referenced is responsive to his request, we
19 will provide it, but we do not believe that it is.
20 **MR. GUILD**: Well, then let's be really precise
21 about this, Mr. Chairman. I move that the company
22 produce any response — any presentation they had
23 from Toshiba that was just alluded to in Mr.
24 Marsh's testimony, whether or not Counsel deems it
25 responsive to my request.

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1 **MR. BURGESS**: Mr. Chairman, I don't think now
2 is the appropriate time to demand documents. We
3 had a discovery process that we faithfully adhered
4 to, and to now ask for documents is not
5 appropriate. Mr. Marsh has answered the question
6 Mr. Guild has put to him, and that should be the
7 end of it.
8 **MR. GUILD**: No, it shouldn't be the end of it,
9 Mr. Chairman, because I asked for documents and
10 records responsive to a very precise set of
11 questions about investigating Toshiba's
12 misrepresentations, Westinghouse
13 misrepresentations. Their answer was, as I
14 represented, "No such documents are in our
15 possession." If Mr. Marsh has a presentation from
16 Toshiba that he just alluded to, I would represent
17 to you that it is responsive. And whether it is
18 responsive or not, I do ask that it be produced. I
19 think it's material to this case.
20 **CHAIRMAN WHITFIELD**: I recognize we've had
21 discovery time. Mr. Burgess?
22 **MR. BURGESS**: Mr. Chairman, again, based upon
23 the way that Mr. Guild has formulated his discovery
24 demand, we have appropriately responded to that
25 request.

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1 **CHAIRMAN WHITFIELD**: Mr. Burgess, I would ask
2 that you review it again. Go back to your
3 discovery materials, review it again, and report
4 back to us.
5 **MR. BURGESS**: I'll be happy to, Mr. Chairman.
6 **MR. GUILD**: May I proceed?
7 **CHAIRMAN WHITFIELD**: Yes, sir, Mr. Guild.
8 **BY MR. GUILD:**
9 **Q** Mr. Marsh, part of the agreement with Westinghouse, and
10 an element in the proposed settlement with the other
11 parties, is a proposal to reverse the $85 million
12 penalty provision that Westinghouse would have been
13 responsible for, absent the renegotiated contract,
14 correct?
15 **A** That's correct.
16 **Q** All right. Now, in the settlement agreement, paragraph
17 four at page six, referring to that $85.5 million
18 penalty provision, it characterizes it this way: Quote —
19 that penalty provision, quote, "would have been fully
20 earned by SCE&G" for failure to meet the original dates,
21 and, quote, "was credited to SCE&G's ratepayers in
22 Commission Order 2015-661," close quote. That's what
23 the settlement agreement provides, is it not?
24 **A** What page were you on, Mr. Guild?
25 **Q** Page six, paragraph four.

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1 **A** [Indicating.] That's correct.
2 **Q** All right. So that $85.5 million penalty belongs to
3 ratepayers, not SCE&G. What authority on earth does
4 SCE&G and the settling parties have to give away my
5 $85.5 million?
6 **A** Eighty-five point five three [$85.53] million was
7 deducted from the capital-cost schedule that was
8 presented to the Commission last July as part of our
9 projected costs for the project. Since they were not
10 scheduled to meet the guaranteed substantial completion
11 dates at that time, we believed it was appropriate to
12 book the value of that credit to the projected costs,
13 because it would reduce the projected costs. Nothing
14 had been refunded to customers at that point, because
15 all projected costs had not yet been incurred; it was
16 just a cost projection in the capital-cost schedule.
17 When the amendment was negotiated, we moved the
18 guaranteed substantial completion dates, so, at that
19 point, they were not in violation of that provision and
20 so the value of that credit, from a contractual
21 perspective, needed to be added back because it would
22 not be a penalty. As part of that agreement, you know,
23 we have four times the liquidated damages today that we
24 did at the time we had the agreement before the
25 Commission in 2015.

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1 **Q** But that was already credited to ratepayers. That's the
2 language in the settlement agreement. You're taking it
3 away from ratepayers. What right do you have to take
4 that away from ratepayers? It was already part of the
5 savings that ratepayers enjoyed under the originally
6 approved EPC contract for Westinghouse's failure to meet
7 their completion dates.
8 **A** It was credited to our customers in the context of
9 reducing projected costs under the contract.
10 **Q** And, therefore, financing costs borne by consumers under
11 the Base Load Review Act, correct?
12 **A** If that had been — if we had finished the contract under
13 those provisions, they would have received a credit for
14 the $85 million when it was deducted from future costs
15 on the contract. But since we've revised the agreement
16 and we moved the guaranteed substantial completion
17 dates, that would be a penalty to Westinghouse that
18 would not be incurred, so it needed to be removed from
19 projected costs.
20 **Q** Well, Mr. Marsh, wouldn't it be just a little more fair
21 if Kevin Marsh, or the Board of SCANA, or SCE&G
22 stockholders wrote us a check for $85 million, since you
23 just negotiated away a benefit that you already said had
24 been credited to your ratepayers? Shouldn't you bear
25 that cost and not ratepayers?

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1 **A** I think it's a legitimate adjustment to the contract
2 under the provisions of the amendment we signed with
3 Westinghouse. And taken as a whole, I believe the
4 amended EPC contract is a better contract than the one
5 we had at the time we came to the Commission in July
6 2015, which included the credit for the $85 million in
7 projected costs.
8 **Q** All right, sir. We beg to disagree. All right. So you
9 cut a deal with Westinghouse that you think is a good
10 one, despite the rather copious loopholes we've been
11 discussing. I mean, I listened to our presidential
12 debates, and our Republican, Donald Trump, talks about
13 the art of the deal, and he implies that in the deals
14 he's been involved in, there's him and then there's the
15 sucker on the other side. Who's the sucker in this
16 deal, Mr. Marsh? Is it Westinghouse? Is it SCANA? Or
17 is it your ratepayers, who are going to be left holding
18 the bag? Who's the sucker in this deal?
19 **A** I don't really care to be characterized with either one
20 of our presidential candidates at this point.
21 **Q** I'm just quoting the man. I mean, he's your candidate.
22 **A** I didn't say he was my candidate.
23 **Q** Who's the sucker in this deal?
24 **A** I don't think there are any suckers in this deal. I
25 think the customers are going to benefit with two

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1 nuclear power plants that will produce clean, reliable
2 energy for the State of South Carolina for 60 years.
3 We're building these plants under the Base Load Review
4 Act that was passed by the Legislature in 2008, which
5 has proven to be the most cost-effective way to build
6 large base-load generating plants — and that's what
7 we're doing; we're building base-load generation to meet
8 the needs of South Carolina for the long-term future.
9 We presented the information for that case back in 2008
10 and it was approved by the Commission in 2009. We've
11 had adjustments to that on several occasions since that
12 time, and the Commission considers it still to be a
13 prudent project for the benefit of consumers. We still
14 believe that to be the case, and that is why we're here
15 today. We're talking about building clean energy for
16 the future of South Carolina.
17 **MR. GUILD**: Well, as one of your ratepayers
18 and as a lawyer for the Sierra Club, I want to
19 say: I want my money back.
20 All right. Thank you, Mr. Marsh.
21 Thank you, Mr. Chairman.
22 **CHAIRMAN WHITFIELD**: Thank you, Mr. Guild.
23 Mr. Burgess, any redirect?
24 **MR. BURGESS**: We have no redirect, Mr.
25 Chairman.

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1 **CHAIRMAN WHITFIELD**: Commissioners.
2 **COMMISSIONER HAMILTON**: Mr. Chairman.
3 **CHAIRMAN WHITFIELD**: Excuse me, Commissioner
4 Hamilton. Hold on a second.
5 [Brief pause]
6 Go ahead, Commissioner Hamilton.
7 **COMMISSIONER HAMILTON**: Thank you, Mr.
8 Chairman.
9 **EXAMINATION**
10 **BY COMMISSIONER HAMILTON**:
11 **Q** Mr. Marsh, happy to have you with us today, sir.
12 **A** Thank you.
13 **Q** You've been there for a while. I hope it won't be too
14 much longer for you.
15 **A** I'm good.
16 **Q** I do have a question for you. Mr. Marsh, what is the
17 percentage completion of the project and items as to
18 construction now? The percentage?
19 **A** Well, you can look at that a couple of different ways.
20 In terms of the dollars that have been paid, it's above
21 50 percent, and I say that because the majority of the
22 major equipment for the plant has already been
23 fabricated and delivered on-site. The work that's
24 remaining to be done is to take that equipment and
25 actually put it into the construction project itself and

assemble what I call the parts and pieces. That's probably in the 25 to 30 percent range, in terms of the actual construction. In terms of dollars being spent, we've spent $4 billion of the estimated total cost of the project at this point, including contractual costs as well as owner's costs and transmission costs.

Q So you've spent probably close to 50 percent?

A Yeah. We've got — bear with me just a second here, and I can give you some detail on that [indicating]. We've spent a little over $4 billion on the total project; that would be greater than 50 percent. About $2.9, almost $3 billion on the EPC contract itself. And on top of that, we have transmission costs of about $240 million, including some escalation, to bring that to $271 million, and then I think that $2.9 billion includes our owner's costs.

Q And you said the construction was at about 25 percent?

A It's between 25 and 30. Mr. Byrne may be able to give you more accurate numbers, a specific number, on that.

Q Okay. Thank you, very much, sir.

A Yes, sir.

COMMISSIONER HAMILTON: Thank you, Mr. Chairman.

CHAIRMAN WHITFIELD: Thank you, Commissioner Hamilton.

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1 Commissioner Hall.
2 **COMMISSIONER HALL**: Okay, thank you.
3 **EXAMINATION**
4 **BY COMMISSIONER HALL:**
5 **Q** Good afternoon, Mr. Marsh.
6 **A** Good afternoon.
7 **Q** On pages 18 and 19 of your direct testimony, you talk
8 about negotiating the remaining costs of the fixed-price
9 category. You indicate future change orders would be in
10 addition to these amounts. You further indicate that
11 Westinghouse may be entitled to change orders if the
12 changes are the result of changes in circumstances
13 beyond Westinghouse's control. Have there been any
14 instances of change orders outside of the fixed-price
15 category?
16 **A** No, we don't have any at this point.
17 **Q** Okay. And besides a change in law, what other
18 uncontrollable circumstances would there be that
19 Westinghouse would be entitled to change orders?
20 **A** There are typical changes in the provisions of this
21 contract that you would see in any large contract for
22 uncontrollable costs: Acts of God. Hopefully, we don't
23 have one of those on the way now that would impact the
24 construction of the plants, that would cause delays, you
25 know, with flooding, lightning, bad-weather events, that

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could impact the construction of the plant. Those are typical provisions that are included in large construction contracts; something along those lines could give rise to a change order.

Q All right. Thank you. That makes sense. Now, let me ask you, are you the best person for me to ask you a few questions about the DRB?

A I'll do my best to answer those. If not, I'm sure one of the following witnesses can do that.

Q Okay, thank you. Who is on it?

A We have three independent attorneys that are on that board, that were selected by us and our partner, Westinghouse.

Q Okay. And you mutually decided on these members.

A Yes, we did.

Q And they're all attorneys, but only one was required to be an attorney; is that right?

A I believe that's correct, but my understanding is they're all attorneys.

Q Okay. But they all also have requisite knowledge of large construction projects, such as this?

A They have extensive knowledge and I think are fully qualified to serve in those positions.

Q Okay. Are they compensated?

A They are. I don't remember the exact provisions of

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1 their compensation at this point but, yes, they are
2 compensated.
3 **Q** Okay. And do the three, collectively, bear that cost,
4 or how does that work?
5 **A** We would share our *pro rata* share of the costs, along
6 with Santee.
7 **Q** Okay. What rules apply to the DRB? Is it a hearing, or
8 how does that work? I mean, is it subject to rules of
9 evidence or —
10 **A** I may not be able to get to those specific answers —
11 **Q** Okay.
12 **A** — but, generally, if we take an issue to the DRB, it is
13 a hearing. I think there is a court recorder there.
14 The evidence is heard from both sides, witnesses called
15 on both sides. That information is provided to the DRB
16 leaders. There's an opportunity for the DRB leaders to
17 converse with both parties in an effort to try to find a
18 resolution, up to agreements, so we can keep the project
19 moving.
20 The whole idea behind the DRB was not to get
21 embroiled in long, extensive litigation while we're
22 trying to finish the project, because it distracts from
23 the day-to-day activities, it takes senior leadership
24 away when they need to be on-site or focused more on the
25 actual construction, and it was a concept we discussed

with Westinghouse when we negotiated the amendment and thought it would be an appropriate way to help us efficiently finish the project but still reserve the rights, if we have a significant issue that we disagree with — it might've been decided against us by the DRB — to take that to litigation after the projects come on-line.

Q Okay. So you can take something that you can't resolve, that the DRB can't resolve, but only after the substantial — the units are completed?

A The way the process works is the DRB would resolve it, and we would have to abide by their decision while we finished the plants.

Q Okay.

A If we disagreed with the impact of that decision, if it's in excess of $5 million on a 100 percent basis for the project, we reserve the right to take that to litigation after the plant is complete.

Q And would that be essentially an appeal, or would you start the whole process over? And what I mean by that is, would whatever proceedings from the DRB, would you take that to litigation as —

A It would not be part of the DRB process. It would be a separate litigation channel.

Q Yeah, I know. What I'm saying is, if there is a court

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reporter at the hearing — as you said you thought there was — would you take evidence from those hearings into your litigation? Or would it just start as a clean slate?

A I think the best I can answer that is to say it depends on what that evidence was —

Q Okay.

A — and how we built our case in terms of what we wanted to put forth in front of another judge.

COMMISSIONER HALL: Okay. All right. I think that's it.

Thank you, Mr. Chairman.

Thank you, Mr. Marsh.

CHAIRMAN WHITFIELD: Thank you, Commissioner Hall.

Commissioner Fleming.

EXAMINATION

BY COMMISSIONER FLEMING:

Q Good afternoon.

A Good afternoon.

Q We're all having trouble with our microphones today, it seems. I wanted to go back to the production tax credits, and I think this has been pretty well covered, but I did want to ask the question that, if you do not qualify for those credits, the maximum liquidated

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1 damages for both units would be $371.8 million. Do you
2 think that amount is sufficient protection for the
3 company and its customers? Are you comfortable with
4 that amount?
5 **A** Certainly, I would've liked to have had more, because
6 the credits are vitally important to the project and our
7 customers. In the context of the whole agreement, that
8 was the extent we could negotiate in our discussions
9 with Westinghouse, given the other provisions of the
10 contract.
11 **Q** And what would be — could you go a little bit more into
12 the strategy behind negotiating those liquidated
13 damages?
14 **A** Yeah. We felt like Westinghouse needed to have more
15 skin in the game than they did under the existing
16 contract, and wanted to put the opportunity for
17 penalties or bonuses in the form of payments to them
18 that would get their attention. We felt like raising
19 the liquidated damages was certainly one way to do that.
20 At one point in the negotiations, or under the basic
21 amendment of the plan, if we had decided not to elect
22 the fixed-price option, the liquidated damages would've
23 increased six times over what they were previously. In
24 order to secure the fixed-price option, that was
25 negotiated down to four times, so that was part of the

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1 give-and-take in that process. We felt the value of the
2 fixed-price option would be more than the value of the
3 additional liquidated damages that we could apply to the
4 project if they didn't get finished on time. The
5 production tax credits are of great concern to us. The
6 value of those is significant. With the dates that are
7 out there, we felt a higher level of confidence with the
8 first plant. Even though we're working extremely hard
9 to complete that plant by August of 2019, we do have
10 more of a cushion on that plant than we do the second
11 unit. So the focus on the second unit was to get as
12 much as we could under these provisions, and that's
13 where we ended up in the negotiations. I have no
14 assurance that we can change the laws in Washington to
15 extend that deadline, but we're certainly making every
16 effort we can to protect those credits for customers,
17 and I think it would be more likely for the second unit
18 than the first unit — first new unit.
19 **Q** Okay. I'd like to ask you, what do you think are the
20 two or three biggest challenges to successfully
21 completing the V.C. Summer units?
22 **A** There are probably a number of these, and I'm sure Mr.
23 Byrne will correct me if he doesn't agree with me. But,
24 certainly, the completion of the shield building on the
25 first new unit. That shield building is one of the

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1 newest designs, and in making sure we can fabricate the
2 parts and have them delivered on-site in timely fashion,
3 weld those together and get those placed on the nuclear
4 island in a timely fashion and to have those completed.
5 There's a top ring that goes on the shield building that
6 has venting in it, that Mr. Byrne can describe in more
7 detail, which is one of the more complex designs of the
8 plant. Making sure that design is completed, so those
9 pieces can be delivered in time for early completion of
10 the units or on-time completion of the units is
11 something that I follow pretty closely.
12 On the second unit, I think it's more with some of
13 the structures on the base end of the new unit, making
14 sure we get out of the ground in a timely fashion. I
15 don't think the shield building will be the issue on
16 that plant because we will have already built the shield
17 building on the first new unit. We're seeing great
18 improvements in productivity where we're doing things
19 for the second time, and we won't be racing the clock to
20 make sure those parts are on time.
21 Mr. Byrne can add some more detail, but those are
22 the two from the construction side.
23 I continue to have concerns about Fluor being able
24 to attract enough qualified workers to the site. There
25 are a lot of large projects going on around the

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1 Southeast right now that don't involve nuclear, and some
2 workers may prefer not to work in a nuclear environment
3 where you have strict guidelines and strict rules in
4 terms of compliance and documentation and quality
5 control. So making sure we get enough workers on-site
6 is a concern of mine, too.
7 **Q** Okay. And what about the lack of a resource-loaded
8 integrated scheduled for the completion?
9 **A** We have a schedule in place today. It was the one that
10 was in place when Fluor completed the — when Fluor came
11 on-site with the new contract. They're in the process
12 of going through that schedule today to make any changes
13 they deem appropriate. We meet quarterly with
14 Westinghouse and Fluor representatives, and I asked them
15 every quarter very specifically, I said, "Do you know of
16 any reason today I cannot tell my Commission that these
17 plants will be completed on time with the guaranteed
18 substantial completion dates?" And they reaffirmed to
19 me just two or three weeks ago that they still believe
20 they can meet those dates.
21 Now, their schedule moves — if you're looking at a
22 live schedule, they may be ahead a month, maybe behind a
23 couple of months, and that's normal with a project of
24 this size and they're making adjustments to account for
25 those changes as we go through time. It's just not a

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1 firm date that never moves when you go through that
2 construction process. They believe they can attract the
3 resources to do that, and I will continue to ask them
4 that question every time we meet.
5 **Q** So, well, I guess that's the answer for that particular
6 one, but what would be your plan for meeting the first
7 two challenges, if that comes about?
8 **A** Are you talking about on the shield building?
9 **Q** Uh-huh, the shield building and the workforce.
10 **A** Well, we encouraged CB&I at the time to have more than
11 one site to fabricate parts and pieces for these plants,
12 especially submodules and some of the major components
13 that go along with the submodules. They now have, I
14 believe it's five different locations where we are
15 fabricating parts. Newport News, in Virginia, is doing
16 the majority of the shield building parts for the first
17 new unit. We have people on-site supervising activities
18 up there. We visit on a regular basis. We stay close,
19 to find out if there are any issues coming up. I know,
20 in talking with Westinghouse and Fluor when they assumed
21 responsibility for the project, they recognized that as
22 one of the areas they needed to focus attention and I
23 know Westinghouse has put additional money and effort
24 and resources into making sure Newport News has what it
25 needs to complete those shield building panels.

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1 **Q** And the workforce?
2 **A** The workforce, they have taken quite a few measures.
3 They have reached out extensively across the country to
4 bring in additional workers. They've been pretty
5 successful doing that. Although, with any project of
6 this size you do have turnover, so while you are
7 bringing in 10 you've got to make sure you don't have
8 three leaving, so you get the net increase in the
9 workers that you need. They've been successful in doing
10 that, to date. They're going to continue to need to be
11 more aggressive in terms of finding those workers as the
12 work ramps up.
13 They've been unique and novel, I think, in looking
14 at some of the approaches to address the work that needs
15 to be done. They have a non-English-speaking group that
16 they have negotiated with that comes in, where they can
17 assign particular scopes of work to a group of people
18 that are non-English speaking, but they have an English-
19 speaking supervisor so he can communicate both with the
20 Fluor and Westinghouse team and also effectively with
21 the workers on-site. They've been successful at doing
22 that. We have very few labor union workers on the site
23 today, other than those from CB&I that continue to do
24 some of the welding as a subcontractor, but they've been
25 successful in doing that. They're also exploring the

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1 possibility of bringing in some union workers, again,
2 where they can isolate that work effectively without
3 impacting the ongoing construction team.
4 So I believe that Fluor is being pretty creative in
5 trying to identify workers and make sure we can ramp the
6 workforce up.
7 **Q** And lastly — and we've heard this today, as well, but we
8 hear often, and what would you say to those who feel
9 that shareholders should bear some of the financial
10 responsibility for this project?
11 **A** Yeah, I think they continue to shoulder responsibility
12 for the investments that they've made. I mean,
13 certainly, the dollars that have gone into the project,
14 they're earning a return on those based on what the
15 Commission has ruled on in previous cases. But they
16 still have the risk that the plants operate as designed,
17 that they generate the power they're designed to
18 generate. I mean, we all believe that's going to
19 happen, but until those plants are turned on and
20 everything operates as planned, they do have a risk in
21 the investments they've put out there.
22 Investors today have hundreds of opportunities to
23 make investments, so for them to choose an investment in
24 the nuclear plants at SCE&G, they have to have
25 confidence in Westinghouse as the designer, the

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1 contractor — which I believe they have strong confidence
2 in Fluor, based on their proven experience. They look
3 at the regulatory climate and the support we have from
4 the Commission, the support we have from the
5 Legislature. All those things impact whether or not
6 they want to make an investment in these plants. But
7 this is a large investment for our company. We haven't
8 hidden that. It's a very significant investment for our
9 company, and when it's successful, it will provide
10 significant benefit for the State of South Carolina.
11 So, even though they're earning a return on their
12 investments they've put in, that return is measured
13 based on the risk that they've taken. If the Commission
14 were to make a decision that they were going to disallow
15 some of the costs that we've incurred or they believe
16 the contract we negotiated is not prudent, then that
17 would send a message to them that not only are they not
18 going to earn a return, but they're not going to get a
19 return of the money they invested either. I think that
20 could be devastating for the project and make it
21 virtually impossible for us to raise the funds we need
22 to complete the projects in a timely fashion.
23 **Q** So you do — what you're saying, they do share in the
24 risk of the project?
25 **A** They have the ultimate risk. They're the ones that put

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1 the money in. It's their money.
2 **Q** Thank you.
3 **A** Okay.
4 **CHAIRMAN WHITFIELD**: Thank you, Commissioner
5 Fleming.
6 Commissioner Randall.
7 **VICE CHAIRMAN RANDALL**: Thank you, Mr.
8 Chairman.
9 **EXAMINATION**
10 **BY VICE CHAIRMAN RANDALL:**
11 **Q** I think — let me just make sure about these microphone
12 things. I think most of — whether it's presidential
13 candidates or witnesses or lawyers, if you speak
14 directly into the microphone, everybody hears you pretty
15 good.
16 [Laughter]
17 Mr. Marsh, we beat around this a little bit. On
18 page 10, Chart B, we talked about the fixed-price option
19 and the cost of the EPC contract, costing the $505.5
20 million. On the items that are not covered in the
21 fixed-price option — owner's costs, transmission costs,
22 time-and-materials, whatever — what's the magnitude of
23 the exposure represented by items not covered in the
24 fixed-price option?
25 **A** I believe the items not covered are around 1 percent.

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1 The fixed items constitute about 99 percent of the
2 ultimate cost of the contract, or the price of the
3 units.
4 **VICE CHAIRMAN RANDALL**: Great. Thank you.
5 That's all.
6 **CHAIRMAN WHITFIELD**: Thank you, Commissioner
7 Randall.
8 Commissioner Elam.
9 **COMMISSIONER ELAM**: Thank you.
10 **EXAMINATION**
11 **BY COMMISSIONER ELAM:**
12 **Q** Good afternoon, Mr. Marsh. Did you get the mint out of
13 your pocket okay?
14 **A** I've still got a sticky goo in my pocket. I'm going to
15 have to explain that my wife when I get home.
16 [Laughter]
17 **Q** Well, better you than me. At various places in
18 testimony and papers, the company describes — it talks
19 about money in terms of 2007 dollars; and at other
20 places, it's about current dollars; and other places,
21 future dollars. Is there a yardstick or some sort of
22 criteria about whether you call something 2007 dollars,
23 current dollars, or future dollars?
24 **A** That was a challenge with the original contract, because
25 the costs were cut — were determined based on 2007

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1 dollars, and there were various indices of escalation
2 that applied to certain portions of that contract. With
3 the new contract, it's all in current dollars. There's
4 just a very small piece that's subject to escalation,
5 but for the most part it's all in current dollars, so
6 that's not something we should have to worry about from
7 this point forward.
8 **Q** Okay. On page 18 of your testimony, at line eight, you
9 talk about the $505.5 million, and you describe that as
10 in future dollars. Could you tell me why that was
11 future dollars?
12 **A** Well, they will be paid in the future, as the contract
13 is complied with. As they deliver the goods, we'll pay
14 future dollars of $505 million. That number won't go up
15 based on escalation and it won't go down as escalation
16 drops.
17 **Q** Okay.
18 **A** It'll just be paid in future.
19 **Q** I was going to ask — that was actually my next one to
20 ask, whether that was subject to escalation. Page 20 of
21 your testimony, you talk about change-order claims. Is
22 there any update to that, as far as whether there are
23 any more?
24 **A** I don't know of any at this time. There were a number
25 of change orders that were included in this docket.

Some of the costs were adjusted on those, based on negotiations with the Office of Regulatory Staff, but I don't have any new change orders at this point.

Q Okay. On page 22 — you talked about this a little bit, about the labor for the plant, and I don't know if this is one for Mr. Byrne or — you're saying you're going to three shifts at the plant. Can you fully support and fully supervise three full shifts at the plant?

A We believe we can. Mr. Byrne will be prepared to address that. We've had discussions about that in our talks with Westinghouse and Fluor, and we're confident we can do that, and the cost for doing that would be included in the analysis.

Q Does the fact that you're a stone's throw away from the Vogtle Plant create any problems about putting on that third shift?

A Not really. You know, we communicate with the Vogtle construction team on a regular basis. You know, we're not competing with them to hit deadlines; we're just focused on finishing our plant and finding the resources we need to complete our project.

Q You spent a good deal of time with Mr. Guild about the tax credits.

A Yes.

Q And you said something that I had not recalled seeing,

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that — do you have just an eight-year window to use the production tax credits?

A You can earn those over an eight-year period.

Q Right.

A And we believe that the production that would come out of the plant, there will not be an issue with us being able to earn all the credits that are allocated to us.

Q Okay. I was going to ask you —

A The credit period only runs for eight years.

Q Okay.

A So if we're in a tax situation where we weren't able to take advantage of the credits, my understanding is we'd be able to carry the value of those credits forward, even though they might not be able to be utilized on a current year's tax return. We would earn the credits and the value would be there.

Q Okay. And you would have eight years to use what you could — do you pay enough taxes to eat up $2.2 billion of tax credits?

A We pay a lot of taxes. If we don't use them during that period, we'd be able to have them for future periods.

Q That — no. I was heading toward something about Trump, but I decided not to.

[Laughter]

Now, in the settlement agreement, at page eight,

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it's talked about the third floor of the service building, and that that's been moved from the fixed-price to owner's costs.

A That's correct.

Q Is there any limit to what items you can move into owner's costs?

A I don't know if there's a specific prohibition, but what we have in the settlement agreement with ORS is, if we do move something from the fixed-price contract to owner's costs, we have to — we get a work order to do that, or a change order to do that under owner's cost, and it can be no more than the credit we receive for the fixed-price option, so there's not an increase that will accrue to customers based on shifting from one category to another.

Q But if you have trouble — where Mr. Guild was going, about Westinghouse not wanting to eat however much he was talking about, $800-$900 million — would that be any incentive to move things to owner's cost because you couldn't get it from Westinghouse?

A It'd be some pretty unusual facts and circumstances if that were to occur, I think, to try to speculate exactly what that would look like. But, I mean, the key is, if we do move something, it's going to be limited to the amount that's in the owner's costs, no more than what

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1 was in the fixed-price contract.
2 **Q** All right. If you would look at the settlement
3 agreement for me, at page 13, paragraph 18 and footnote
4 7 —
5 **A** What was that reference again you said?
6 **Q** Page 13, paragraph 18.
7 **A** Okay.
8 **Q** "By Commission Order 2015-661, the Commission
9 established a return on equity of 10½ percent," —
10 **A** Yes.
11 **Q** — "which is applicable for revised-rates filings made on
12 or after January 1, 2016, under the Base Load Review..."
13 It goes on to say, "As a condition of this settlement
14 agreement and for Base Load Review Act purposes only,
15 beginning with any revised-rates filing made on or after
16 January 1, 2017..." and you can just read the rest of
17 that. What does the phrase "for Base Load Review Act
18 purposes only" mean, in that context?
19 **A** I believe this provision on setting the ROE would
20 provide for the returns that are appropriate under the
21 Base Load proceeding — Base Load Review Act proceedings,
22 that they would not be applicable to any other
23 regulatory proceedings that might come before the
24 Commission.
25 **Q** Okay. And I think that both of them are going to be at

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1 10¼ now, both your overall —
2 **A** That's correct.
3 **Q** — ROE —
4 **A** On the electric side and on the nuclear plants.
5 **Q** Okay. And the BLRA is, essentially, construction work
6 in progress, you know, what the Commission used to
7 approve as that, essentially, right?
8 **A** That's correct.
9 **Q** Okay. And it wasn't unusual to have a different return,
10 overall return, and what your return on QWIP was
11 allowed, correct? It may be the same, it may not.
12 **A** I'm trying to think back through the cases I've been
13 involved in, and I don't recall any for SCE&G where you
14 had a different rate for QWIP than we did for the
15 overall return. There may have been. There may have
16 been some when we phased in the cost of the first
17 nuclear plants back in the 1980s, but that was a very
18 different circumstance.
19 **Q** So what that says is, if the company comes in for
20 another rate proceeding and the overall ROE changes,
21 that doesn't change the ROE for the Base Load Review Act
22 portion.
23 **A** That would be correct.
24 **Q** And one more thing on the tax credits. I think you told
25 Mr. Guild that you could sell them. You can sell tax

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1 credits?
2 **A** There are ways you can do that. If you can't take
3 advantage of them, yourself, there are financial ways to
4 make that happen. I've never actually done it myself,
5 but there are opportunities to do that.
6 **Q** Is there like a commodities market for tax credits?
7 **A** I don't think it's that big. There aren't that many
8 credits.
9 [Laughter]
10 **COMMISSIONER ELAM**: I just — that was just
11 completely new on me. I had not heard that before.
12 Okay. Thank you. That's all I have.
13 **CHAIRMAN WHITFIELD**: Thank you, Commissioner
14 Elam.
15 **EXAMINATION**
16 **BY CHAIRMAN WHITFIELD**:
17 **Q** Mr. Marsh, good afternoon. I have just a few questions
18 for you. I had a question about the relationship of
19 Toshiba and Westinghouse, but I think you've answered my
20 questions with Ms. Wright and with Mr. Guild, so I'm not
21 going to go down that area again. I do want to talk
22 just a minute about your first answer to the first
23 question from Commissioners, from Commissioner Hamilton.
24 I think he asked you about the completion of the
25 project, and I think you had — he asked you in several

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1 different areas, and I think you mentioned you've spent
2 — over $4 billion has been spent, to date?
3 **A** To date.
4 **Q** And then, in Mr. Byrne's testimony, he says that more
5 than 80 percent of the major equipment for the units is
6 fabricated and stored on-site. Are you taking that 80
7 percent number and then the number you gave to
8 Commissioner Hamilton, I think you said — I thought,
9 first, you said 23 percent, but I think you ended up
10 saying 25 to 30 percent completion on construction and
11 labor, I guess in labor man-hours. Are you kind of —
12 **A** Yeah, the $4 billion would include the costs of
13 completing all the fabrication of the equipment that is
14 now delivered on-site. That's one number. That's the
15 actual total dollars that have been paid out-of-pocket.
16 The lower number, the 25 to 30 percent number that I'll
17 get Mr. Byrne to verify when he gets up here, is for the
18 actual progress on assembling what I call the parts and
19 pieces of the actual project itself. We could
20 essentially pay for all the equipment to be delivered,
21 but until it's assembled and fabricated into the new
22 nuclear units, it's not usable.
23 **Q** Okay. Well, given those two different numbers — one in
24 the 25 to 30 range and one in the 80 percent or above
25 range — did I hear you say to Commissioner Hamilton that

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you estimated the percentage, overall completion of the project, to be slightly above 50 percent? Is that what I heard you say, before you gave the $4 billion figure?

A No, that was — that over-50 percent includes the 80 percent of the major equipment being delivered on-site, the costs associated with that major equipment.

Q Okay.

A And then the 20 to 30 percent number would be the assembly of that equipment into the nuclear island and other buildings on-site.

Q I see. So you're not really assigning a percentage to the overall completion of the project?

A We had this discussion internally, and I know it's confusing. When you're looking at completion in terms of fabricating the new units, themselves, that's the number I'm saying is 25 to 30 percent complete. If you're looking at the dollars that have been spent on the project to date, that's the number of $4 billion, which is in excess of 50 percent complete. If you thought about it like your house, if you were building a new house, which is an example used many times, if you went to build your house and you paid for 50 percent of the lumber and the bricks and all the pipes and pieces that a house needs to be delivered on-site, you would say, "I've paid for half the cost of the house."

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1 **Q** I see.
2 **A** But your gentleman from the bank who wants to come out
3 and says, "Well, what percent complete are you," if they
4 haven't done anything with those materials, he's going
5 to say, "Well, you're not 50 percent complete. You just
6 have 50 percent of the materials on-site." And that was
7 the two numbers I was trying to explain. The $4 billion
8 would include all the major equipment that's been
9 delivered on-site, as well as the construction that has
10 taken place, but in terms of where we stand percentage
11 complete of the project, that would be the 25 to 30
12 percent number.
13 **Q** Okay. So the 50 percent number is the amount you have
14 paid, of the 80 percent of fabricated materials that are
15 on the site; is that correct?
16 **A** No, the 50 percent number would include the cost of
17 those materials and major pieces that have been
18 delivered on the site. It encompasses the 80 percent of
19 the major components.
20 **Q** I see. That's inside there.
21 **A** Like, if 80 percent of the components, for example, were
22 $2 billion in cost, that $2 billion is included in the
23 $4 billion.
24 **Q** I see. I follow you.
25 **A** Yeah.

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1 **Q** Next, I want to just ask you two more things, and I know
2 you don't have a great crystal ball or anything. None
3 of us do. But I want to kind of paint a not-so-good
4 scenario and a good scenario. Mr. Guild painted a
5 situation of you exceeding the liquidated damages amount
6 and Westinghouse — quote, unquote — "walking off the
7 job." What if you exceeded the $371 million liquidated
8 damages that this amendment allows for, but yet
9 Westinghouse didn't walk off the job? You're still
10 proceeding with the project, but yet you've exceeded
11 that amount, and what is the alternative there?
12 Litigation, if your Dispute Resolution Board hasn't been
13 able to work anything out? What scenario are you under
14 there?
15 **A** It probably depends on the nature of the dispute or
16 issue that led to the delay. If it's just a delay in
17 work being done, and it's not a change in regulation or
18 a change in law, they're just not as productive as they
19 need to be and they miss those dates, that would be a
20 price that we feel like they would pay for. And, you
21 know, we would have to incur additional owner's costs,
22 because we would still have people on-site to do that,
23 and those liquidated damages would be an effort to cover
24 those additional costs of the company, depending on how
25 long that would run. If it was a six- or twelve-month

period, I believe our run rate now, on owner's costs, is somewhere around $6 million for our share that would be remaining if Unit 3, for example, weren't completed. So those dollars would be sufficient to help recover those costs.

Q So you would get up to the capital and liquidated damages amount, and anything beyond that could be subject for litigation or whatever path you chose, right?

A I think it would depend on what the issues were that gave rise to the change.

Q Okay. What about a good scenario? By exercising this fixed-price option, it's costing you a good — there's a $505 million price tag right up front, in addition to the other costs. But in exercising this option, suppose that things go really, really well, and obviously you've spent your money to guarantee that they do. But I noticed in your testimony that, previously, you had a bonus, in the old contract. Are there any other kind of incentives — I get that you're exercising the fixed-price option, but are there any other — since you've eliminated this bonus, are there any other kind of incentives that are there for Westinghouse and Fluor, as a construction manager, to exceed this, other than, of course — I mean, now they're — they're guaranteeing this

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for this fixed — you're exercising this fixed-price option. Are there any other carrots, if you will, since you've eliminated this bonus that was in the old contract? Do you have any other carrots, if you will, to encourage expedited —

A Yeah, I think the bonus you're talking about that's been eliminated from the contract was the megawatt bonus —

Q Oh, that was —

A — for capacity. They could've earned a premium, had the units produced more megawatts than originally designed.

Q Than originally designed.

A They felt like that could give them a substantial premium. We were able to negotiate that out of the new amendment, so there's no risk that we would pay a premium if the units — like you say, if everything goes well and they provide more megawatts than designed, we wouldn't have to pay them.

Q I'm sorry, that was a capacity bonus for megawatts.

A And we do have an amendment to the EPC contract, a bonus we would pay them if they complete the units in time to qualify for the production tax credits, and that would be at a rate of $82½ million per unit. We have not included those costs in the filing here before the Commission today. I think it's appropriate, from our perspective, to see that they complete the units on

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time, and determine that cost — the appropriateness of that cost at the time.

Q Thank you, Mr. Marsh. Lastly — this may be for Mr. Byrne also — when do you anticipate Fluor having the new schedule that they're currently working on ready?

A We expect to have that before the end of the year. I think it will probably be in December.

CHAIRMAN WHITFIELD: Thank you. That's all I have, Mr. Marsh.

Mr. Burgess?

MR. BURGESS: Nothing further from the company, of this witness.

CHAIRMAN WHITFIELD: Okay. You may be excused, and we will recess now for 10 minutes

[WHEREUPON, the witness was excused.]

[WHEREUPON, a recess was taken from 3:08 to 3:44 p.m.]

CHAIRMAN WHITFIELD: Please be seated. I'll call the hearing back to order. I apologize for the little-longer-than-expected break. We were trying to gather some more information concerning the weather.

I would note, for the record, that I have excused Intervenor Frank Knapp from the rest of the case.

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C E R T I F I C A T E

I, Jo Elizabeth M. Wheat, CVR-CM-GNSC, Notary Public in and for the State of South Carolina, do hereby certify that the foregoing is, to the best of my skill and ability, a true and correct transcript of proceedings had and testimony adduced in a hearing held in the above-captioned matter before the PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA;

That the witnesses appearing during said hearing were affirmed by me to state the truth, the whole truth, and nothing but the truth;

IN WITNESS WHEREOF, I have hereunto set my hand and seal, on this the 20th day of October, 2016.

Jo Elizabeth M. Wheat, CVR-CM/M-GNSC
Hearings Reporter, PSC/SC
My Commission Expires: January 27, 2021.