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BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

COLUMBIA, SOUTH CAROLINA

HEARING #15-11488 JULY 21, 2015 10:35 A.M.

DOCKET NO. 2015-103-E:

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

TRANSCRIPT OF TESTIMONY AND PROCEEDINGS **VOLUME 1 OF 3**

HEARING BEFORE: Nikiya M. 'Nikki' HALL, *Chairman;* Swain E. WHITFIELD, *Vice Chairman;* and COMMISSIONERS John E. 'Butch' HOWARD, Elliott F. ELAM, JR., Comer H. 'Randy' RANDALL, Elizabeth B. 'Lib' FLEMING, 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 and Colanthia Alvarez, 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**

APPEARANCES (Cont'g):

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

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

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

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1 exercise efficiencies.
2 Madam Chair, members of the Commission, I look
3 forward to an opportunity to examine the witnesses
4 and to speak further on these matters, but I submit
5 to you that, on the basis of the evidence of this
6 case, you should reject the Application that's been
7 submitted to you, for the reasons I've stated.
8 Thank you.
9 **CHAIRMAN HALL**: Thank you, Mr. Guild.
10 Okay. Now, Mr. Burgess.
11 **MR. BURGESS**: SCE&G calls Kevin Marsh to the
12 stand.
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 name for the
22 record?
23 **A** My name is Kevin Marsh.
24 **Q** By whom are you employed and in what capacity?
25 **A** I'm employed by SCANA Corporation. I'm the chief

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1 executive officer.
2 **Q** And did you prepare or cause to be prepared under your
3 direct supervision 49 pages of direct testimony that's
4 been prefiled in this docket?
5 **A** I have.
6 **CHAIRMAN HALL**: Mr. Burgess, could you pull
7 that microphone closer? I don't think everybody
8 can hear you.
9 **BY MR. BURGESS:**
10 **Q** Mr. Marsh, were there any changes or corrections
11 required of your testimony?
12 **A** I have three small changes, and I'll be glad to
13 highlight those.
14 **Q** Would you please indicate the page number and line
15 number for those corrections that are required?
16 **A** The first one would be on page 17 at the bottom of the
17 page. On line seven, there's a parenthetical there that
18 starts "Approximately one-half of the Alternative
19 Resources..." Right after the opening parenthetical
20 should be inserted "In 2019-2021." So it should read
21 "In 2019-2021 approximately one-half of the Alternative
22 Resources..." on that line seven.
23 The next change is on page 25. On line three,
24 after the word "does" the word "the" should be inserted
25 between "does" and "company's." And on line four, the

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1 word "stands" should be "stand"; eliminate the "s" from
2 "stands."
3 The final change is on page 46, line nine. The
4 words "as the" should be replaced with the word "for."
5 So that line would read "schedules for BLRA purposes."
6 That would be all the changes I have.
7 **Q** Mr. Marsh, subject to those edits in your prefiled
8 direct testimony, if I asked you all the questions
9 contained in your testimony, would your answers be the
10 same?
11 **A** Yes, they would.
12 **MR. BURGESS**: Madam Chairman, at this time, we
13 would move into the record the prefiled direct
14 testimony of Kevin Marsh as if given orally from
15 the stand.
16 **CHAIRMAN HALL**: All right. Mr. Marsh's
17 testimony will be entered into the record as if
18 given orally.
19 *[See pgs 52-100]*
20 **MR. BURGESS**: Thank you, Madam Chairman.
21 **BY MR. BURGESS:**
22 **Q** Mr. Marsh, have you prepared a summary of your direct
23 testimony?
24 **A** Yes, I have.
25 **Q** Would you please deliver that, at this time?

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A I will.

Good morning, Madam Chairman and Commissioners. SCE&G comes before the Commission today to request approval of a revised construction milestone schedule and revised cash flow forecast for the two new nuclear units it is building in Jenkinsville, South Carolina.

CHAIRMAN HALL: Excuse me, Mr. Marsh. I'm sorry. Could you pull that microphone a little bit closer? I think the people in the back are having some trouble hearing.

WITNESS: [Indicating.] Is that better?

CHAIRMAN HALL: Do we have — okay, we're going to switch the mics out.

[Brief pause]

WITNESS: Is that better?

CHAIRMAN HALL: Okay. For the people in the back, is that better?

VOICE: He hasn't said anything.

WITNESS: Is that better?

VOICE: Yes.

CHAIRMAN HALL: Okay.

VOICE: Not much.

WITNESS: Not much? It sounded like it was better with this one [indicating]. Can you hear me with this one at all?

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1 **VOICE**: Yes.
2 **CHAIRMAN HALL**: Okay, that's good.
3 **WITNESS**: I'll start over.
4 SCE&G comes before the Commission today to
5 request approval of a revised construction
6 milestone schedule and a revised cash flow forecast
7 for the two new nuclear units it is building in
8 Jenkinsville, South Carolina. This is the third
9 BLRA update proceeding since the Commission
10 initially approved the project in 2008. At that
11 time, SCE&G provided the Commission with a detailed
12 overview of the risks and challenges of building a
13 nuclear plant. We showed that the benefits to our
14 customers from new nuclear capacity far outweighed
15 the risk and challenges.
16 We are currently approximately seven years
17 into the project, and the benefits from this
18 project still far outweigh the risk. Capital costs
19 have increased by approximately $712 million, or
20 about 15 percent, since 2008. At the same time,
21 based on current schedules and forecasts,
22 escalation on the project has declined by $214
23 million, the financing costs on the debt to
24 construct the units has declined by approximately
25 $1.2 billion, and the projected benefit for federal

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1 production tax credits, which we will pass directly
2 to customers, has increased by approximately $1.2
3 billion. The impact of these savings can be
4 expected to offset the impact to customers of the
5 initial — excuse me — of the increase in capital
6 costs since 2008.
7 In addition, the benefits to our customers
8 from new nuclear capacity still far outweigh the
9 risks. There is no other source of non-emitting,
10 dispatchable base-load power that can replace the
11 generation represented by the units. With both
12 units in service, SCE&G will have reduced its
13 carbon emissions by 54 percent, compared to 2005
14 levels. At that time, 61 percent of SCE&G's
15 generation will come from non-emitting sources,
16 compared to 23 percent in 2014. The units will be
17 an important part of SCE&G's plan to meet CO_2
18 emissions limitations that will be required under
19 the EPA's proposed Clean Power Plan.
20 As Dr. Lynch testifies, even with today's low
21 natural-gas prices, which I believe are not
22 sustainable over the long run, completing the units
23 remains the lowest-cost alternative for meeting
24 customers' need for additional base-load generating
25 capacity.

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Completing the units will give SCE&G a well-balanced generation system with roughly equal amounts of coal, gas, and nuclear capacity. If SCE&G were to meet its base-load generation needs by adding new natural gas generation, then fossil fuels would account for approximately 75 percent of SCE&G's generation in 2021, with gas alone representing 48 percent of that generation. This would be an unbalanced generation portfolio that would also be overly subject to environmental and price risks from fossil fuels.

Concerning the financing of the units, as of March 2015, SCE&G has successfully raised approximately 46 percent of the capital needed for the units, or $3.1 billion. This includes $1.5 billion in first mortgage bonds issued at an average interest rate of only 4.99 percent. Interest rates have been locked in on approximately $1.3 billion anticipated 2015-2016 borrowings at an estimated effective rate of 5.09 percent. These rates have been possible because the financial community has become comfortable with the careful and consistent approach the Commission and ORS have used in applying the Base Load Review Act.

We are now entering a critical period in

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1 executing the financial plan. At the 36 months
2 beginning with calendar year 2015, we will need to
3 finance approximately $2.8 billion of investment in
4 the units. During this time, SCE&G will not have
5 the option of waiting out unfavorable market
6 conditions or postponing financing if markets have
7 become skeptical of investing in the company due to
8 unfavorable financial or regulatory results.
9 During this period, it will be vitally important
10 that SCE&G maintain access to capital markets on
11 favorable terms.
12 The BLRA addresses the two principal concerns
13 of the financial markets. One is the risk of
14 regulatory disallowances for events outside the
15 company's control. Write-downs resulting from
16 disallowances have disproportionate impact on
17 investors' risks and return calculations. Under
18 the BLRA, disallowance is permitted only if changes
19 in costs or scheduled forecasts are the result of
20 imprudence by the utility. Markets are comfortable
21 with that risk.
22 The second concern is the need for revenues to
23 pay financing costs and support debt coverage and
24 other measures of creditworthiness while the
25 project is being built. The BLRA provides for

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1 regular rate adjustments during construction to pay
2 financing costs. This maintains SCE&G's
3 creditworthiness while raising the necessary funds.
4 Nothing is more important to SCE&G's financial
5 plan than maintaining market confidence and the
6 continued application of the BLRA in a fair and
7 consistent way. Loss of this confidence would put
8 the financial plan for completing the units at
9 risk. In this regard, markets see the settlement
10 agreement we've entered into with ORS and the
11 Energy Users as a positive example of how the
12 regulatory process is working in a fair and
13 rational way in South Carolina. As is always the
14 case under the BLRA, revised rates are based on
15 actual payments only, not projections or forecasts,
16 or speculative costs. ORS carefully audits all
17 amounts proposed for revised rates recovery. Only
18 actual costs are included.
19 My senior management team and I are directly
20 involved in the management and oversight of the new
21 nuclear project. We deal with the issues that
22 arise with Westinghouse aggressively and at the
23 highest levels. If we stay the course with
24 construction and with regulation, the units will
25 provide reliable, non-emitting, base-load power to

our customers for 60 years or more.

It is my opinion, based on 38 years' 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.

On behalf of SCE&G, I ask the Commission to approve the updated cost forecast and construction schedule for the units as presented here.

That concludes my summary.

[PURSUANT TO PREVIOUS INSTRUCTION, THE PREFILED DIRECT TESTIMONY {W/CORRECTIONS} OF KEVIN B. MARSH FOLLOWS AT PGS 52-100]

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Please note: The change(s)/correction(s) noted herein reflect testimony given during the hearing in this matter.

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DIRECT TESTIMONY

OF

KEVIN B. MARSH

ON BEHALF OF

SOUTH CAROLINA ELECTRIC & GAS COMPANY

DOCKET NO. 2015-103-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. 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

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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 President and Chief Operating Officer of PSNC Energy 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 TESTIFIED BEFORE THIS COMMISSION BEFORE?

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 "Petition"), the Company requests that the Public Service Commission of South Carolina (the "Commission") approve an updated construction schedule and schedule of forecasted capital costs for the project to construct V.C. Summer Units 2 & 3 (the "Units"). My testimony explains the requests contained in the Petition and the value the Units represent to SCE&G's customers, to its partner, Santee Cooper, and to the State of South Carolina. I discuss the importance of this proceeding to SCE&G's plan for financing the Units and how this proceeding fits within the structure of the Base Load Review Act ("BLRA.")

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

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A. The other witnesses presenting direct testimony on behalf of the Company are Mr. Stephen A. Byrne, Mr. Ronald A. Jones, Ms. Carlette L. Walker and Dr. Joseph M. Lynch.

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 and presents the updated construction schedule provided by the contractors, Westinghouse Electric Company, LLC ("WEC") and Chicago Bridge & Iron ("CB&I") (collectively "WEC/CB&I"). Mr. Byrne also testifies concerning the commercial issues with WEC/CB&I related to the project.

2. Mr. Jones is the Vice President for New Nuclear Operations for SCE&G. Mr. Jones will testify concerning change orders related to the project that SCE&G has agreed to with WEC/CB&I, changes in the Estimated at Completion ("EAC") costs and changes in Owner's cost arising from the new project schedule and other matters.

3. Ms. Walker is Vice President for Nuclear Finance Administration at SCANA. She sponsors the current cost schedule for the project and presents accounting, budgeting and forecasting information supporting the reasonableness and prudency of the adjustments in cost forecasts. Ms. Walker also testifies in further detail concerning key drivers of the changes in the Owner's cost forecast.

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4. Dr. Lynch is Manager of Resource Planning at SCANA. He will testify concerning updated studies showing that even considering historically low natural gas prices, completing the Units remains the lowest cost option for meeting the generation needs of SCE&G's customers.

All Company witnesses testify in support of the reasonableness and prudency of the updated construction schedule and the costs it represents. From my knowledge of the project and my perspective as SCE&G's Chief Executive Officer, I can affirmatively testify that SCE&G is performing its role as project owner in a manner that is reasonable, prudent, cost-effective and responsible. 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 decades. 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 Engineering, Procurement, and Construction Agreement (the "EPC Contract") with what is now

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WEC/CB&I on May 23, 2008, after two and one-half years of negotiations. On May 30, 2008, the Company filed a Combined Application under the BLRA seeking review by the Commission and 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 share of the total anticipated cost was $4.5 billion.[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),

[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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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.

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 three 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 WEC/CB&I had recently completed. The 2009 update changed the timing of cash flows for the project, but the total forecasted cost for the Units of $4.5 billion did not change.
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 $4.5 to $4.3 billion.

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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 WEC/CB&I for cost increases associated with:
    a. The delay in the Combined Operating License ("COL") issued by the Nuclear Regulatory Commission (the "NRC");
    b. WEC's redesign of the AP1000 Shield Building;
    c. The redesign by WEC/CB&I 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 schedule of Owner's cost to reflect more detailed operations and maintenance planning; new safety standards issued after the Fukushima event; and other matters. The 2012 update also involved several specific EPC Contract change orders. It increased the anticipated cost for the Units from $4.3 billion to $4.5 billion. The Commission adopted these new schedules in Order No. 2012-884. South Carolina Supreme Court affirmed that order in *S.C. Energy Users Comm. v. S.C. Elec. & Gas*, 410 S.C. 348, 764 S.E. 2d 913 (2014).

Q. PLEASE PROVIDE AN OVERVIEW OF THIS PETITION.

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A. In this proceeding, SCE&G seeks approval of the revised milestone schedule (the "Revised Milestone Schedule") attached to Company Witness Byrne's direct testimony as Exhibit ___ (SAB-2). The updated schedule is based on information recently provided to SCE&G by WEC/CB&I. It shows new substantial completion dates for Units 2 and 3 of June 19, 2019, and June 16, 2020, respectively (the "Substantial Completion Dates").[2]

SCE&G has also submitted a revised cash flow forecast for the project (the "Revised Cash Flow Forecast"). That schedule is attached to Company Witness Walker's direct testimony as Exhibit No. ___ (CLW-1). It shows an updated cost forecast for the Units dollars of $5.2 billion, which is an increase of approximately $698 million, or 15%, from the costs approved in Order No. 2012-884.[3] Chart A, below, summarizes these adjustments.

[2] SCE&G has not, however, accepted WEC/CB&I's contention that the new Substantial Completion Dates are made necessary by excusable delays. Nothing in this testimony should be taken as a waiver or abandonment of any claims SCE&G may have against WEC/CB&I. Explanations of the reasons for certain delay or cost increases should not be taken as an indication that SCE&G agrees that the associated delays or cost increases are excusable under the EPC Contract or that WEC/CB&I is not liable to SCE&G for the resulting costs and other potential damages.

[3] This $698 million is net of approximately $86 million in liquidated damages that SCE&G intends to seek from WEC/CB&I for the delays. While WEC/CB&I disputes this claim, SCE&G does not believe that WEC/CB&I's counter position should be recognized in determining anticipated payments to complete the project.

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CHART A
SUMMARY OF COST ADJUSTMENTS
(millions of dollars)

	Delay Cost	Non-Delay Cost	Total Cost
ESTIMATE AT COMPLETION (EAC) COST*			
Associated with Delay	$ 228.1		
Less: Liquidated Damages	$ (85.5)		
Net Associated with Delay			$ 142.6
Not Associated with Delay			
Other EAC Cost			
Productivity and Staffing Ratios		$ 154.8	
WEC T&M Changes		$ 27.4	
Total: Other EAC Costs		$ 182.2	
Design Finalization		$ 71.9	
Total Not Associated with Delay			$ 254.1
TOTAL EAC COST ADJUSTMENT			$ 396.7
OTHER EPC ADJUSTMENTS			
Ten Change Orders		$ 56.5	
Less: Switchyard Reallocation		$ (0.1)	
TOTAL EPC COST ADJUSTMENT			$ 453.1
OWNER'S COST			
Associated with Delay	$ 214.3		
Not Associated with Delay		$ 30.8	
TOTAL OWNER'S COST ADJUSTMENT			$ 245.1
TOTAL ADJUSTMENT	$ 356.9	$ 341.3	$ 698.2
TOTAL ADJUSTMENT	$ 442.4	$ 341.3	$ 783.8
(Without Liquidated Damages)			

Totals may vary due to rounding.

* Delay and Other EAC Costs as reported in the Petition is $411 million. It includes (a) EAC Costs Associated with Delay ($228.1 million), and (b) Other EAC Cost ($182.2 million).

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

A. While the base capital cost of the project has increased, several components of the ultimate cost of the project to customers are projected to offset this increase:

a. **Capital cost**. Capital costs are increasing by $712 million in 2007 dollars compared to the amount approved in Docket 2008-196-E. The $712 million increase reference here is different than $698 million increase referenced in the Petition but both are correct. The total cost approved in Order No. 2012-884 was more than that approved in Order No. 2009-104(A) by approximately $14 million. As a result the increase in anticipated costs is approximately $698 million when compared to Order No. 2012-884 and $712 million when compared to Order No. 2009-104(A).

b. **Escalation.** The forecasted cost of escalation on the project has declined by $214 million compared to 2008. This is true even taking into account the increased cost of the project, and the effect of extending the project by two years.

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c. **Financing.** Since 2008, SCE&G has been able to obtain low-cost borrowing for the project based on support from the BLRA, SCE&G's favorable bond ratings, and the low cost of financing available in debt markets. Compared to the projections presented in 2008, customers are anticipated to save approximately $1.2 billion in interest costs (in future dollars) over the life of the debt that has been issued to date to finance the project and on future issuances where interest rates have been hedged.

d. **Production Tax Credits.** The 2005 Energy Policy Act provides a production tax credit to qualifying new nuclear units of 1.8 cents per kWh during the first eight years of operation. The credits are limited to 6,000 MW of nuclear capacity built during a specified period with qualifying units sharing the credits pro rata. In 2008, SCE&G anticipated its total benefit would be $1.06 billion gross of tax. Now it appears that there will be a smaller number of competing utilities so that SCE&G will receive a larger amount of credits. Assuming that the current completion dates can be maintained, SCE&G's forecasted benefit has increased by approximately $1.2 billion in future dollars since 2008. SCE&G intends to pass all of the savings from the tax credits directly to its customers as fuel cost credits.

The impact of these savings will more than offset the impact to customers of the forecasted $712 million increase in 2007 capital cost. For

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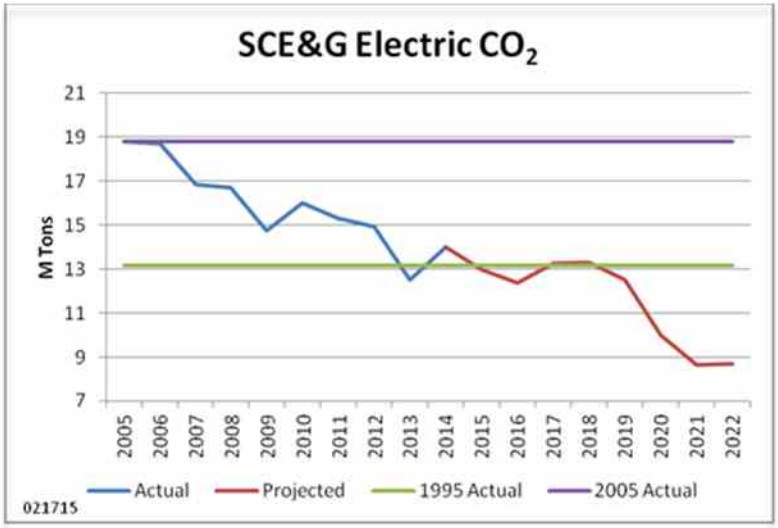
that reason, the combined capital and related cost to customers today does not exceed the estimate provided to the Commission in 2008.

Q. HOW HAS THE VALUE OF THE UNITS TO SCE&G'S SYSTEM CHANGED IN RECENT YEARS?

A. When SCE&G and Santee Cooper made the decision to construct these Units, they did so to capture the value of adding 2,234 MW of efficient and non-emitting, base-load generation to their generation portfolios to serve the people of South Carolina. In large part because of the Units, SCE&G projects that by 2021 it will have reduced its carbon emissions by 54% compared to their 2005 levels, and 34% compared to 1995 levels. Chart B shows the forecasted reduction in CO_2 emissions in millions of tons:

<u>Chart B</u>
SCE&G's Forecasted CO2 Emissions



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There have also been immediate environmental benefits from the Units. In 2008, the Company committed to evaluate whether building the Units might support retiring smaller coal units. The Company has followed through on this commitment. Since 2008, SCE&G put in place plans to retire 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. For reliability purposes, SCE&G must maintain McMeekin Units 1 and 2 in service pending the completion of the new nuclear Units. But the current plan is to fuel the McMeekin units with natural gas after 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.

Q. HOW DOES THE ENVIRONMENTAL PROTECTION AGENCY'S ("EPA") PROPOSED 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 are not yet in final form. But they will require substantial cuts in CO_2 emissions from most state's electric generation fleets. Planning for these reductions underscores the value and importance of nuclear generation.

Q. HOW DOES THE CLEAN POWER PLAN WORK?

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A. 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. That target carbon intensity rate is expressed in pounds of carbon per megawatt hour of electricity generated (lb/MWh). The Plan leaves it to the states to decide how to achieve mandated reductions and how to allocate those reductions among plant operators.

In computing the target for South Carolina, EPA treats the Units as existing units and assumes that they were operating at a 90% capacity factor in 2012. The plan then mandates reductions in carbon intensity rate from that artificially reduced baseline.

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

A. EPA is proposing that South Carolina reduce its discharges from its actual 2012 carbon intensity of 1,587 lb/MWh to 772 lb/MWh, a 51% reduction. Compliance will be phased-in beginning in 2020. In its comments to EPA, SCE&G has proposed that the Units not be included in the 2012 baseline calculation. If that is done, South Carolina's carbon intensity target goes to 990 lb/MWh which would mean a reduction in carbon emissions of 38% compared to actual 2012 emissions.

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

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A. It is not clear how the proposed EPA regulations will change, 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 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.

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 and advocated the adoption of the South Carolina Distributed Energy Resources Act found in Act No. 236 of 2014. SCE&G is currently working to achieve the renewable resources goals established by the South Carolina General Assembly in that Act. The achievement of those 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 Demand Side Management (DSM) program as approved by this Commission. However, with current

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

Because of EPA regulations limiting carbon discharges, it is extremely difficult to permit new coal generation. For that reason, 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, natural gas generation does entail some emissions of CO_2 and the six criteria air pollutants. Nuclear generation remains the only base load resource that is entirely non-emitting with respect to these air pollutants.

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 C on the following shows how that plan stands today.

[Chart C begins on the following page]

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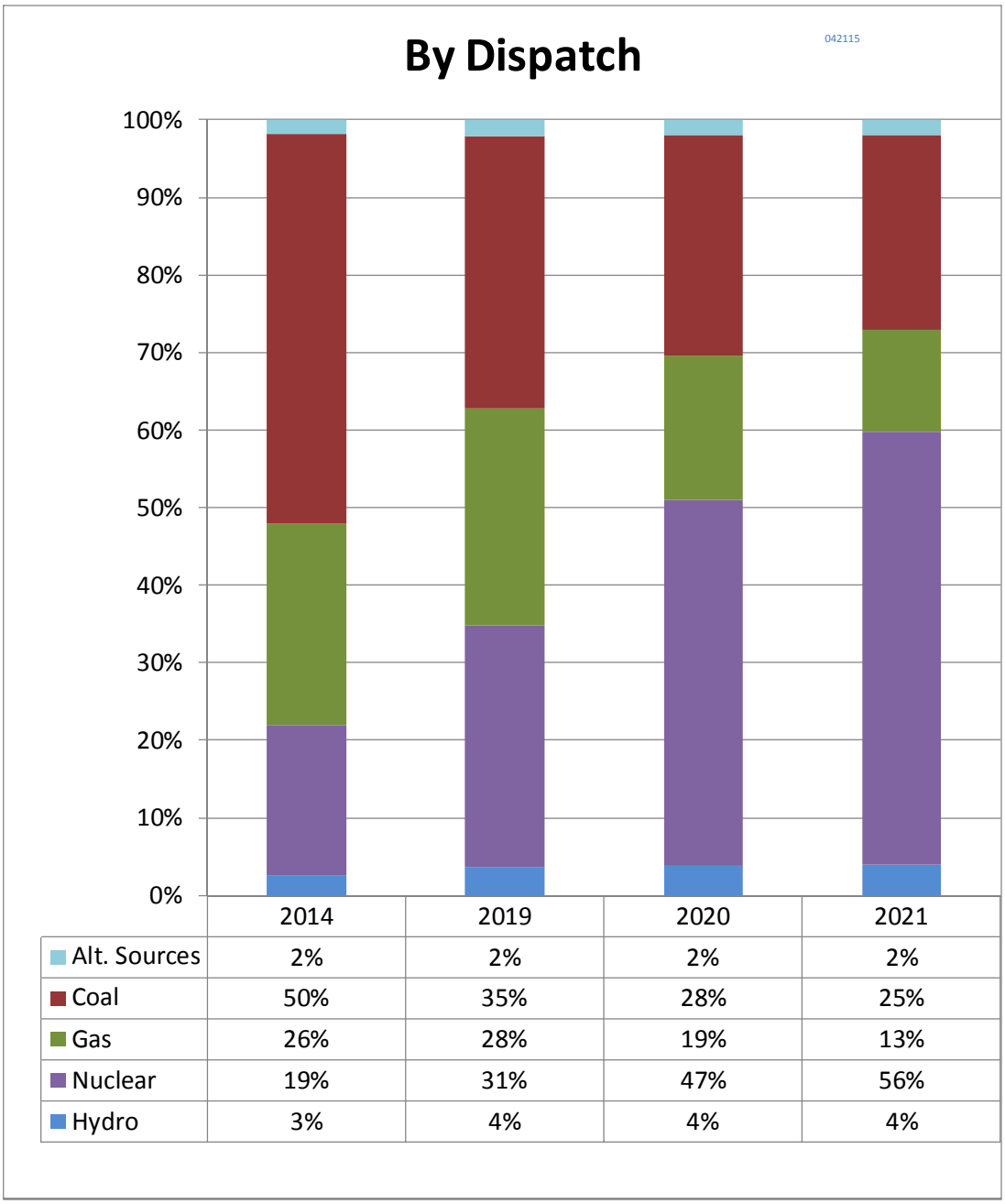
Chart C

SCE&G's Current and Forecasted Generation Mix



	2014	2019	2020	2021
Alt. Sources	2%	2%	2%	2%
Coal	50%	35%	28%	25%
Gas	26%	28%	19%	13%
Nuclear	19%	31%	47%	56%
Hydro	3%	4%	4%	4%

In 2014, 23% of SCE&G generation of energy was from non-emitting facilities. (In 2019-2021 / approximately one-half of the Alternative Resources

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listed in Chart C 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 61% of the energy serving SCE&G's customers will come from non-emitting sources. SCE&G is on track to 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 72% towards fossil fuel, with coal representing 38% of that capacity, and natural gas representing 34%. In large part because of the addition of nuclear generation, SCE&G will have a well-balanced generation system in 2021 with 28% of its capacity in coal units, 26% of its capacity in natural gas units, 32% of its capacity nuclear units and 14% 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 D shows this capacity mix in a graphic form:

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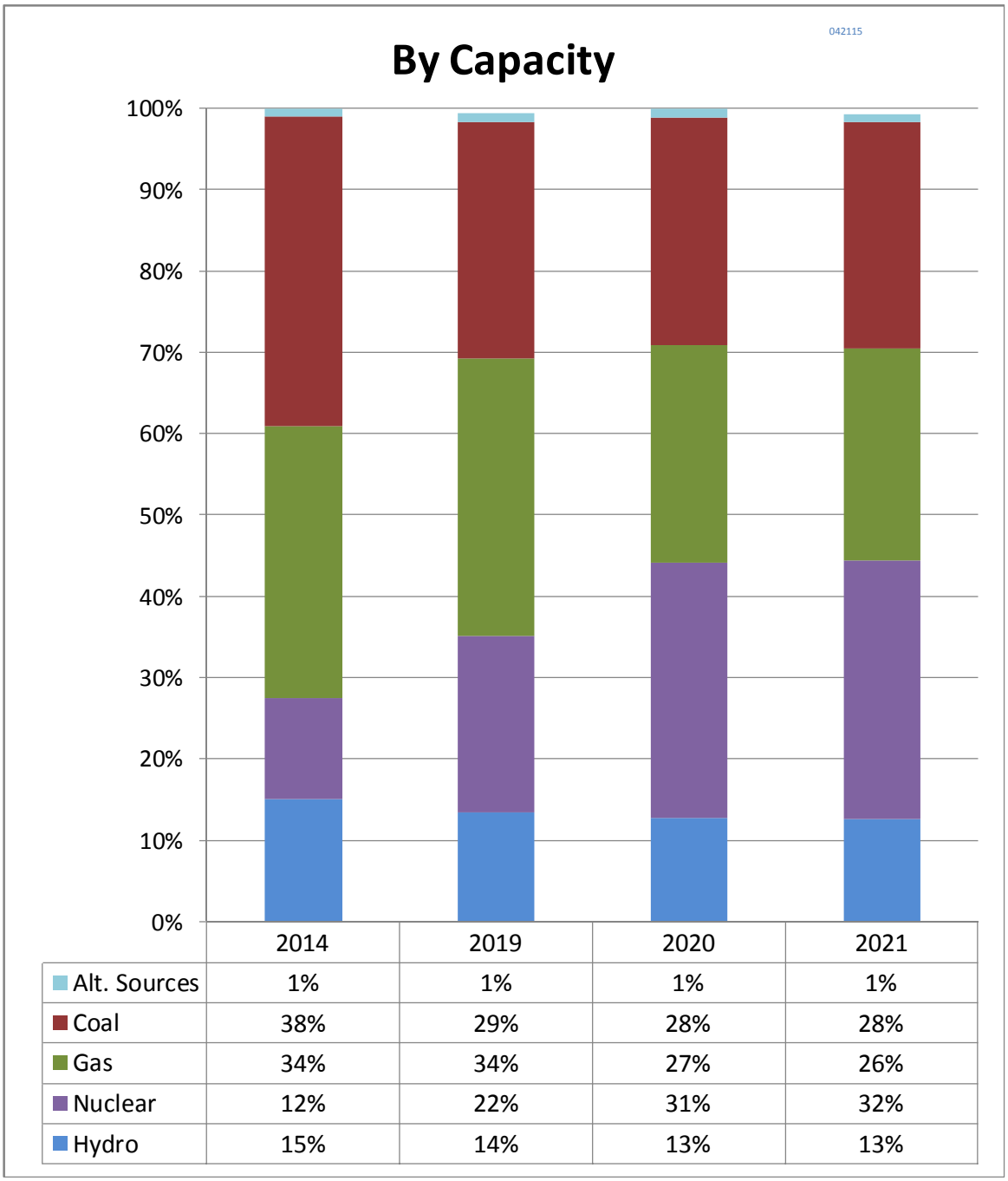
Chart D
SCE&G's Current and Forecasted Capacity Mix



	2014	2019	2020	2021
Alt. Sources	1%	1%	1%	1%
Coal	38%	29%	28%	28%
Gas	34%	34%	27%	26%
Nuclear	12%	22%	31%	32%
Hydro	15%	14%	13%	13%

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

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flexibility other than by adding new nuclear capacity. This is particularly true now that for environmental reasons adding new coal 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 48% 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 at this time and for some years in the future. However, predictions of future natural gas prices are notoriously unreliable over the long-term. The planning horizon for determining the

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value of a nuclear unit is 60 years or more. Prices for fuels are historically volatile as natural gas will change over that time. The lesson of history is that fossil fuel prices will change dramatically and unexpectedly over that long a 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.

In the case of natural gas supplies and fracking, there are efforts underway to limit fracking based on environmental concerns. But the issues go beyond fracking. The Sierra Club indicates on its current website that it is committed to "putting natural gas back in the dirty box with its fossil fuel brethren." In its "Beyond Natural Gas" campaign, the Sierra Club tells readers of its website that "[t]otal life-cycle emissions for coal and gas are nearly equivalent," and that "[t]he Sierra Club continues to legally challenge new natural gas plants and demand requirements that limit their emissions of greenhouse gases." According to the Sierra Club, "[n]atural gas is not part of a clean energy future."[4] It is only reasonable to assume that once coal plants are closed, restricting natural gas generation will become the principal focus of entities like the Sierra Club.

In addition, domestic United States natural gas prices are still out of line with global prices:

[4] http://content.sierraclub.org/naturalgas/protect-our-climate (accessed May 20, 2015).

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CHART E

Landed LNG Prices, April 2015

($US/MBTU)

http://www.ferc.gov/market-oversight/mkt-gas/overview/ngas-ovr-lng-wld-pr-est.pdf

Updated: April 2015

How long the current price disparities can remain is difficult to determine. But there is every reason to expect that in the coming years U.S. natural gas prices may begin to respond to global markets and the global hunger for energy. Major energy companies are moving to expand their infrastructure to export natural gas produced in the United States as liquefied natural gas ("LNG"). A review of the reported 2015 data indicate that 24 new LNG export facilities have been approved or proposed to be permitted in the United States. Another 26 sites are listed as potential export sites in North America.

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CHART F

North American LNG Import /Export Terminals
Approved

Import Terminal

APPROVED - UNDER CONSTRUCTION
U.S. - FERC
1. **Corpus Christi, TX:** 0.4 Bcfd (Cheniere – Corpus Christi LNG) (CP12-507)

APPROVED - NOT UNDER CONSTRUCTION
U.S. - MARAD/Coast Guard
2. **Gulf of Mexico:** 1.0 Bcfd (Main Pass McMoRan Exp.)
3. **Offshore Florida:** 1.2 Bcfd (Hoëgh LNG - Port Dolphin Energy)
4. **Gulf of Mexico:** 1.4 Bcfd (TORP Technology-Bienville LNG)

Export Terminal

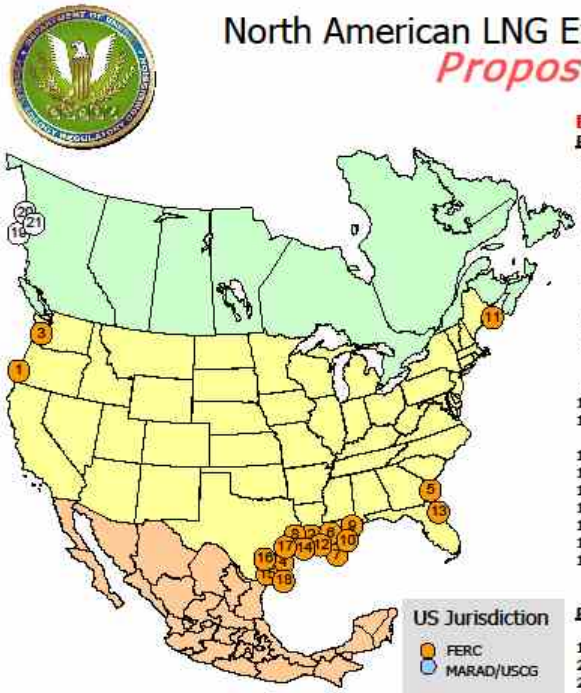
APPROVED - UNDER CONSTRUCTION
U.S. - FERC
5. **Sabine, LA:** 2.76 Bcfd (Cheniere/Sabine Pass LNG) (CP11-72 & CP14-12)
6. **Hackberry, LA:** 1.7 Bcfd (Sempra – Cameron LNG) (CP13-25)
7. **Freeport, TX:** 1.8 Bcfd (Freeport LNG Dev/Freeport LNG Expansion/FLNG Liquefaction) (CP12-509)
8. **Cove Point, MD:** 0.82 Bcfd (Dominion – Cove Point LNG) (CP13-113)
9. **Corpus Christi, TX:** 2.14 Bcfd (Cheniere - Corpus Christi LNG) (CP12-507)

APPROVED – NOT UNDER CONSTRUCTION
U.S. - FERC
10. **Sabine Pass, LA:** 1.40 Bcfd (Sabine Pass Liquefaction) (CP13-552)

US Jurisdiction
- FERC
- MARAD/USCG

As of April 14, 2015

Office of Energy Projects



North American LNG Export Terminals
Proposed

Export Terminal
PROPOSED TO FERC
1. **Coos Bay, OR:** 0.9 Bcfd (Jordan Cove Energy Project) (CP13-483)
2. **Lake Charles, LA:** 2.2 Bcfd (Southern Union - Trunkline LNG) (CP14-120)
3. **Astoria, OR:** 1.25 Bcfd (Oregon LNG) (CP09-6)
4. **Lavaca Bay, TX:** 1.38 Bcfd (Excelerate Liquefaction) (CP14-71 & 72)
5. **Elba Island, GA:** 0.35 Bcfd (Southern LNG Company) (CP14-103)
6. **Lake Charles, LA:** 1.07 Bcfd (Magnolia LNG) (CP14-347)
7. **Plaquemines Parish, LA:** 1.07 Bcfd (CE FLNG) (PF13-11)
8. **Sabine Pass, TX:** 2.1 Bcfd (ExxonMobil – Golden Pass) (CP14-517)
9. **Pascagoula, MS:** 1.5 Bcfd (Gulf LNG Liquefaction) (PF13-4)
10. **Plaquemines Parish, LA:** 0.30 Bcfd (Louisiana LNG) (PF14-17)
11. **Robbinston, ME:** 0.45 Bcfd (Kestrel Energy - Downeast LNG) (PF14-19)
12. **Cameron Parish, LA:** 1.34 Bcfd (Venture Global) (PF15-2)
13. **Jacksonville, FL:** 0.075 Bcfd (Eagle LNG Partners) (PF15-7)
14. **Hackberry, LA:** 1.4 Bcfd (Sempra – Cameron LNG) (PF15-13)
15. **Brownsville, TX:** 0.54 Bcfd (Texas LNG Brownsville) (PF15-14)
16. **Brownsville, TX:** 0.94 Bcfd (Annova LNG Brownsville) (PF15-15)
17. **Port Arthur, TX:** 1.4 Bcfd (Port Arthur LNG) (PF15-18)
18. **Brownsville, TX:** 3.6 Bcfd (Rio Grande LNG – NextDecade) (PF15-20)

PROPOSED CANADIAN SITES IDENTIFIED BY PROJECT SPONSORS
19. **Kitimat, BC:** 1.28 Bcfd (Apache Canada Ltd.)
20. **Douglas Island, BC:** 0.23 Bcfd (BC LNG Export Cooperative)
21. **Kitimat, BC:** 3.23 Bcfd (LNG Canada)

US Jurisdiction
- FERC
- MARAD/USCG

As of April 14, 2015

Office of Energy Projects

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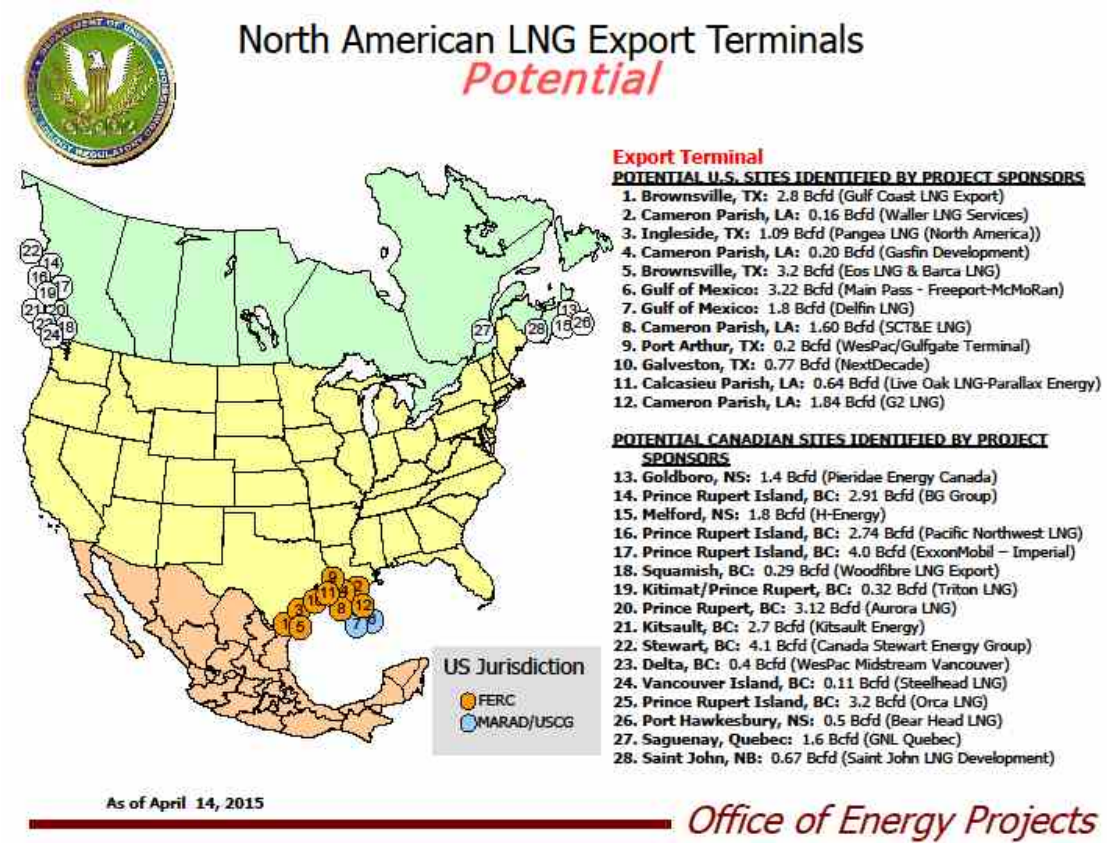

Furthermore, there are questions about how to make sufficient pipeline capacity available to transport natural gas to consumers if the greater part of the nation's future energy needs will be supplied by natural gas indefinitely. A number of new pipelines are under construction or have been proposed such as the new Atlantic Coast Pipeline being constructed from West Virginia to North Carolina. Capacity in these pipelines will be significantly more expensive than existing pipeline 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. Over the long-term, prices will change unpredictably.

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I have testified to that fact before this Commission in past proceedings. It continues to be my firm belief.

Q. WHERE DOES THE COMPANY'S FINANCIAL PLAN REGARDING THE UNITS PLAN STAND~~S~~ TODAY?

A. As of March 2015, SCE&G had successfully raised the capital necessary to support $3.1 billion of the $6.8 billion cost of the Units in future dollars (which is comparable to $5.2 billion in 2007 dollars). This represents approximately 46% of the value of the Units when completed. SCE&G has supported this investment through issuance of debt in the form of first mortgage bonds of SCE&G and equity from SCE&G's retained earnings, and sales of common stock by SCANA and retained earnings of SCANA, the proceeds of which have been contributed to SCE&G. Where possible, SCE&G has locked in favorable interest rates for future borrowings. As of March 2015, interest rates on approximately $1.3 billion in anticipated 2015-2016 borrowings have been locked in at an estimated effective rate of 5.09%.

Q. HOW HAS THE FINANCIAL COMMUNITY RESPONDED TO SCE&G'S BORROWING TO SUPPORT THE UNITS?

A. As evidenced by SCE&G's recent debt offerings, the financial community has been supportive of SCE&G's plan to finance the construction of these Units. The financial community is comfortable with the careful and consistent approach to applying the BLRA that has been

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followed by the ORS and Commission since its adoption. Since 2009, SCE&G has issued approximately $1.5 billion in first mortgage bonds through eight separate issues that are directly related to the nuclear project. The weighted average interest rate of these bonds is only 4.99%.

Q. COULD YOU PROVIDE EXAMPLES OF SUCCESSFUL MARKETING OF BONDS IN RECENT YEARS?

A. SCE&G's $250 million bond issue in February 2011 was oversubscribed by a factor of eight and was ultimately priced at the lowest end of the indicated interest rate range. SCE&G's $250 million bond issue in January 2012 was oversubscribed by a factor of six and, when issued, bore "one of the lowest 30-year coupons of all time," as reported at the time by Credit Suisse. Nevertheless, the next issue, which was SCE&G's $250 million issue in July 2012, bore a yield which "represent[ed] the lowest 30-year utility yield on record," as reported at that time by Well Fargo. SCE&G's $300 million May 2014 bond issue represented the first 50-year bond issued in the utility and power sector and only the sixth such bond ever issued in the United States. It was oversubscribed by a factor of 13 and was issued at a rate estimated to be only 35 basis points higher than a 30-year bond would have borne.

Q. HOW DID THE MARKET RESPOND TO SCE&G'S MOST RECENT BOND ISSUE?

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A. In May of this year, SCE&G issued $500 million in 50-year first mortgage bonds. The interest rate was favorable at 5.1%. However, on the day of the issuance the subscriptions for this issue were slow in coming. At one point, it appeared that the entire $500 million might not be sold. In the closing hours of the offering, it required a slight nudge upward in the interest rate to bring the book of potential buyers from $400 million to the expected $500 million. While the interest rate on the bonds was still very good, it was the first time in recent years that the issuance was not oversubscribed. In most other cases, the bonds were quickly oversubscribed.

Q. DO YOU KNOW WHY THESE BONDS WERE MORE DIFFICULT TO SELL?

A. We polled several investment banking firms involved in the transaction. They reported that an important factor for many potential buyers was their concern over regulatory risk related to the current filing. Bond buyers have options. If bond buyers have concerns about SCE&G's risk profile, it is often just as easy for them to buy bonds of companies that do not face such risks as to buy SCE&G's bonds.

Q. WHAT IS YOUR CONCLUSION FROM THESE FACTS?

A. The market is becoming increasingly sensitive to SCE&G's regulatory risk in the nuclear context. The 'overhang' of the current proceeding has brought that risk into focus for the market. We were able to

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complete the transaction successfully and at a good interest rate, but what we learned is that the risk of losing market support for our financing plan is real. That could happen if the market loses confidence in the consistent application of the BLRA.

Q. WHAT IS THE FINANCIAL PLAN FOR COMPLETING THE UNITS GOING FORWARD?

A. In mid-2015, we are entering a critical time in the execution of our financial plan. We anticipate spending approximately $940 million on the Units in 2015, approximately $1 billion in 2016, and approximately $900 million in 2017. After that time, annual capital expenditures are anticipated to drop quickly. During this three year period, SCE&G will not have the option of waiting out unfavorable conditions in the capital markets or postponing issues during periods where it has achieved unfavorable financial or regulatory results as a company. During this time, it will be vitally important that SCE&G maintain access to capital markets on favorable terms. If SCE&G can maintain access on such terms, the Company may be able to continue to reduce debt costs and the costs to customers from financing the Units as compared to the 2008 projections. However, if access to capital markets on favorable terms is lost, the reverse is true. Financing costs will go up, and in some circumstances, it could prove impossible to finance the completion of the Units.

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Q. WHAT ROLE DOES THIS PROCEEDING PLAY IN SCE&G EXECUTING ITS FINANCIAL PLAN?

A. Nothing is more important to SCE&G's financial plan than that we sustain the market's understanding that ORS and the Commission will continue to apply the BLRA in a fair and consistent way. The financial markets understand that the Commission and ORS may come under pressure to deviate from the terms of BLRA as challenges appear in the construction project. The decision here will provide the financial markets with an important signal concerning how the markets should expect that the BLRA will be applied over the remaining five years of the project. That will greatly impact how the financial community assesses the financial and regulatory risks of the project and the rates and terms on which SCE&G will be able to finance the approximately $3.4 billion of debt and equity that remains to be raised.

Q. PLEASE EXPLAIN WHY YOU BELIEVE THAT THE BLRA IS SO IMPORTANT TO THE FINANCING PLAN FOR THE UNITS.

A. The BLRA was adopted to make it possible for electric utilities like SCE&G to consider building new nuclear units. Before the BLRA was adopted, building a new nuclear plant was not a viable option for SCE&G. For SCE&G to seriously consider adding new nuclear capacity, legislative action was needed to overcome two major challenges. These are the two challenges which the BLRA sought to address:

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The Financing Challenge. Recovering the financing costs of a project during construction was the first challenge. During construction of a base load plant, a company must raise hundreds of millions of dollars of new capital each year to finance construction costs. Each time bonds are issued to pay for construction, debt service increases. Unless there is a corresponding increase in revenues, debt service coverage ratios decline as do other financial ratios. Bond ratings are based on these ratios. As these ratios decline, the creditworthiness of the company suffers. In time, bond ratings are downgraded. At that point, raising capital on favorable terms can be extremely difficult or potentially impossible. Capital to complete the plant may not be available.

On the equity side, each time additional common stock is issued to support construction, there are more shares outstanding. Additional dividends must be paid. Without new revenues, earnings are diluted. As earnings are diluted, the attractiveness of the stock and its value decline. To finance the next round of construction, a higher number of lower-priced shares must be issued to generate the same amount of capital. This causes yet more dilution and further weakens the value of the stock going into the next financing cycle.

The only solution is for the company to generate revenues sufficient to pay debt service, meet coverage ratios and provide reasonable levels of earnings per share as the new plant is built. Some years ago the

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Commission recognized this fact and began to authorize utilities to include the financing costs of plants in rates before they were completed. This was done in general rate cases by recognizing the financing costs associated with construction work in progress ("CWIP") as an expense for ratemaking purposes. The Commission has historically allowed a company to apply its weighted average cost of capital to its CWIP to determine the amount of revenue needed to support the common stock and bonds issued to finance construction. The weighted average cost of capital is the amount of revenue that the Commission has determined to be necessary to support investment of capital in the utility, specifically, to pay debt service on bonds and allow a reasonable level of earning to support common stock.

But this CWIP based approach required the utility to file general rate cases during plant construction. This produced rate adjustments that were stair stepped in one or two-year intervals. SCE&G successfully used this approach when building its last coal plant, Cope Station (1995), and its most recent combined cycle natural gas plant, Jasper Station (2004). During construction, there were a total of six separate rate adjustments which placed some part of the financial costs of the capital spent on those plants into rates.

Cope and Jasper, however, took three to five years to build, not twelve as is the case for nuclear. Outlays for those plants were in the hundreds of millions of dollars, not billions. If this approach were to be

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used to support a nuclear construction project, it would require SCE&G to litigate full electric rate cases every year or two for approximately 12 years. Neither SCE&G nor its investors considered this to be practical.

Disallowances. The second challenge utilities like SCE&G faced in base load construction was the threat of construction cost disallowances. Investors are sensitive to very small changes in returns. Even 'minor' construction cost disallowances can hit investor returns with crippling force. For example, it takes only a five percent disallowance of principal in a given year—$50 million on a $1 billion investment—to cut a ten percent return in half. Even a small disallowance today indicates the potential for future disallowances as construction progresses. Therefore, even small disallowances can drive investors away and make it impossible for a utility to complete a construction project due to lack of financing.

These financial realities are facts that opponents of nuclear power used to great effect in the last nuclear construction cycle. They underscore why SCE&G believes that even a small departure from the terms of the BLRA could cause the investment community to fundamentally change its assessment of SCE&G's future regulatory risk.

The BLRA. In response, the South Carolina General Assembly adopted the BLRA. It allows for annual rate adjustments through revised rates filings to cover the financing costs of approved nuclear construction projects pending their completion. Financing costs are based on the same

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weighted average cost of capital that applies under the CWIP method. As with the CWIP method, before a plant goes into service, only financing costs may be recovered under the BLRA, not the cost of the plant itself. The BLRA carries forward the key concepts of the CWIP method but does so without requiring full rate cases each year which would not be practical.

As to disallowances, the BLRA provides an opportunity for the Commission to review the prudency of constructing the plant in detail before construction begins. Once the prudency decision is made, disallowances are permitted if (a) the construction does not proceed within the originally approved cost and construction schedules and (b) schedule amendments such as the updates that are requested here are not made. As to the second point, the BLRA states that the Commission will grant requests for amendment as long as "the evidence of record justifies a finding that the changes are not the result of imprudence on the part of the utility." S.C. Code Ann. § 58-33-270(E)(1).

Under the BLRA, prudency reviews are made based on plans and forecasts before construction begins. The Commission determines whether or not it is prudent to proceed with the project under the construction plan and with the contractors and EPC contract proposed by the Company. The initial plans and forecasts can then be updated so long as the updates are not the result of imprudence by the utility. This assures the financial community that disallowances based on after-the-fact prudency challenges

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will not impair their ability to recover the capital they invest in the project unless there is imprudence by the utility in administering the project.

Q. WHAT DO YOU BELIEVE TO BE THE POLICY BEHIND LIMITING THE PRUDENCY REVIEW IN UPDATE DOCKETS TO THE PRUDENCY OF THE OWNER IN MANAGING THE PROJECT?

A. In considering disallowances, the BLRA properly focuses on the utility as owner of the project and those cases where the utility has caused additional cost to be incurred through imprudence in its role as owner. More specifically, in this project, the Commission properly looks to SCE&G as owner for prudence in

- construction oversight;
- obtaining licenses and permits for the Units including NRC licenses, and complying with those licenses and permits;
- administering the EPC Contract and enforcing its terms;
- resolving disputes with the EPC contractors;
- constructing transmission facilities to support the Units;
- recruiting, hiring and training of operating staff for the Units;
- deploying information technology ("IT") systems to support the Units;

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- drafting and obtaining approval of the operating, maintenance and safety plans for the Units; and
- performing all the tasks that fall under the heading of operational readiness for the Units.

The BLRA provisions as to cost and construction schedule updates properly focus on those aspects of the project that the Company can control, specifically its own prudence as owner in administering the EPC contract, overseeing the contractor's work and performing the work that is the owner's direct responsibility. Other risks related to construction are reviewed in the initial BLRA proceeding when the EPC contract, EPC contractor, and other aspects of the project are being approved. The decision to approve a project under the BLRA is a decision that it is reasonable and prudent to assume the risks of proceeding given the terms of the EPC contract, the review of the EPC contractor, and the other matters considered.

Q. IS THIS POSITION CONSISTENT WITH THE COMMISSION'S PRIOR RULINGS UNDER THE BLRA?

A. In the 2008 proceedings, the Commission and the parties reviewed the risk factors associated with this project and concluded that the project should proceed under the terms of the BLRA in spite of those risks. Based on its review of that information, the Commission ruled as follows:

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> The Commission's approval of the reasonableness and prudency of the Company's decision to proceed with construction of the Units rests on a thorough record and detailed investigation of the information known to the Company and the parties at this time. Once an order is issued, the Base Load Review Act provides that the Company may adjust the approved construction schedule and schedules of capital cost if circumstances require, so long as the adjustments are not necessitated by the imprudence of the Company. S.C. Code Ann. § 58-27-270(E). The statute does not allow the Commission to shift risks back to the Company. ... In addition, risk shifting could jeopardize investors' willingness to provide capital for the project on reasonable terms which, in turn, could result in higher costs to customers.

Order No. 2009-104(A), p. 92. On appeal, the South Carolina Supreme Court described that order as "a very thorough and reasoned order." *Friends of Earth v. Pub. Serv. Comm'n of S. Carolina*, 387 S.C. 360, 372, 692 S.E.2d 910, 916 (2010). The court stated that "the Commission addressed each and every concern Appellant presented . . . ." *Id.*

Q. WHAT INFORMATION ABOUT RISKS DID SCE&G PLACE BEFORE THE COMMISSION IN 2008?

A. When SCE&G filed for BLRA approval in 2008, it placed before the Commission an extensive assessment of the risks and uncertainties of this project. SCE&G also placed before the Commission its choice of EPC contractors, its plan for construction of the Units, and the terms of the EPC Contract under which subcontractors would be selected and the Units would be constructed. SCE&G explained:

> SCE&G has reviewed the risks related to constructing the Units carefully and over an extended period of time. It has compared those risks to the risks of the other alternatives that are available to meet

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> the energy needs of its customers and the State of South Carolina. . . . SCE&G has concluded that constructing the Units is the most prudent and responsible course it can take at this time to meet the base-load generation needs of its Customers. . . .
>
> …In the end, this project's ability to meet its current schedule and cost projections will depend on the cumulative effect of those risk events that do occur on the schedule and cost projections contained in this Application.

Petition, Docket No. 2008-196-E, Exhibit J, p. 12.

SCE&G's 2008 BLRA application acknowledged that, "[f]or a project of the scope and complexity of the licensing and constructing of the Units, any list of potential risk factors compiled at this stage of the process will not be exhaustive." Petition, Docket No. 2008-196-E, Exhibit J, p. 12. With that caveat, SCE&G listed the specific risks that seemed most important at the time. Among the risks specifically enumerated at that time were many, if not all, of the risks that have resulted in the current update filing:

- Module production: "It is possible that manufacturers of unique components (e.g., steam generators and pump assemblies or other large components or modules used in the Units) and manufacturers of other sensitive components may encounter problems with their manufacturing processes or in meeting quality control standards. . . . Any difficulties that these foundries or other facilities encounter in meeting fabrication schedules or

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quality standards may cause schedule or price issues for the Units."

- Construction Efficiencies: "The project schedule and costs are based on efficiencies and economies anticipated from the use of [standardized designed and advanced modular construction processes]. . . . However, standardized design and advanced modular construction has not been used to build a nuclear facility in the United States to date. The construction process and schedule is subject to the risk that the benefits from standardized design and advanced modular construction may not prove as great as anticipated."
- Rework: "[N]o AP1000 units have yet been built. Accordingly, problems may arise during construction that are not anticipated at this time. These problems may require repairs and rework to be corrected. Repairs and rework pose schedule and cost risks resulting both from the repairs and the rework itself, and from the time and expense required to diagnose the cause of the problem, and to plan, review and approve the work plan before implementation."
- Scope Changes: "[S]cope increases can result from changes in regulation, design changes, changes in the design and characteristics of components of equipment, and other similar

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factors. . . . Scope changes represent an important category of risk to which the project is susceptible."

- Design Finalization: "[T]here is engineering work related to the Units that will not be completed until after the COL [Combined Operating License] is issued. Any engineering or design changes that arise out of that work . . . could impact cost schedules or construction schedules for the Units."

See Combined Application, Docket No. 2008-196-E, Exhibit J, p. 6-12.

In light of these risks, SCE&G expressly acknowledged in 2008 that cost and schedule updates might be required. The Commission agreed that under the BLRA these updates would be allowed so long as they were not due to the imprudence of the utility.

Q. WHAT DO THE OUTSTANDING COMMISSION ORDERS SAY ABOUT THE EPC CONTRACT?

A. In Order No. 2009-104(A), the Commission ruled that "[a] key component of the prudency review envisioned by the Base Load Review Act is a review of the reasonableness and prudence of the contract under which the new units will be built." Order No. 2009-104(A) at p. 70. The Commission pointed out that in the 2008 proceedings "[a] number of intervenors have raised questions concerning the degree of price certainty provided by the EPC Contract." *Id.* at p. 73. However, the Commission noted that this issue has been addressed in the testimony of the Company's

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witnesses who "testified that in the EPC Contract the Company sought to obtain the greatest degree of price assurance possible, with due consideration to the cost that [WEC/CB&I] would charge for accepting additional price risk." *Id.* The Commission concluded that "the EPC Contract contains reasonable and prudent pricing provisions, as well as reasonable assurances of price certainty for a project of this scope." *Id.* at 74.

Mr. Byrne and I were involved in the negotiation of the EPC contract, which took over two years after WEC/CB&I was selected as the preferred vendor. During those negotiations, we gave serious consideration to obtaining fixed or firm pricing for Craft Labor, Non-Labor Costs and some or all of the potential scopes of work falling in the Time & Materials ("T&M") categories. The EAC cost adjustments presented for review in this proceeding, apart from change orders, are all found in these categories.

As indicated in Order No.2009-104(A), we determined that the price SCE&G and SCE&G customers would have paid for price certainty for these items was prohibitive. In 2008, we did negotiate fixed or firm pricing for more than 50% of the EPC Contract. Since that time, we have extended price assurance to approximately two-thirds of the contact through subsequent negotiations with WEC/CB&I. Our conclusion in 2008 was that the premium to fix the prices for the remaining EPC cost categories was too

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high. The Commission expressly approved that decision as reasonable and prudent in Order No. 2009-104(A).

In spite of the increased costs we are considering today, the decision to forego price certainty in 2008 was the correct decision. I have participated in the EPC Contract negotiations and can affirm that the cost increases we are facing today do not exceed the cost that would have been paid for additional fixed price assurances under the EPC Contract.

Q. SHOULD THE COMPANY POSTPONE UPDATES TO THE SCHEDULES UNTIL ISSUES RELATED TO SCHEDULE AND COST DISPUTES WITH THE CONTRACTORS ARE RESOLVED?

A. No. It would not be prudent for the Company to defer updating its cost and construction schedules until a later time:

1. We do not know when a more appropriate time would be. While we would hope that our disputes with the contractors can be resolved by negotiations, there is no timetable for those negotiations. If litigation is required, the court proceedings in a matter this complex could last five years or more. The final resolution might come well after the project was completed.

2. The most important years for financing the Units will be 2015-2017. Delaying a decision on these costs will inject significant uncertainty in the financing plan at the exact wrong time.

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3. If SCE&G foregoes adjusting its cost and construction schedules, it foregoes including these costs in revised rates filings. Without revised rates, SCE&G loses revenue that is required to support the debt the Company plans to issue in the coming years and to support common stock. Our financial plan for completing these Units is based on regular, annual revised rates filings. Without the revenue from revised rates, our debt service ratios, and other financial ratios begin to erode immediately resulting in a financial plan that rapidly becomes unworkable.

4. The financial community expects us to update our schedules and proceed with revised rates as we have every year since 2009. If we are not able to proceed consistently with past practice and current expectations, the financial community will swiftly reassess its support for this project and the confidence it has in the Company's financial plan. This is the most important point of all. The consequences of the Company not proceeding with updates and revised rates filings as the BLRA envisions could result in an immediate withdrawal of financial support for this project.

5. Not to proceed with this filing would also be contrary to our long-standing commitment to this Commission and the public to come forward publically for approval of changes in our cost and construction schedules as we identify them.

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Without approval of the cost and construction schedules proposed here, the Company's ability to finance the completion of the Units on reasonable financial terms may be placed in great jeopardy.

Q. IF THESE DISPUTES ARE UNRESOLVED, HOW CAN COST AND CONSTRUCTION SCHEDULE UPDATES BE APPROVED?

A. The cost and construction schedules presented for approval here are no different from those approved in 2008 and in each update docket thereafter. In each case, the Company came before the Commission with the best information available concerning the anticipated construction schedule for completing the Units and the anticipated costs associated with that schedule. In every case, both the cost and the construction schedules presented and approved have been anticipated schedules for completing the Units. As anticipated schedules they are subject to risks, uncertainties, potential changes and possible revisions. That is true of the cost schedule here just as it has been true of all cost schedules the Commission has approved to date.

The current schedules reflect the best information available about the anticipated costs and construction timetables for completing the project. The anticipated capital costs presented here are not speculative. As Mr. Byrne testifies, they are based on a careful review of construction plans and the costs of the tasks required to complete them. No speculative or un-itemized costs are included in this cost schedule. There is no question that

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these costs on this schedule will be paid. They only question is whether SCE&G can recover some of these costs from WEC/CB&I. It is appropriate that this cost schedule be approved under the BLRA as the updated schedule for the project.

Q. SHOULD WE WAIT FOR CHANGE ORDERS?

A. No. A change order is not needed to properly consider these updates. The Construction Labor, and Non-Labor Costs, which constitute the Target Cost categories under the EPC Contract, are not fixed or firm. T&M costs are also not fixed or firm. Change orders to the EPC Contract are not required for WEC/CB&I to bill SCE&G for amounts above the target or estimated levels.

Q. HOW WILL REGULATORS ENSURE THAT IMPROPER CHARGES ARE NOT INCLUDED IN REVISED RATES?

A. As is always the case under the BLRA, revised rates are based on actual payments only, not projections. They never reflect costs that have not been paid. In all cases when SCE&G files for revised rates, the Company presents ORS with the actual invoices and other cost data establishing the project costs that have been paid to date and information justifying those costs. ORS has full audit authority over this data. ORS carefully audits all amounts SCE&G seeks to include in revised rates recovery.

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SCE&G has no interest in including any improper amounts in revised rates recovery. If anything improper is found in these amounts through ORS's audits or otherwise, we will thank the party that points that out and remove those amounts from revised rates filings immediately. If those amounts were improperly invoiced to us by WEC/CB&I, we will take appropriate action with WEC/CB&I to have their invoices corrected and proper credits applied.

Q. HAS SCE&G APPROVED THESE UPDATED SCHEDULES?

A. SCE&G has "approved" the updated schedules in the sense that it recognizes them to be the most accurate and dependable statements available of the anticipated construction schedule for completing the Units and the anticipated schedule of capital costs for completing the Units. As a practical matter, these schedules are in fact the schedules under which work on the project is proceeding. Insofar as they reflect data from WEC/CB&I, that data has been endorsed by WEC/CB&I as contractor under the EPC Contract. SCE&G has carefully reviewed the data provided by WEC/CB&I and verified its reasonableness. SCE&G has also provided certain data of its own that is included in the cost schedule, specifically data as to Owner's cost and payments it intends to withhold from WEC/CB&I. SCE&G stands behind its data completely.

For these reasons, SCE&G has determined that the anticipated cost schedule presented by Ms. Walker (Exhibit No. ___ (CLW-1)) and the

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anticipated construction schedule presented by Mr. Byrne (Exhibit No. __ (SAB-2)) are reasonable and prudent basis on which the Commission may update the approved BLRA schedules for this project. The schedules presented here in every way meet the definition of the anticipated construction schedule and the anticipated capital cost schedule for the project. They are appropriate schedules for the Company to bring forward to the Commission for review and approval under BLRA. In that regard SCE&G has approved these schedules for filing as updated project schedules ~~as the~~ for BLRA purposes.

However, for purposes of the EPC Contract, we are concerned that WEC/CB&I may seek to take the term "approved" as applied to these schedules to mean that SCE&G has approved substituting these schedules for the schedules previously approved in the EPC Contract, thereby excusing WEC/CB&I from contractual obligations, penalties, claims and possible damages from failing to meet those schedules. SCE&G has not approved those schedules in that sense whatsoever. In its role as Owner of the project, SCE&G intends to maintain all claims and exert all possible leverage over WEC/CB&I related to its obligations under the EPC Contract.

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

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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 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 seven years into a twelve year construction project. As Mr. Byrne testifies, the project team has overcome many of the one-of-a-kind challenges presented by this project. The financial information I have provided shows that the impact of lower inflation, lower debt costs and increased production tax credits will offset the impact of capital cost increases. Because of these off-sets, the costs of the project to customers is no greater today that it was in 2008 when SCE&G first came to the Commission for its approval.

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

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lowest cost alternative for meeting the pressing need of SCE&G's customers for base load generating capacity. The financial benefits of completing the Units are clear even when the risk of future natural gas volatility is ignored.

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. 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. That could increase the costs of the project to customers dramatically and could well result in the financial community denying SCE&G access to capital on reasonable terms. That 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 WEC/CB&I and its senior leadership team. We are dealing with the issues with WEC/CB&I aggressively and at the highest levels. The challenges we are facing are consistent with the risk we identified in our filings in 2008.

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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, 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 thirty-eight years' 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, Mr. Jones, and Ms. Walker. SCE&G requests that the Commission find that the changes in cost and construction schedules are the result of risks that have long been identified as pertaining to a project of this size and complexity. Moreover, SCE&G requests the Commission to 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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1 **MR. BURGESS**: Madam Chairman, Mr. Marsh is
2 available for cross-examination by Mr. Guild and
3 questions from Commissioners, if any.
4 **CHAIRMAN HALL**: All right. We'll take a short
5 break before we begin. Five minutes.
6 [WHEREUPON, a recess was taken from 11:35
7 to 11:50 a.m.]
8 **CHAIRMAN HALL**: Thank you. Be seated.
9 Mr. Guild, if you will go over to that mic,
10 and never leave that mic, please.
11 [Laughter]
12 **CROSS EXAMINATION**
13 **BY MR. GUILD**:
14 **Q** Good morning, Mr. Marsh.
15 **A** Good morning.
16 **Q** I'd like to confirm some numbers for you as we try to
17 examine the Application you have before us. The company
18 has just recently filed for a Base Load Review Act
19 annual increase based on the capital costs of the
20 proposed plants; is that right?
21 **A** It's based on the revised schedule we received from the
22 consortium, that's correct.
23 **Q** Okay. And I have an Exhibit G to that Application
24 that's identified as a red-lined amended Exhibit G —
25 corrects a couple of errors, I think. I just wanted

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you, if I could get you to confirm, subject to check, the figures that appear on that sheet that I've been relying on. First, there's a line that's entitled "Incremental Revenue Requirements-BLRA," and are those the incremental requirements that are associated with financing the Units 2 and 3?

MR. BURGESS: Madam Chairman, would Mr. Guild be so kind as to show Mr. Marsh what he's reading from?

MR. GUILD: I just have one copy, but if perhaps counsel has available the document, they could share with him. I'd be happy to show it to him; it just has my handwriting on it, my scratching.

CHAIRMAN HALL: Can you tell us what document you're referring to?

MR. GUILD: Yes. It's Exhibit G to the pending rate increase request by SCE&G. It's their pending request.

BY MR. GUILD:

Q You filed one in June, did you not, Mr. Marsh?

A I believe that's correct. I'll get a copy of it from the attorneys.

Q Perhaps I could just ask —

MR. BURGESS: You don't have a copy, Mr.

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1 Guild, to show him?
2 **MR. GUILD**: I have just one copy.
3 **MR. BURGESS**: Okay.
4 **VOICE**: It's your document.
5 **MR. BURGESS**: I think you have to show your
6 copy to the witness.
7 **CHAIRMAN HALL**: Okay. Mr. Guild, we're going
8 to get a copy of that, so that he can review it, as
9 well. You don't have a clean copy, Mr. Guild?
10 **MR. GUILD**: No, ma'am, I do not. I assumed
11 the company would know about their own exhibits.
12 **CHAIRMAN HALL**: Mr. Zeigler, have you found a
13 copy?
14 **MR. ZEIGLER**: [Indicating.]
15 **WITNESS**: [Indicating.] I've got a copy of
16 the exhibit. We are ready.
17 **CHAIRMAN HALL**: Thank you.
18 **BY MR. GUILD:**
19 **Q** Mr. Marsh, you have that before you?
20 **A** Yes, I do.
21 **Q** And make sure you have the amended red-lined version.
22 Do you have that one, sir?
23 **A** Mine says, "Amended Exhibit G."
24 **Q** That's right. "Red-Lined version" under that?
25 **A** I don't see "red-lined version."

MR. BURGESS: I think his version is a clean version that he has there.

MR. GUILD: Well, let's just see —

MR. BURGESS: There is a clean version and a red-line version. I think Mr. Guild is reading from the red-line version. We have a copy of the clean version. If you would prefer that he read from a red-line version, we'll try to find a red-line version.

MR. GUILD: It's just the copy I have, Mr. Burgess.

BY MR. GUILD:

Q But let me just see if I can get you to confirm the numbers. If they're different, just tell me, please.

A That's fine.

Q But, again, there's a horizontal line that reads "Incremental Revenue Requirements-BLRA." You see that? Left-hand column?

A Yes, I do.

Q All right. And it has a series of entries by year, running across from left to right, on the page, correct?

A That is correct.

Q Does that indeed represent the annual increase associated with financing Units 2 and 3 under the BLRA?

A It would represent through 2014 the revenue requirement

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that I believe we've already applied under the Base Load Review Act, and from '15 forward I believe those numbers would represent the estimated amounts of revenue increase that will be required, based on the information we provided in this docket to the Commission.

Q Indeed, that's what I'm driving at, all right? So, just subject to check — and if you have the document, confirm these numbers appear — for 2015, and that's the pending application, you show an incremental BLRA revenue requirement of $70 million, correct?

A That is correct.

Q All right. And 2016, $135 million?

A That's correct.

Q 2017, $111 million?

A That's —

MR. BURGESS: Madam —

WITNESS: — correct.

MR. BURGESS: — Chair, if I may. I'm not really sure where Mr. Guild is going with this. He's referring to an Application in another docket that's not germane to this proceeding. We would object to this line of questioning on the ground it's irrelevant.

MR. GUILD: Madam Chair, it seems to me that the —

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VOICE: If he can –

MR. GUILD: – BLRA revenue –

VOICE: – stand up, I can stand up.

CHAIRMAN HALL: I'm sorry.

VOICE: I want to –

CHAIRMAN HALL: No, ma'am, you cannot stand up. You will sit down and behave with some decorum. The only parties – only parties will address the Commission.

Go ahead, Mr. Guild.

MR. GUILD: Madam Chair, the revenue requirements anticipated to complete the plant couldn't be any more relevant. This is a document from the company. It represents an admission by the company. I can't imagine that the Commission wouldn't be interested in hearing what the expected total revenue – incremental revenue requirements are going to be, associated with these cost overruns and project delays. That's precisely what I'm driving at.

CHAIRMAN HALL: All right. Mr. Burgess's objection is sustained, Mr. Guild, so move on, please.

BY MR. GUILD:

Q Would you accept, subject to check, that the total

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1 incremental revenue requirements through the in-service
2 dates of 2020 amount to $677 million under the Base Load
3 Review Act, as you project them?
4 **A** Not just as a number added up, because those numbers
5 represent potential future increases. Those are derived
6 based on the estimates we have in the calculation we
7 provided the Commission in this case on the revised and
8 updated schedule. As we have provided in our testimony,
9 a significant portion of those dollars are still under
10 dispute and we continue to pursue that dispute with the
11 consortium. So these are estimates for BLRA purposes;
12 they would not represent the actual dollars that would
13 be filed. The only thing that could be filed with the
14 Commission are actual dollars that are spent when they
15 are actually spent. These are future dollars and, so,
16 until they're actually expended by the company, they
17 would not be included in a rate proceeding.
18 **Q** Would you accept, subject to check, that my math is
19 correct, $677 million, and, with that explanation, is
20 the total future revenue requirement, 2015 through 2020?
21 **A** Yes.
22 **MR. GUILD**: Madam Chair, I ask that this be
23 marked as an exhibit and travel with the record as
24 an offer of proof, please.
25 **CHAIRMAN HALL**: It will be Hearing Exhibit

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No. 3.

[WHEREUPON, Hearing Exhibit No. 3 was marked for identification.]

MR. BURGESS: Madam Chairman, may I see that?

CHAIRMAN HALL: Go ahead, Mr. Burgess.

MR. BURGESS: [Indicating.] Madam Chairman, I would object to the handwriting on this document. I'm not sure whose handwriting that is. It's certainly no witness of ours. So, if Mr. Guild wants to include this in the record, he certainly has that right to do so, but I would object to the writing that's on here.

CHAIRMAN HALL: Mr. Guild, do you have a clean copy?

MR. GUILD: I don't. It's my copy. I submit it's my handwriting. You sustained an objection to my questioning. I submit that I should be able to ask those questions. I'd like the company's own document, from which I was questioning, marked as an offer of proof to travel with the record. I believe, under the Rules of Evidence, I'm entitled to have it marked as an offer of proof, whether it has my handwriting or not, whether Mr. Burgess likes my handwriting or not. I simply ask that the record contain a document from which you did not

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1 allow me to examine the witness. Thank you.
2 **CHAIRMAN HALL**: Well, certain things, Mr.
3 Guild. Number one, we prefer a clean copy. I
4 mean, I don't know if you want your work product
5 involved or included in the record –
6 **MR. GUILD**: I have no problem with that, Madam
7 Chair. You can have my handwriting. I just want
8 to have the record clear that the Commission would
9 not allow this line of questioning, and that is an
10 offer of proof to support any evidentiary
11 objections that I might want to preserve for
12 appeal. So, I'd ask that it be marked in the form
13 in which –
14 **CHAIRMAN HALL**: In which –
15 **MR. GUILD**: – I was using it.
16 **CHAIRMAN HALL**: – case, a clean copy would
17 suffice.
18 **MR. GUILD**: Ma'am?
19 **CHAIRMAN HALL**: I mean, a clean copy would
20 suffice, would you agree?
21 **MR. GUILD**: I can't under- – I can't hear you.
22 **CHAIRMAN HALL**: A clean copy. Would you not
23 agree a clean copy would suffice?
24 **MR. GUILD**: Would suffice?
25 **CHAIRMAN HALL**: As an offer of proof?

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MR. GUILD: If I wanted to make it an offer of proof. But I want that document made an offer of proof, Madam Chair. It's the document that I was questioning from, so I would like to have that one marked as an offer of proof. If the Chair would like to include a clean copy, as well, I certainly have no objection to that. My only point is I'm trying to examine the witness from the company's own document. You wouldn't let me do it. I'd like it made an offer of proof.

CHAIRMAN HALL: We've already sustained that objection.

MR. GUILD: What objection is that, Madam Chair?

CHAIRMAN HALL: About not going down that line of questioning. So I'm — we'll include the clean copy. We'll include a clean copy that you provide.

MR. GUILD: Madam Chair, I'd like the copy with my notes on it included as an offer of proof.

CHAIRMAN HALL: Okay.

MR. GUILD: If the Chair would like a clean copy included, as well, as a Commission exhibit —

CHAIRMAN HALL: No —

MR. GUILD: — of course, I have no objection.

CHAIRMAN HALL: The clear copy will be Hearing

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1 Exhibit No. 3, no handwriting.
2 **MR. GUILD**: Madam Chair, I don't know how to
3 preserve an objection if you won't allow me to put
4 an offer of proof in, so, if the record would just
5 reflect the fact that I would like my document in,
6 regardless of whether it has handwriting on it, as
7 an offer of proof, I would appreciate it.
8 **CHAIRMAN HALL**: Okay. Well, that's certainly
9 included in the record, and a clean copy will be
10 Hearing Exhibit No. 3.
11 *[See Vol 3, Pg 398]*
12 **BY MR. GUILD:**
13 **Q** Mr. Marsh, let's talk about the estimates of delay.
14 Would you accept that the company now proposes 38 months
15 and 18 days' additional delay in the completion of
16 construction for Unit 2, as compared to the initial
17 proposed substantial completion date approved by the
18 Commission in the initial Base Load Application?
19 **A** Yes, the original date for the new Unit 2 was 2016. We
20 have been back to the Commission with updates to that
21 schedule that currently had it, I believe, before this
22 hearing, as being due in 2017.
23 **Q** Thirty-eight months, 18 days?
24 **A** I'll take your math, subject to check.
25 **Q** You need to get a little closer to the mic. I'm having

a hard time with the speakers.

CHAIRMAN HALL: I'm sorry, Mr. Marsh. Yeah, again, we can't hear you.

WITNESS: [Indicating.] Can you hear me now? I can't get much closer.

[Laughter]

CHAIRMAN HALL: Yeah. I'm sorry.

BY MR. GUILD:

Q All right. And at the time the Commission approved the initial Base Load Order in March 2009, Order 2009-104(A), there were 85 months until the initial substantial completion date for Unit 2. Would you accept that?

A Subject to check.

Q Okay. So the 38-month delay — and 18 days — that you propose now, represents a 45 percent extension of that initial substantial completion of the construction schedule, correct?

A I've not done the math. It's a simple calculation, so subject to check.

Q Subject to check. I believe you stated that you estimate that the additional cost to complete represents a 15.8 percent increase over the initial capital costs approved in the initial BLRA Application, correct?

A I believe I said 15 percent in my testimony.

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1 **Q** All right, I'll accept that. Now, SCE&G already
2 proposes to sell an additional 5 percent of both units
3 to Santee Cooper, do they not?
4 **A** No, that's not correct.
5 **Q** What's the planned relationship with Santee Cooper in
6 terms of proportional ownership of the units expected to
7 be after in-service?
8 **A** Santee Cooper approached us with a discussion about
9 selling part of their ownership. They currently own 45
10 percent of the new units. And after discussions with
11 Santee, we entered into an agreement with Santee —
12 subject to this Commission's approval — that we would
13 purchase an additional 5 percent of Unit 1 — Unit 2, the
14 first new unit, when it came on-line. That purchase
15 would take place over a two-year period.
16 **Q** I see. So, not both units, just Unit 2?
17 **A** Just Unit 1.
18 **Q** I'm sorry, Unit 2?
19 **A** The new unit, which is Unit 2.
20 **Q** But not Unit 3?
21 **A** That's correct.
22 **Q** Okay. So with the addition, then, of an additional
23 fractional ownership by SCE&G, what impact would that
24 have on SCE&G's share of the capital costs to complete
25 the units?

A It has no change on the capital costs we presented here. These capital costs in this filing represent only our 55 percent share. We have not approached the Commission about the additional 5 percent, so there's nothing reflected in these numbers for the additional 5 percent, if we move forward with that.

Q Right, I get that. But if you know already that you're going to sell[sic] 5 percent at least of one unit to SCE&G's co-owner, Santee Cooper, then South Carolina ratepayers are going to bear a proportional increased share of the cost of completing the plant, won't they?

A We're not going to sell any of our interest to Santee Cooper.

Q No, Santee Cooper is going to sell it to you.

A That's correct. I'm just correcting what you said.

Q And so, we, collectively, are going to own more of the units than we would before you sell that fraction — before you buy that fraction from Santee Cooper, correct?

A Subject to this Commission's approval.

Q Right. So how much additional cost will South Carolina Electric & Gas Company ratepayers bear of the cost of the two units after that proposed acquisition is complete?

A The purchase is intended to take place at Santee

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1 Cooper's book cost. Those numbers are being negotiated
2 now, but it will be slightly different from SCE&G's
3 numbers because their accounting is a little bit
4 different. They follow different procedures than we do,
5 as a governmental entity. It would be at their book
6 cost.
7 **MR. GUILD**: Madam Chair, I just apologize but
8 I'm having a hard time hearing the witness. I
9 think it's the sound system in some way. It's just
10 a little garbled and I apologize for pressing him,
11 but I just don't understand some of his answers.
12 I'm sure Mr. Marsh is speaking clearly enough; it's
13 just the system.
14 **WITNESS**: Let me try it again. Is that
15 better? The 5 percent we would propose to purchase
16 from Santee Cooper, when the first new unit comes
17 on-line, would be at Santee Cooper's cost. That
18 cost would be a little bit different from ours
19 because they follow different accounting policies
20 than we do, because they're a governmental entity.
21 But the intent is to purchase that 5 percent at
22 their cost, subject to this Commission's approval,
23 and the payments for that and the related
24 megawatts, the output, would transfer to SCE&G over
25 a two-year period.

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BY MR. GUILD:

Q All right, understood. So the question that I had for you, that I don't think you responded to, is, what additional costs do you expect South Carolina Electric & Gas ratepayers to bear, of the cost of the total project, after that contemplated acquisition from Santee Cooper is complete?

A If you make the assumption that the Commission approves the transfer, then we would assume an additional 5 percent in cost of the total project, based on Santee Cooper's share of the cost.

Q Of Unit 2?

A Of Unit 2.

Q Not Unit 3?

A Not Unit 3.

Q Understood. Thank you. Now, you propose a settlement to the Commission involving an agreed reduction on the return-on-equity component under the BLRA, from 11 percent to 10.5 percent, correct?

A That was part of the settlement agreement.

Q [Indicating.]

A That was part of the settlement agreement, that's correct.

Q Now, can you confirm ORS's estimate that that has an approximate $15 million total-project-lifetime revenue

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1 effect for ratepayers?
2 **A** That is correct.
3 **Q** Now, you follow — apparently, as you said in your
4 testimony — the ratings and commentary by the financial
5 community on the effects of this project on the
6 company's finances?
7 **A** Yes, I do.
8 **Q** You're familiar with Moody's Investors Services, their
9 commentary on the company?
10 **A** They do have commentary from time to time, yes.
11 **Q** You familiar with the piece that they offered that
12 compared the effects of the nuclear project by SCE&G on
13 the other AP1000 under construction, the Vogtle project
14 being built by Georgia Power?
15 **A** I don't recall that particular piece. I may have read
16 it. I see a lot of information from Wall Street. I
17 don't recall that particular piece at this time.
18 **Q** They characterized the project for you as a transforming
19 event for SCE&G. You agree with that?
20 **A** I don't know how they used that "transforming," you
21 know, word, in context. To me, it's a transforming
22 aspect of what we'll be able to provide to the State of
23 South Carolina with the clean energy that will come from
24 the project over 60 years. I think that will transform
25 what South Carolina is able to do by providing clean,

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1 non-emitting, reliable power to its customers.
2 **Q** Here's what they said that meant —
3 **MR. BURGESS**: Objection. That's hearsay.
4 **CHAIRMAN HALL**: Sustained.
5 **MR. GUILD**: Madam Chair, I'm not testifying;
6 this is cross-examination. I believe I'm entitled
7 to put a question to the witness. I'm not offering
8 evidence; I'm asking the question, and I can quote
9 from anything I want to, I thought, under the Rules
10 of Evidence, Madam.
11 **MR. BURGESS**: Madam Chairman, if I may, Mr.
12 Marsh indicated he was not familiar with that
13 particular writing Mr. Guild's referring to.
14 **MR. GUILD**: Whether or not, Madam Chair — this
15 is open cross-examination in South Carolina, and I
16 have never been restrained in a court of law from
17 asking a question based on any supposition. I am
18 proposing to him a premise. He doesn't have to
19 agree with it. He can think I'm making it up, for
20 that matter. But the fact remains, I'm entitled to
21 frame a question under the Rules of Evidence.
22 **CHAIRMAN HALL**: Okay. Finish your question,
23 Mr. Guild.
24 **BY MR. GUILD:**
25 **Q** Transforming event for SCE&G. Would you accept that

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1 adding these units alters SCE&G's nuclear generation
2 dispatch from 24 to 80 percent?
3 **A** I've got that information. Just bear with me for a
4 minute [indicating]. From a dispatch perspective, in
5 2014, the dispatch for nuclear is around 19 percent; in
6 2021, when both units are expected to be on-line, it
7 would go to 56 percent.
8 **Q** All right. Would you accept, subject to check, that
9 Georgia Power, which is building Vogtle, will go from
10 only 23 percent nuclear generation dispatch to 30
11 percent, adding the two Vogtle units?
12 **A** I don't know about their generation mix.
13 **Q** Would you accept that the nuclear units will represent
14 26 percent of your total capacity once they're on-line?
15 **A** I have 32 percent, including our current unit.
16 **Q** Georgia Power/Southern Company, the Vogtle unit is only
17 2 percent of their total generation. You accept that?
18 **A** That sounds very low, but I don't have the details of
19 their generation mix.
20 **Q** SCE&G proposes to — is expected to seek annual rate
21 hikes under the Base Load Review Act that approximate 3
22 percent per year, to finance the Summer units. Would
23 you accept that?
24 **A** I think the average has been about 2.3, 2.4.
25 **Q** But in Georgia, it's only 1 percent to finance Vogtle.

Would you accept that?

A I don't have the details of their financing plan or their generation mix, so I just can't verify those numbers.

Q March 16, 2015, Moody's says, quote, "'SCANA and SCE&G are completely exposed to and dependent on the BLRA,' said Susana Vivares, vice president/senior analyst." Are you familiar with that comment by Moody's?

A I've had a number of conversations with Moody's about the impact of the Base Load Review Act and the importance of its application in the building of our units. That comment would not surprise me. When we came to the Commission in 2008 and put the idea in front of the Commission of building these new plants because we felt like they were the best opportunity for us to serve the base-load needs of our customers for years to come, we produced that — we filed that case under the Base Load Review Act.

I was here in the '70s and the '80s when nuclear plants were built initially; there were a number of challenges that were met by utilities. One of those was the compounding of interest rates on top of expenditures while the plants were being built, before they came on-line. We felt like, under the Base Load Review Act — or we knew under the Act, if we were able to recover the

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1 financing costs of the plants on a current basis, that
2 would save us approximately $1 billion in financing
3 costs, which in turn would save the customers $4 billion
4 over the life of the plant.
5 So I've told this Commission before, without that
6 Base Load Review Act, I don't know that we would have
7 proceeded with construction, because that's the
8 construct under which the plants are financed; that is
9 the way we presented the plants to the financial
10 community. They understand how that works. They
11 understand the benefits of building the plants that way.
12 We had done that on several smaller projects prior to
13 bringing the new nuclear project to the Commission. The
14 BLRA just really codified the existing procedures that
15 minimize the need for extended rate cases during the
16 process, as long as the company was proceeding in
17 accordance with its schedule or updates to that schedule
18 it presented and were approved at the Commission.
19 So for Moody's or any other investor on Wall Street
20 to say they find a very close link between our project
21 and the Base Load Review Act is really no surprise. I
22 would expect them to say that, because the two are very
23 closely tied hand-in-hand and one of the foundational
24 reasons we're able to build this project on favorable
25 financing terms from Wall Street.

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1 **Q** Does that complete your answer?
2 **A** Yes, it does.
3 **Q** "The utility has exhausted its financial cushion, is
4 overbudget, and still years away from commercial
5 operation. We," Moody's, "think the risk that South
6 Carolina's electric consumers become less willing to
7 absorb these cost increases is going to rise. In turn,
8 the filing will...turn up the heat on...regulators."
9 You familiar with that comment by Moody's?
10 **A** I have not read that comment.
11 **Q** Do you dispute the notion that you've exhausted your
12 financial cushion?
13 **A** I'm not sure exactly what they are referring to in terms
14 of the financial cushion. We don't have money on
15 reserve on Wall Street. Every time we go to Wall Street
16 to raise funds, whether it's to sell equity or sell
17 bonds, each issuance stands on its own. They may be
18 talking about the original contingency that was put in
19 place in the initial Base Load Review order, that we
20 discussed with this Commission at length in several
21 proceedings. That may be what they were referring to.
22 **Q** You certainly don't dispute the notion that you're
23 overbudget and still years away from commercial
24 operation, do you?
25 **A** I don't agree with the term "overbudget." When we

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1 brought this project to the Commission in 2008, we
2 talked about the way we laid out the contract with the
3 consortium at the time between Westinghouse and Shaw,
4 and there were three major components. One of those is
5 a firm category — one was firm, one was firm with fixed
6 escalation, and the third was a final bucket of targeted
7 dollars, which essentially were dollars that were at
8 risk because to fix those amounts would have been
9 excessively expensive to the company and for our
10 customers, and those costs will be paid by SCE&G and
11 Santee Cooper at their actual rates. The majority of
12 that is labor and costs related to labor.
13 As we've gone through the project, we've made
14 estimates of the work that needs to be done. Some of
15 those estimates have been challenged by the company,
16 which we included — details about that is included in
17 this filing. So the fact that those target dollars have
18 gone up, in my mind, doesn't mean we're overbudget; that
19 means we've refined those costs. And as we have refined
20 those, we've come back to the Commission and explained
21 those in every case we've been before the Commission for
22 approval.
23 **Q** I guess I just don't understand what the concept of
24 "budget," then, is. If budget is what the Commission
25 relied on when they gave you your initial BLRA approval,

then what do you have in front of them right now that's $698 million on top of that initial proposal? Which is the budget?

A We've provided projections to the Commission of the costs, based on the best information available at the time. We told the Commission those dollars would be subject to change as additional information was available. There were certain risks that may arise on the project. We've had a number of those risks that have identified themselves. We've addressed those. There have been costs associated with those and we've been back to the Commission to raise our estimates, as appropriate.

Q So, in effect, the Commission accepted your initial Base Load Review with those risks in mind, and we made you build nuclear plants. We put a gun to your head to build these nuclear plants at whatever cost they were going to amount to, because there is no budget. Is that your testimony?

A That's not my testimony, and I want to make it clear on the record that no one from the Commission has put a gun to my head and asked me to do anything. We simply put our proposal to build the nuclear plants before the Commission. We believed then, and we believe now, that that was a good-faith estimate of what we expected the

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1 costs to be. We have updated that, as appropriate. And
2 I would offer the Commission that the costs we presented
3 to the Commission back in 2008, when you look at the
4 ultimate costs to be paid by customers, have not
5 changed. While some of the construction costs have gone
6 up, we've saved $1.2 billion in interest costs because
7 we've been able to take advantage of lower interest
8 rates. We believe we'll receive an additional $1
9 billion dollars in production tax credits because there
10 are fewer new nuclear plants being built in the United
11 States, and we'll qualify for more incentives available
12 from the federal government. When you roll that
13 together with the cost adjustments we presented to you
14 today, the cost is the same as it was in 2008 for
15 customers over the life of the project. There's been no
16 change.
17 So to say we are overbudget, I don't accept that
18 connotation, because you're only looking at one aspect
19 of the project, and that's project cost. And,
20 certainly, project costs will ultimately be passed on to
21 consumers, but that's only one part of what customers
22 pay. You have to look at production tax credits,
23 financing costs, operating costs. It's all those
24 factors that impact the customer's bill; it's not just
25 the estimated construction cost.

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1 **Q** So let's focus on those estimated construction costs,
2 because that's why we're here. Page 37 and following of
3 your testimony identifies those risks that you put
4 before this Commission, risks that have turned out
5 adversely and to which you attribute the substantial
6 portion of the increased costs to complete the project;
7 is that right?
8 **A** Yes, I identify a number of risks in my testimony.
9 **Q** These are the risks that did not pan out as you hoped
10 and expected they would when you talked about them as
11 efficiencies that would limit the costs of completing
12 the project in the initial Application, correct?
13 **A** I don't recall that we used the word "efficiencies." We
14 certainly were open and honest about the modular
15 construction efforts and how we thought that would help
16 us build the project the way it was presented.
17 **Q** Okay. Page 37, enumerating these by topic, "modular
18 production," that was one of the expected construction
19 efficiencies that you initially projected.
20 **A** It is one of the risks we identified.
21 **Q** Well, it's a risk you identified, but you identified it
22 initially as a positive that was going to save money on
23 construction of the units, correct?
24 **A** That was our initial expectation, associated with the
25 risk that goes with that.

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1 **Q** And that expectation has not been borne out, has it?
2 **A** In some cases, it has not. Module production goes
3 through a number of phases. It starts with the
4 submodule fabrication, a lot of which is coming from
5 Lake Charles, Louisiana. That was a subcontractor on
6 the job that was hired by Shaw and, ultimately, CB&I.
7 The challenge has been in producing those submodules in
8 a way that met the design applications. Many cases,
9 some of the designs changed, as they were building the
10 modules — the submodules, because of constructibility
11 concerns. They needed to make sure they were in
12 compliance with all the quality-control assurances that
13 we needed for a nuclear project.
14 What I can tell you is, once those parts and pieces
15 had been delivered on site and we put together the
16 complete module, which was then placed into the reactor
17 vessel or elsewhere on site, we've had a pretty good
18 track record of putting those pieces together once they
19 arrive on site. The challenge has been in the initial
20 fabrication of those submodules, before they are sent to
21 the site for assembly.
22 **Q** I look forward to talking to your witness, Mr. Byrne,
23 about those efficiencies or lack thereof, at the plant
24 and at those subcontractors, but suffice it to say, the
25 assumption that you made at the time of the initial

Application is that the modular approach to construction would provide cost savings in the construction of these new AP1000-design units, correct?

A I don't think you can put forth the assumption without the underlying risk we identified with that assumption. I think you have to take it as a whole.

Q All right. Page 38, the second risk you identify as having disclosed to the Commission when they approved this Application was "construction efficiencies," correct?

A That's correct.

Q Again, citing advanced modular construction and standardized design as being the source of expected construction efficiencies, correct?

A That's what we laid out as the plan, along with the risk that was associated with it.

Q Third, you identified "rework" as a risk — correct?

A That's correct.

Q — but note that since AP1000 units have not yet been built, problems may arise during construction requiring rework, correct?

A That's what we identified in our filing, that's correct.

Q And "scope changes," again, page 38, that there can be changes in design, changes in regulatory requirements, midstream during construction, correct?

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1 **A** We discussed that with the Commission at the initial
2 filing, that these plants to be built at the
3 Jenkinsville site, as well as the ones built at Vogtle
4 by Georgia Power, are the only ones being built in the
5 United States. However, there are four AP1000s under
6 construction in China that started several years before
7 our project started, and we expected and have received
8 some design changes from that process. Mr. Byrne can
9 address that in more detail. But we've tried to
10 incorporate design changes that were considered
11 necessary, that refined the original design, into our
12 process. Of course, it takes time and effort to do
13 that, and that has contributed to some of the delays we
14 have encountered. Mr. Byrne can go into more detail,
15 but there could be constructibility issues by the
16 fabricator as they take the design drawings and try to
17 actually produce the work that's in the design drawings,
18 and they have to go back to the designers to try to work
19 through those issues.
20 **Q** Those Chinese AP1000s, are they up and running now?
21 **A** The Sanmen — first unit at Sanmen is physically
22 complete. Mr. Byrne can give you more details. If you
23 were to look at a picture of the plant, you would think
24 it complete. It's beginning to go through some of the
25 testing processes that would need to be completed before

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1 they load fuel. I believe the latest estimate is they
2 would look to be operational in 2016.
3 **Q** All right. Short answer is, none of those AP1000s are
4 on-line yet, producing electricity, are they, in China?
5 **A** At this point, no.
6 **Q** I'm sorry. You were garbled on that answer.
7 **A** No.
8 **Q** Of course, as I think we established in an earlier
9 proceeding, Chinese Communists run the regulatory system
10 in China, don't they?
11 **A** That's not the way we refer to the process. They do
12 have an oversight process in China. They have an
13 oversight group that looks at the work that's done by
14 the utilities that are building those projects. I
15 wouldn't offer it's equivalent to the South Carolina
16 Public Service Commission or the Nuclear Regulatory
17 Commission, but they do have oversight of those
18 projects. Westinghouse has been on site as the designer
19 of that facility, to make sure it's built to the same
20 standards that we would expect. CB&I, or Shaw, the
21 initial contractor, has been involved in the
22 construction of the units to make sure they're
23 constructed in accordance with the design efforts that
24 are also being followed here in the United States.
25 **Q** Well, to be clear, the Nuclear Regulatory Commission is

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1 not licensing the Chinese AP1000s, are they?
2 **A** We have never represented that the NRC was overseeing
3 the construction of the plants in China.
4 **Q** And do you know whether or not they've imposed, in the
5 Chinese reactors, standards that are equivalent to the
6 quality-assurance standards required of our Nuclear
7 Regulatory Commission?
8 **A** I'll let you ask Mr. Byrne that. He's involved in the
9 detailed design and construction more so than I am.
10 He'll be happy to address that question.
11 **Q** I'll do that, but as you sit here today, do you know
12 whether or not the Chinese designs meet the stringent
13 quality-assurance standards imposed by the US NRC on
14 domestic US reactors?
15 **A** I believe I said earlier they're not under the
16 jurisdiction of the Nuclear Regulatory Commission. The
17 exact design, I would let Mr. Byrne address that
18 question.
19 **Q** And on page 39, lastly, of the risks that you say this
20 Commission forced you to take, you identify "design
21 finalization" as a risk that you assumed would work out
22 to your advantage, and has imposed additional cost,
23 correct?
24 **A** I don't agree with your assessment that the Commission
25 forced us to take these risks. We presented this

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1 project as a whole, for the good of South Carolina, to
2 make sure we could provide clean, base-load energy for
3 60 years. We believed then that was the best option,
4 and we believe that today. We were not forced by the
5 Commission to do this. They agreed with our assessment.
6 We spent probably almost two weeks in here. You were
7 involved with that proceeding. We heard a lot of
8 testimony; there were probably thousands of pages of
9 testimony filed. We heard from a lot of witnesses. And
10 at the end of the day, an agreement was reached that
11 that was the best alternative for the State of South
12 Carolina because of the benefits associated with nuclear
13 power. We were not forced to do that.
14 On a project of this size, you know, design
15 finalization is rarely completed when a project starts.
16 We built our Cope generating facility, our coal-fired
17 plant, back in 1996. The design was not completed when
18 that plant started construction. It's typically
19 completed along the way and finishes in time to make
20 sure the components are available and the design is
21 available to finish the project. So there's design that
22 takes place throughout the process.
23 We never represented to the Commission that the
24 design was completed. We offered that this was a new
25 design; a conceptual design had been done. The design

had been certified by the Nuclear Regulatory Commission. There were several dockets that were heard before the Nuclear Regulatory Commission to certify that design. And there were a number of dockets — if I recall, it was probably 18 or 19. I think the design certification was probably docket 19, if I remember my numbers correctly. But there was a lot of work on the initial design, but the detailed design of the individual components had to be done as the project was under construction.

Certainly, a large percentage of that is done now. There remains a percentage that will still need to be completed as we move forward. I'll ask you to get Mr. Byrne to give some more detail on that, but we have never represented that the design was completed from the day we started the project. That's not customarily the way large projects of any kind are done, whether it's a large power plant or a large project for any other type facility.

Q Well, you did represent to the Commission that under the now current, existing regulatory process, the NRC uses a combined operating license. You don't go through a construction permit and then an operating license; they have one proceeding, and that's the COL, or combined operating license. And that was an efficiency you expected, correct?

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1 **A** That was a new process that was offered by the
2 Commission for building new nuclear facilities. It was
3 the first time it had been offered. We expected there
4 would be challenges to work through that. We've
5 encountered some challenges and we've been working
6 through that with the NRC. And it's working as
7 designed.
8 **Q** So when you came to this Commission, you told them you
9 had a streamlined or a new one-step NRC licensing
10 process, but you also told them that you didn't have a
11 complete design yet for the reactor, and you were going
12 to have to complete that design while construction was
13 underway. You told the Commission that, you're saying?
14 **A** We had the design that was certified by the Nuclear
15 Regulatory Commission. The plants could not move
16 forward with nuclear construction until that design was
17 completed and the company issued an operating license.
18 At the time we came to the Commission in 2008, we did
19 not have that license in hand. We were in the process
20 of making application to the NRC to obtain that license.
21 We obtained that license in, I believe it was, March of
22 2012, which meant, from an NRC perspective, the design
23 was certified for the plant as meeting its regulatory
24 safety requirements.
25 **Q** Page 39 of your testimony, "In light of these risks,

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1 SCE&G...acknowledged in 2008 that cost and schedule
2 updates might be required." Quote, "The Commission
3 agreed that under the BLRA these updates would be
4 allowed so long as they were not due to the imprudence
5 of the utility." That's what your testimony is, right?
6 **A** I believe that comes from the Base Load Review Act
7 itself. As we told the Commission, I told the
8 Commission myself, we are presenting the schedules as
9 our best estimate of our informed judgment of what these
10 plants will cost. We talked about the fixed costs, we
11 talked about the firm with fixed escalation, and we
12 talked about the targeted categories. At that time,
13 about 50 percent was fixed; that's now moved to 66-2/3.
14 I committed to the Commission that, as information
15 changed or the cost information needed to be revised,
16 that we would be back before the Commission to explain
17 the reasons behind it and give them a chance to ask us
18 questions. ORS is on site on a daily basis. They
19 review this information; they sit in our meetings; they
20 have access to all the documents. Our commitment was we
21 would inform the Commission, as the Base Load Review Act
22 requires us to, from a full transparency perspective,
23 and make them aware of the changes. We've been back
24 several times to do that and presented that information
25 with the Commission, under the Act, and to this point

they have found nothing that's been done that was imprudent by the company.

We believe the information we provided in this case supports the evidence that these costs are justified to be added to the estimate of construction and the change in the schedule, and the company has acted prudently in bringing that information and managing the project.

Q All right.

CHAIRMAN HALL: Mr. Guild, we're going to break for lunch now. We will come back at 1:15 – 1:45.

[WHEREUPON, the witness stood aside.]

[WHEREUPON, a recess was taken from 12:35 to 2:10 p.m.]

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A F T E R N O O N S E S S I O N

CHAIRMAN HALL: Thank you. Be seated.

[Witness recalled]

THEREUPON came,

K E V I N B . M A R S H ,

recalled as a witness on behalf of the Petitioner, South Carolina Electric & Gas Company, who, having been previously affirmed, was examined and testified further as follows:

CHAIRMAN HALL: All right. Before we resume Mr. Guild's questioning of Mr. Marsh, I think there was something we need to take up? Mr. Burgess?

MR. BURGESS: Thank you, Madam Chairman. One preliminary matter before we begin. Before we took a break, there was an objection lodged by SCE&G as to the relevance of the document that Mr. Guild was cross-examining Mr. Marsh on. So, we hereby withdraw that objection. So if Mr. Guild wishes to cross-examine Mr. Marsh on what I believe to be Exhibit G, the red-line version, which is from the revised rates docket, we have no objection to that line of questioning.

CHAIRMAN HALL: Okay. The document is Exhibit G to what docket?

MR. GUILD: Madam Chair, it's 2015-160-E.

CHAIRMAN HALL: -160-E.

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MR. GUILD: The revised rates docket.

CHAIRMAN HALL: Okay. All right, thank you. All right. And Mr. Guild, the objection has been withdrawn, and we've now identified the document. So, before, I ruled that the clean copy would come into evidence, but for what purpose do you want it entered at this time?

MR. GUILD: So, Madam Chair, I would move that a clean copy of that document, Amended Exhibit G from the docket we just referred to, be marked for identification and received in evidence. I've got just a question or two about it. But I would like it, now, received as an exhibit.

CHAIRMAN HALL: Okay, the clean copy.

MR. GUILD: Yes, ma'am.

CHAIRMAN HALL: Because we were — the dispute was about the handwritten copy.

MR. GUILD: The clean copy in as an exhibit, please.

CHAIRMAN HALL: Okay, so the clean copy —

MR. BURGESS: Madam Chairman, just so as not to confuse, there is a red-line version of that document —

CHAIRMAN HALL: Okay.

MR. BURGESS: — and there's a clean version of

that document. I believe the document Mr. Guild had was the red-line version that had his handwritten notes on it. So we certainly have no objection to the red-line version coming in, absent any handwritten notes, or, if you would prefer to put the clean version in, absent any handwritten notes — I know it's a little confusing.

CHAIRMAN HALL: Okay.

MR. BURGESS: — I think that would be sufficient for us.

CHAIRMAN HALL: All right. So right now, we've made Hearing Exhibit 3 the clean red-line copy? Is that correct, Mr. Butler?

MR. BUTLER: I think that was correct.

CHAIRMAN HALL: Okay.

MR. BUTLER: Mr. Guild was just getting ready to, I think, identify —

CHAIRMAN HALL: Okay, go ahead, Mr. Guild. I'm sorry.

MR. GUILD: It's immaterial. Either one — the contents are the same with the exception of the corrections. But if it's the company's preference, we'll have the clean copy of the final non-red-line version of that Exhibit G. I'd ask that be received in evidence, please.

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CHAIRMAN HALL: All right.

MR. BURGESS: That's perfectly acceptable with us.

CHAIRMAN HALL: All right. Well, it's already in as evidence. Hearing Exhibit No. 3.

[See Vol. 3, Pg 398]

FURTHER CROSS EXAMINATION

BY MR. GUILD:

Q Good afternoon, Mr. Marsh. Thank you for your patience.

A Good afternoon. Is the microphone working better?

MR. BUTLER: Much. Much better.

CHAIRMAN HALL: Okay, yeah, and I do apologize for that. Apparently, an amplifier wasn't on. And so, we do apologize. And, yes, now all the Commissioners can hear.

MR. GUILD: Everybody sounds like themselves, Madam Chair, and also Mr. Marsh I hear loud and clear.

BY MR. GUILD:

Q Would you just accept, subject to check, Mr. Marsh, again from that document — the company's Amended Exhibit G — that if you total the entries for "Incremental Revenue Requirement-BLRA" from years 2015 through 2020, recognizing that those latter years are estimates, as you said, that the total of those values would be $677

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1 million, subject to check?
2 **A** Subject to check, yes.
3 **Q** Now, Mr. Marsh, as you relayed in your testimony, the
4 company is currently in a dispute with the consortium —
5 the Westinghouse Consortium — with regard to who bears
6 the costs for a number of elements in the capital costs
7 of the proposed Unit 2 and Unit 3 reactors, correct?
8 **A** That's right. The numbers that we presented in the
9 filing before the Commission today represent the best
10 estimate of the costs to complete the plants at this
11 time, but do reflect — we have noted in my testimony,
12 and others' — that there are disputes related to certain
13 costs included in those amounts.
14 **Q** And what's the form, currently, of those disputes, Mr.
15 Marsh?
16 **A** We have been in discussions with the consortium on
17 numerous occasions since we got the revised integrated
18 schedule. I believe it was in August of last year, and
19 the cost data that went with that schedule followed
20 shortly thereafter. Once we got the cost information,
21 we put a team together on the site, at the project, to
22 review the schedule, to understand the assumptions
23 they'd made, and to challenge the costs and the data
24 that was in that schedule to determine, one, if we
25 thought it was a reasonable estimate to reflect what it

1 would take to complete the plants, based on the timeline
2 they had given us. Our team on site agreed with the
3 costs as the best estimate we had at the time and what
4 it would take to complete the plants by June of '19 —
5 Unit 2 in June of '19 and Unit 3 in June of 2020. And
6 based on that, we then began to negotiate over who would
7 be responsible for the costs. So we didn't have a
8 dispute over what the costs were and whether or not they
9 were reasonable; it was a question of accountability or
10 who would be actually the one to pay the costs.
11 **Q** Yeah, precisely. So with regard to that latter point,
12 the amounts of the costs in dispute with respect to who
13 pays, what is the company's current claim against the
14 consortium? How much money are you asking for?
15 **A** Well, there are amounts identified in the testimony, if
16 you'll bear with me just a second.
17 **Q** Sure.
18 **A** There are total delay EAC costs of about $324,803,000.
19 That's net of liquidated damages. Then there's the
20 total owner's costs associated with the delay of
21 $214,000,307. The combination of those, I believe, if
22 I've added my numbers correctly, reflects the part that
23 we would dispute as part of the additional costs
24 associated with the project.
25 **Q** So that's roughly $538 million, if I'm adding correctly?

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1 **A** It's 538, 539, somewhere in there, that's correct.
2 **Q** All right. And have you made a formal claim against the
3 consortium in that amount?
4 **A** We have talked with the consortium about our
5 disagreement with those costs, and the reasons giving
6 rise to those costs, principally — the delay in the
7 structural submodules that have been delivered to us,
8 and some productivity factors based on the work that's
9 being performed at the plant — and do not believe that
10 we are responsible for paying these costs. We have
11 identified those cost to them. We have, you know, not
12 gone to a legal proceeding at this point, but,
13 certainly, that's an option we will have at some point
14 down the road if we can't find a fair resolution.
15 But the challenge we've got is to work to defend
16 these claims on behalf of the company and, ultimately,
17 our customers, but at the same time, maintain a
18 reasonable working relationship with the consortium so
19 they'll continue to work on the project. If we just
20 stopped work on the project until we resolved the
21 claims, that would severely limit our ability to finish
22 these units in a timely fashion. So we're in
23 discussions; we've had numerous discussions with the
24 senior level management team at CB&I and Westinghouse.
25 Mr. Byrne and I, along with other representatives from

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1 Santee – Lonnie Carter, their president – we've been to
2 Toshiba to talk to them about the costs, some of the
3 disagreements we've got.
4 So it's an ongoing discussion. We've sent a number
5 of letters that have outlined our concerns of why we
6 think these costs are not appropriate, but, in terms of
7 filing a claim, you know, we have not filed a claim –
8 specifically, a claim in court – because we've not
9 gotten to the point where we feel like it's necessary to
10 file litigation at this point.
11 **Q** Well, we'll get to that. The question really is, is
12 there a number? Is there a number in a document or a
13 writing that you have presented to the consortium that
14 represents the demand by SCE&G, on behalf of your
15 stockholders, us ratepayers, for how much you want them
16 to write you a check for, or pay?
17 **A** We presented these numbers in discussions with the
18 consortium at a variety of levels. I'm sure they've
19 been discussed at the plant site level, with the people
20 on site there that are involved in the day-to-day
21 construction activities and the finances related to
22 that. We've had them at Mr. Byrne's level. Our chief
23 nuclear officer has had discussions with the consortium
24 about these costs. I've been involved in discussions.
25 So we presented these numbers and discussed them on

numerous occasions.

Q You're not quite getting my question, I don't think. My question is, if I were to look for a document, would I find a document from SCE&G to the consortium saying, "You owe us 538, give or take, dollars, because of your responsibility for the delay, et cetera, in completing this project"?

A I don't know that there's one document that includes that amount. The schedule we have filed as part of our testimony here outlines the specific amounts that we have disputed. I can attest to the Commission that we have discussed these items directly with the consortium, Westinghouse and CB&I, as part of our negotiation process.

Q Now, does the EPC contract contemplate some other dispute resolution mechanism — arbitration or mediation, for example?

A There are opportunities for arbitration and mediation as part of the dispute resolution process.

Q And has South Carolina Electric & Gas Company invoked formal arbitration processes to resolve the cost dispute with the consortium?

A We've not gone to the formal level of doing that. We've certainly made it clear to the consortium that we reserve the right to do that. History tells us — my

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1 history tells me, from my years of being in business, if
2 you can resolve the issues without having to go through
3 the legal steps, you're likely to get, potentially, a
4 better decision.
5 **Q** Don't say bad things about us lawyers, now, Mr. Marsh.
6 [Laughter]
7 Might need one every once in a while.
8 **A** And I've had plenty of them work for me in the past.
9 You know, we certainly want to keep the lines of
10 communication open. I don't think there's any question
11 we've raised the disputes to the consortium. We've
12 leaned on them extremely hard, and made sure they
13 understand their position. The consortium — I need to
14 be honest with the Commission — they have a position
15 that's very different from ours, which is why we're in
16 negotiations. We intend to, you know, push hard on our
17 side and look for a resolution that's beneficial to us
18 and, ultimately, our customers, but at the same time
19 trying to keep the work on the plants underway.
20 **Q** So, you've not initiated formal litigation. Your
21 testimony is clear about that.
22 **A** That's correct.
23 **Q** Although, you contemplate that as a potential, possible
24 remedy.
25 **A** It is a remedy — a potential remedy down the road.

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1 **Q** All right. You've not invoked any alternative dispute
2 resolution mechanisms that are contemplated in the EPC
3 contract, such as binding arbitration or mediation, up
4 to date, have you?
5 **A** That's correct.
6 **Q** You've had discussions with them, but there's no
7 specific dollar that you've put forward — the 538 which
8 you offered as the estimated total of the costs
9 associated with their responsibility, you haven't put
10 that number to them yet, have you?
11 **A** I think what I said earlier was I don't know that that's
12 in one single document, but we have certainly discussed
13 these amounts with the consortium. I mean, we wouldn't
14 have put information in this schedule under oath to the
15 Commission unless we had documented that and made it
16 clear that's what we thought the amount in dispute was.
17 **Q** All right. Now, if the matter required litigation to be
18 resolved, what would be the determinative basis for
19 costs being required of the consortium? What kind of
20 acts or omissions on their part would trigger liability
21 or responsibility for those additional costs, Mr. Marsh?
22 **A** I'm not sure I understand the question. The costs that
23 we have identified are costs that they have outlined in
24 the rebaselined integrated scheduled to complete the
25 project. We have not disagreed with those costs. We

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1 believe those costs are known today; they're the best
2 estimate available today, and that's why we included it
3 in this updated filing. The question is, who's
4 responsible for the costs?
5 **Q** That's right. So my question to you is, what is the
6 basis for determining responsibility for those costs?
7 Do you have to establish that the consortium was in
8 violation of some contract term for them to be
9 responsible, that they breached a contract term? Is
10 that one?
11 **A** Certainly, we've identified in our testimony that we
12 don't think the consortium is in compliance with the
13 contract, specifically in the areas of the submodules
14 that are delivered to the plant site, to comprise the
15 modules that are put together there, and in their
16 productivity on the site.
17 **Q** Let's take those — sorry. Did you finish your answer?
18 **A** I'm through.
19 **Q** Let's take those two. So, with regard to the delivery
20 of the submodules at the site, what is it — what's the
21 company's contention with regard to the dereliction or
22 failures by the consortium in that regard?
23 **A** We don't believe the submodules have been delivered to
24 the plant in a timely fashion to be in compliance with
25 the schedules included in the agreement with the

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1 consortium in the EPC contract. Their contention is,
2 there have been regulatory changes that have principally
3 caused the changes in delivery dates on those
4 submodules, and we simply have a disagreement.
5 **Q** All right. So it's their contention that the rules of
6 the game changed and that's why they're slow in
7 delivering the submodules? Is that the essence of it?
8 **A** That's their primary concern.
9 **Q** All right. Your contention is to the contrary, that
10 they just didn't meet quality standards in producing
11 those submodules, and they had to take longer to get
12 them right to deliver them in the form in which the NRC
13 would allow you to use them, right?
14 **A** We believe the contract is very clear on the
15 responsibility for delivering the modules at specific
16 times at a specific cost, and they have not done that.
17 **Q** With an appropriate level of quality that meets
18 regulatory requirements for inclusion in a nuclear
19 plant.
20 **A** Well, that goes without saying, because we would not
21 accept the parts on site for inclusion in the project
22 unless they passed the quality test before we accept
23 delivery of the submodules.
24 **Q** Right, and nor would the NRC allow you to.
25 **A** The NRC would find us in violation of the license, if we

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1 did that?
2 **Q** Yes. So when will you decide whether or not the
3 resolution of this dispute about $538 million
4 necessitates you invoking one of these more formal
5 dispute resolution mechanisms: arbitration or mediation?
6 **A** I can't give the Commission a specific date on that
7 today. The discussions are ongoing. What I can tell
8 the Commission is, in the past, we've been able to find
9 resolutions to our disagreements to this point. So
10 we're certainly going to exhaust every opportunity to
11 find a resolution that we think is good for the company
12 and good for the customers over the long term, and we
13 will push on that effort until we decide it's no longer
14 fruitful. Then we'll decide what our options are at
15 that point, whether it's some sort of dispute resolution
16 or a move to a legal avenue.
17 **Q** Okay. Page 41 of your testimony, line 15, I quote, "If
18 litigation is required, the court proceedings in a
19 matter this complex could last five years or more. The
20 final resolution might come well after the project was
21 completed." That's your testimony?
22 **A** I believe that's what it says, yes.
23 **Q** Well, Mr. Marsh, if it could take five years or more,
24 why didn't you start last year? Or today? Why wait
25 longer to initiate a process that you say might take

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1 five years?
2 **A** I'm not convinced today that the legal route would
3 produce a result that would be in the best interests of
4 our customers. You know, going through a legal
5 proceeding does not guarantee a result. There's
6 certainly risk associated with those proceedings. My
7 experience has been for something this complex and this
8 large, it could take a considerable amount of time. And
9 before we embark on that process, I want to make sure
10 we've exhausted all other avenues to us.
11 I'm very concerned, if we were to file a lawsuit
12 immediately, that it would have an impact on our ability
13 to work closely with our consortium partners on
14 completing this project. My number one priority is to
15 complete these projects safely, on time, so they can
16 deliver the benefits they are expected to deliver to
17 customers over the next 60 years. Just to jump into a
18 lawsuit today and say, "Well, I need to start now so I
19 can finish up, you know, by 2020," I don't think that
20 would be prudent at this point, based on my knowledge of
21 the disagreements and where we are in discussions with
22 the consortium. I believe they have a vested interest
23 in looking for a solution to this process without having
24 to go through litigation.
25 **Q** Well, you're aware, aren't you, that Georgia Power

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Company has been, for some time, in litigation with a consortium about very similar claims with regard to noncompliance by the consortium and their obligations under their EPC?

A You know, first, their contract is very different from ours. It's a sealed contract, so I've not had the ability to go through it. My understanding, and I believe they've talked publicly, is that primarily their contract is fixed. So the disagreements they might have in their contract over the same issues in our contract would be evaluated very differently, I believe, from the potential of litigation. I know they have a large number of legal personnel working on those projects, trying to resolve issues. They have not been resolved yet. I think it'll be many years as they continue down the same road before they get resolved. And we're trying not to put ourselves in that position.

Our contract is not fully fixed, which I said earlier we didn't do to preserve ourselves the right to try to protect the lower cost of the project. Their project is significantly higher, and I believe part of that reason is because it was fixed from day one, which we elected not to do, on the total contract. So I can't really compare their decision to move down a legal avenue on an issue — while the issue may be the same in

terms of the construction project, probably a very different evaluation from a legal perspective. I'll trust them to make the decisions that are right for their project.

Q But you haven't reviewed their EPC contract, which is confidential, so you're really speculating about what the content of that agreement is.

A I believe that's what I said. I have not reviewed the contract. I can only rely on what I've heard their personnel say publicly and what the general understanding is in the marketplace.

Q So you say that Westinghouse owes you, or the consortium owes you, or your stockholders, $538 million. Are you aware that Georgia Power's claims in their initial complaint against the consortium were for $928 million for damages due to noncompliance?

A That number sounds correct, but, again, I don't think you're looking at apples-to-apples. I believe some of the costs that are in their initial claim, we resolved early on in our project, so we didn't have to go to litigation. We brought the results of that settlement to this Commission, I believe it was in 2012.

Q So Georgia Power has chosen a different route. They've been in court for some time. They're asking for, you know, close to twice as much from the consortium as you

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say you're going to try to get from them. You've not tried anything other than talking to them. No negotiation — no arbitration, no litigation. And you say you're not litigating or using the other means because you don't want to interfere with your working relationship. Well, what harm has the litigation done that's discernible to the efficacy of construction at the Vogtle site? They're following the same pattern you are.

A I can't speak for the impact it's had on them. I'm just telling you, from my business experience, with a project this large, if you become embroiled in significant litigation before the project is completed — and sometimes you have to do that, but at this point we don't believe we're at that point — I believe it will have an impact on our working relationship, the conversations we have on a day-to-day basis at the plant site about work that needs to be done, to the point that it could — not saying it will, but it could — potentially damage the relationship that would put our ability to complete these projects on time at great risk.

Q What adverse impact has choosing the litigation route had on the progress in completing the Vogtle units?

A I can't speak to where they are with the litigation and

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1 the direct impact it's had on their project.
2 **Q** Can you identify any material difference in the progress
3 towards completion of the Vogtle units as compared to
4 the Summer units?
5 **A** They have not provided me with an analysis or a
6 discussion around that. I can only assume it has made
7 their discussions with field personnel different than I
8 believe they would be if you were not in litigation.
9 **Q** We're just nicer around here, in South Carolina, than
10 those Georgia boys are. I mean, really, is there any
11 material impact of them having asserted their rights for
12 their ratepayers in court, in Georgia, as compared to
13 the route that you've taken of being nice and just
14 talking about it?
15 **A** Well, being nice is not the term I would use in the
16 negotiating room we've had with the consortium. Despite
17 our calm demeanor in South Carolina, we've been pretty
18 firm when we needed to be. You know, we've had some
19 very frank discussions with the consortium, and I
20 believe that is the most appropriate way for us to do it
21 at this point. I think it's great that we've gotten
22 this far along in the project and we don't have
23 significant litigation. As I told you earlier, I'm
24 giving you my experience as a businessman in South
25 Carolina for almost 38 years now that, when you get

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1 embroiled in litigation, it changes your relationship.
2 I mean, it just does. I mean, you can go to a divorce
3 and I'd hasten to say your relationship with someone
4 you're going through a divorce on is probably not the
5 same while you're going through that divorce as it was
6 before you filed the divorce papers. I just think it's
7 human nature, given the challenges you would have in
8 discussions of that nature.
9 **Q** And you think that if this Commission approves, as
10 you've requested, this $538 million as an increment of
11 the total $698 million in additional costs to complete,
12 you think that will enhance your bargaining position
13 with the consortium; you'll be able to come out swinging
14 harder in getting them to come to the table to write you
15 that check. Is that your position?
16 **A** We're going to swing hard under all conditions. I mean,
17 just because the Commission would approve these
18 additional costs to be added to the capital costs of
19 this project is not going to change our position at all.
20 We're going to work extremely hard to recover these
21 costs, to keep these costs to a minimum as we resolve
22 these issues with the consortium. We're not going to
23 take a decision by this Commission as something we've
24 got in the back pocket so we don't have to negotiate
25 very hard. We've made those very statements to the

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consortium; I told them I was disappointed that we did not have some resolution prior to having to come to this Commission, but I was obligated to keep my Commission informed and we were going ahead with the discussion we'd made with the filing with the Commission to update these schedules. I made it very clear to the consortium; we've got language in our testimony before this Commission to commit to this Commission that we'll not change our negotiating efforts and the zeal with which we will look to look out for our company and our customers.

Q So you told us — or the Commission, or the public — last fall, that you would resolve these issues with the consortium, the schedule and the cost issues, and then you'd come to the Commission once you had known-and-measurable evidentiary basis for final costs and a final schedule, then you'd come to the Commission. But you don't have that yet, do you? You don't have the costs, because you've got $538 million up for grabs, in dispute. And yet, you're still here asking the Commission to give you a prudency judgment that that $538 million is freely chargeable to ratepayers. That's your position now?

A I don't agree with the way you stated that. I believe we've done exactly what we told the Commission we were

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1 going to do. We were starting the discussions last
2 fall. I was optimistic at that point that we would have
3 a reasonable chance of resolving the responsibility
4 decision over who would be accountable for the costs.
5 But the numbers we have put in front of the Commission,
6 they are known, they are measurable. We've been through
7 the evaluation of the dollars that were included in the
8 fully integrated schedule that was given us. The costs
9 associated with that have been reviewed in detail by our
10 expert team on site. They've been reviewed by the
11 Office of Regulatory Staff. And we concluded that these
12 costs are prudent, in our opinion.
13 You know, just because we haven't assigned
14 responsibility for the costs doesn't mean you can't
15 determine what the costs to finish the plant would be,
16 at this point, and that's what we presented to the
17 Commission. And I think our testimony spells that out
18 very carefully. We've only included in this capital
19 cost schedule what we are required to pay under the
20 contract. The risk we've got is, if we don't pay the 90
21 percent that was in dispute, we could find ourselves in
22 breach of the contract. And if that happens, the
23 contractor could slow down work or potentially walk off
24 the job, and we'll never have the opportunity to finish
25 these plants on time.

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1 So the numbers are known. They've been gone
2 through with experts internally and externally, and are
3 considered to be prudent. The only remaining question
4 at this point is who will be responsible for paying the
5 costs. The way the Base Load Review Act is employed by
6 the Commission, only actual costs incurred will be
7 billed to customers through revised rates, the carrying
8 costs on that. None of these costs will be billed to
9 consumers until plants come on-line and go into
10 commercial operation. They won't pay a single dollar
11 for the cost of the plants until the plants come on-
12 line.
13 **Q** No, they'll pay the financing costs for whatever you ask
14 the Commission and they, in turn, deem prudent as part
15 of the capital costs of the plant.
16 **A** They will only pay the financing costs if the actual
17 costs are incurred. They could approve this schedule
18 today as part of this proceeding, and we could resolve
19 the issue – if life would be so nice – in the next
20 couple of weeks, and we could find out – if you take the
21 extreme example – where we wouldn't have to pay any of
22 the additional costs. What caused those costs would not
23 be incurred; they would never be charged to customers.
24 No financing costs, nor the actual costs. That's the
25 way the Base Load Review Act functions.

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1 **Q** Well, I see it differently, Mr. Marsh. I'd say there
2 are two other alternatives. One is you could wait those
3 couple of weeks, hold this Application in abeyance.
4 Wait those couple of weeks. Once you've worked out
5 either zero dollars, because you've persuaded — with all
6 that good South Carolina sweet talk — persuaded the
7 consortium to bear the $538 million, then you come in
8 here and it's a much smaller pie we're talking about.
9 Or, or, you could ask your stockholders to pay the $538
10 million, or the 90 percent, carry the load that they are
11 responsible for because you made these management
12 decisions, and complete the plant just as you described.
13 Pay the 90 percent, keep the consortium happy, but write
14 the check out of your stockholders' pocket instead of
15 the ratepayers'. You could do that, couldn't you?
16 **A** I think that option would be the most imprudent step we
17 could take with respect to completing this project on
18 time. I gave the extreme example of if we could
19 complete negotiations in a couple of weeks. We're not
20 going to complete negotiations in a couple of weeks. I
21 don't know the exact timeframe, but it's not going to be
22 in the next couple of weeks.
23 If we don't include these capital costs in the
24 schedule — because they are known, we've estimated those
25 to be reasonable and in accordance with the work that

needs to be done — the financial community will be very concerned about our ability to recover the costs we spend on this project. The shareholders — the shareholders you talk about having to eat this cost until we come back to the Commission, we have to raise capital. We don't have those shareholders today. We'd have to sell new stock, eventually, to pay for the cost of this plant, along with bond sales we have to make up about 50-50. So if this Commission were not to allow these capital costs to go forward as approved, subject to the actual costs to be paid over the long term, I think we're going to have a very difficult time, if not an impossible time finding the shareholders you talk about to step up to the plate and make an investment, because they're not concerned about just receiving a return on their investment; they ultimately want to receive a return of their investment when these plants come on-line and depreciation starts. So I think that would be the worst alternative that could be imagined for this project, and put our ability to finish these plants on time in tremendous jeopardy.

Q All right. But the standard the Commission is going to weigh is not whether or not Wall Street or your stockholders are put in a bind by these cost overruns; they're the standard of whether these additional capital

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costs that you propose to incur are imprudent. That's the standard under the Base Load Review Act, isn't it?

A There has been no evidence provided in this case to support the fact or the contention that these costs could be imprudent. We —

Q That's not my question. Sorry for interrupting, but my question really is, the standard is imprudence — that's what you've testified to — under the Base Load Review Act. That's the standard, isn't it?

A My understanding of the Base Load Review Act is, once the initial capital cost schedule has been provided, which we did in 2008, the company would be authorized to return to the Commission to make updates to that schedule, which we have done on a couple of occasions, and based on the evidence presented in those hearings and the information provided by the company, those amounts are deemed to be prudent unless there's evidence provided about their imprudence.

I know of no evidence in this case where someone has challenged the costs and said they're imprudent. This schedule has been reviewed by our team, it's been reviewed by ORS, and the Office of Regulatory Staff concluded that these costs were prudent and the company's filing was appropriate.

Q We look forward to you listening to the rest of the case

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1 that's being presented here, on that score, Mr. Marsh,
2 but the standard of prudence is what this Commission is
3 going to have to weigh. Are you aware of the position
4 that your company has taken on, with regard what the
5 definition of "prudence" is that should be employed by
6 this Commission?
7 **A** I've talked to the Commission on numerous occasions
8 about my definition of "prudence." I don't know if our
9 company has written one. You may have one you want to
10 present to me, but I —
11 **Q** I want to share with you the final brief of Respondent
12 South Carolina Electric & Gas Company, in the appeal of
13 South Carolina Energy Users Commission[sic] at the State
14 Supreme Court. And it's a document that I think you'll
15 recognize, signed by Mr. Chad Burgess, January 21, 2014.
16 I'm going to direct your attention to page 22 of that
17 document [indicating].
18 **A** [Indicating.]
19 **MR. BURGESS**: [Indicating.]
20 **BY MR. GUILD:**
21 **Q** And I'll ask you, if you would, please, Mr. Marsh — I
22 made an asterisk by a line with some quotation marks
23 that begin with the word, "'Prudence' is universally
24 understood..." Would you read that quote, please?
25 **A** Yes. It says, "'Prudence' is universally understood

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1 under a prudency test, a standard by which management
2 action is to be judged, as that of reasonableness under
3 the circumstances, given what was known or should have
4 been known at the time the decision was made or action
5 was taken."
6 **Q** It cites a case, Georgia —
7 **A** It cites the case of Georgia Power Company versus
8 Georgia Public Service Commission.
9 **Q** You don't need to read the citation, but, thank you.
10 And you'd acknowledge that that is the position that the
11 company took in that filing with the Supreme Court
12 [indicating]?
13 **A** You know, I'm not a lawyer. I will certainly
14 acknowledge that's what it says, but I think to get the
15 feel for the whole decision that was reached by the
16 Supreme Court, you'd have to read that whole document.
17 I just read a —
18 **Q** And I want to —
19 **A** — piece of it.
20 **Q** — show you the whole decision. This is the Georgia
21 Power decision that your lawyer cited as the appropriate
22 prudence standard. I'll put that before you
23 [indicating].
24 **A** [Indicating.]
25 **Q** And the language that you just read is the underlying

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1 language, but would you read the rest of that text that
2 follows after the underlined language, about the
3 definition of prudence, that your lawyers argued,
4 please?
5 **A** [Indicating.]
6 **MR. BURGESS**: [Indicating.]
7 **WITNESS**: Did you say you want me to read the
8 underlined part, or you want me to start reading
9 after that?
10 **BY MR. GUILD:**
11 **Q** Start reading after it, please, Mr. Marsh.
12 **A** "The concept of prudence implies a standard or duty of
13 care owed to others. In building a nuclear power plant,
14 the Nuclear Regulatory Commission requires the utility
15 to exercise a high standard of care in order to protect
16 the public health and safety. Similarly, given the
17 costs involved and the rate impact of those costs on
18 monopoly customers, this Commission finds that the
19 utility should be held to a high standard of care in
20 making decisions and taking actions in its planning and
21 constructing such a project. Thus, while the standard
22 to be applied is reasonableness under the circumstances,
23 where the risk of harm to the public and ratepayer is
24 greater, the standard of care expected from the
25 reasonable person is higher. Given this standard, a

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1 reasonable person is one who is qualified by education,
2 training, and experience to make the decision or take
3 the action, using information available and applying
4 logical reasoning processes."
5 **Q** All right. Thank you. Mr. Marsh, I take it that you
6 would accept that language, description, by the Georgia
7 Court, aptly captures what you believe to be your
8 competence in making judgments about the terms on which
9 this nuclear project is going forward?
10 **A** It sounds like a reasonable explanation of the
11 activities we've undertaken to identify these additional
12 costs and evaluate those costs prior to presenting them
13 to the Commission as an amendment to the capital cost
14 schedule.
15 **MR. GUILD**: Thank you, Mr. Marsh. That's all
16 I have.
17 **CHAIRMAN HALL**: All right. Commissioners,
18 questions for Mr. Marsh? Commissioner Randall.
19 **COMMISSIONER RANDALL**: Thank you, Madam Chair.
20 **EXAMINATION**
21 **BY COMMISSIONER RANDALL:**
22 **Q** I've just got one question. We've had several, sort of,
23 thoughts and reactions to the proposed reduction on the
24 return on common equity from 11 to 10½ in the settlement
25 agreement. Have you had any reaction from the financial

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1 community regarding this reduction, and how do you see
2 that the financial community actually views this
3 proposed reduction?
4 **A** I don't think they've reviewed the 10½ by itself. I
5 think they've taken that as part of the comprehensive
6 settlement agreement that was reached with the ORS and
7 Energy Users. I believe, in my experience, they believe
8 it was a good decision on the company to try to settle
9 these issues because it limits or could mitigate
10 potential, you know, appeal of the decision by the
11 Commission. It certainly shows that one of our
12 significant intervenors, that's been involved in all of
13 our cases since we started in 2008, has come to an
14 agreement with the company on what we believe is a
15 reasonable and fair decision on the issues that were
16 involved in this case. I think they've reacted
17 positively. It would certainly be a sign to the
18 financial community that the Commission – if the
19 Commission were to adopt the settlement – that it has
20 continued its fair and reasonable approach of applying
21 the Base Load Review Act, upon which we depend heavily
22 for our future financing.
23 **COMMISSIONER RANDALL**: Thank you.
24 Thank you, Madam Chair.
25 **CHAIRMAN HALL**: All right. Thank you.

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Commissioner Elam.

EXAMINATION

BY COMMISSIONER ELAM:

Q Good afternoon, Mr. Marsh.

A Good afternoon.

Q The reduction — let's see if I can clear up something that I heard earlier. The reduction in the ROE from 11 to 10.5 —

A Right.

Q — represented, according to ORS, a $15 million savings, over what time period? Is it the construction schedule, or is it the entire anticipated life of the plant?

A No, it would just be during the construction schedule. While these plants are under construction, under the Base Load Review Act, they would have applied the rate of return that's been agreed to. So the 10½ percent would apply until Unit 2 and Unit 3 come on-line. So at the time those units come on-line, you will transition to the then-effective ROE for the core business, and that would be the ROE that would be there into the future.

Q Okay. You've been asked some questions about some comparisons to Georgia Power. Do you know, off the top of your head, a comparison of the number of electric retail customers SCE&G has, as opposed to how many

Georgia Power has?

A I don't know that number, specifically. I can confirm that it's a lot more than we have in South Carolina.

Q Is it on an order of double, or triple?

A I'm confident it's at least double. It may be three times, just for Georgia Power.

Q Okay. And as to Georgia Power versus SCE&G, just the total megawatts of generation, the difference between the two companies, do you know that?

A I don't know the specific amount that's owned directly by Georgia Power Company. They are part of a holding company known as the Southern Company, and there may be generation that is co-owned and some of those megawatts are allocated between companies. I just don't know that, specifically, but I would expect their generation megawatts that either they own or have been assigned to them from the corporate entity would be of a magnitude consistent with the number of customers.

Q Okay. Following up on your discussion with Mr. Guild about negotiations with the consortium, when did those start?

A We started, I believe it was last September. We received the updated schedule from them in August, and that followed shortly thereafter with the costs associated with that schedule.

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1 **Q** Okay.
2 **A** So when they decided to make an effort to bill that
3 additional cost to us, we started challenging them on
4 the costs. That's not to say there weren't some
5 preliminary discussions, because we expected it to be
6 coming. But we certainly didn't get into direct
7 negotiation of that, probably until September of 2014.
8 **Q** Okay. At September 2014, were you in agreement with the
9 consortium about what the dollar figure value of that
10 was, or was that later?
11 **A** I don't know exactly when the dollar amounts were
12 presented to them in the various discussions. I don't
13 think that occurred at one particular time. As I told
14 Mr. Guild, as we got into the schedule and had a chance
15 to evaluate the numbers and, you know, go through and
16 identify what we specifically thought was not
17 appropriate — I mean, this is a schedule that's
18 thousands of lines long and has thousands of pages of
19 detail behind it. So we didn't get the schedule on a
20 Monday and we were through with it on a Wednesday. It
21 took us weeks and probably several months to get all the
22 way through the detail on that schedule, because we
23 wanted to determine first if we thought it was
24 achievable, and then we looked behind the hours and the
25 costs behind that to determine what we thought was

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1 appropriate and not consistent with the EPC contract.
2 **Q** Okay. Thousands of lines. Without getting into a
3 dollar figure, has there been any agreement about any of
4 those sub-lines, as far as whose responsibility
5 something or the other is, and you're just trying to get
6 through to the end? Or is there no agreement on
7 anything to this point?
8 **A** No, there were some dollars in there that we did agree
9 that were appropriate, and I believe Mr. Jones is going
10 to present some change orders in connection with that.
11 We identified a couple of other costs that we believe
12 are appropriate in the revised schedule they gave us.
13 The ones we pointed out in the filing here and we've
14 indicated we're only going to pay 90 percent of are the
15 ones we dispute under the contract.
16 **Q** Can you give the Commission a rough idea of when you
17 would expect some finality to that process?
18 **A** I wish I could give you a specific date. The consortium
19 is not in agreement with our position, so we continue to
20 negotiate it extremely hard. We've had a number of
21 discussions. There are some areas I believe we're
22 starting to find some common ground. I wish I could
23 give you more detail, but those are confidential
24 discussions and, you know, we certainly haven't signed
25 anything that would say we think we're on the right path

on these three and upset on those five. We're still continuing to work through that process very hard.

Q So no idea whether it would be this year or not?

A I would like to think we could complete it this year. That would certainly be a goal of mine. I believe the consortium would certainly like to resolve it by the end of the year. But I can't commit to an exact date. That's certainly a reasonable target, though.

Q Okay. Tell me what the procedure will be if, in fact, you convince the consortium to take responsibility for half of it, as —

A Right.

Q — an example, and these have already been approved as capital costs. Will there be some mechanism for anything that perhaps ratepayers have paid, to that point, to be credited?

A Well, assume we pay the 90 percent — I'm just going to give an extreme example. Let's assume we paid all of the 90 percent, and we reach a resolution where we recover all of the 90 percent. Certainly, we would immediately credit that back to the cost of the project, and in the next revised rate filing, that would be reflected in the customers' rates because they're paying for the carrying costs on that amount.

Q How will that come back? Just in the cost of the

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1 project, or — there's no other rate mechanism as far as
2 any change in the capital costs?
3 **A** Well, if we were to recover monies from the consortium
4 that we had paid, we would immediately credit those
5 dollars to the project. So the capital costs we've
6 eventually paid for the project would go down
7 immediately. Those actual dollars paid are what we use
8 to file our revised rates adjustment on an annual basis,
9 so your next revised rate adjustment would be on a lower
10 capital cost, which would give you the credit on that
11 carrying cost for customers in bills going forward.
12 **Q** Okay. On page 11 of your prefiled testimony, you talk
13 about the increase in the forecasted benefit of
14 production tax credits, due to a smaller number of
15 competing utilities. Do you have any concerns about
16 having both units meet the required placed-in-service
17 date of prior to January 1, 2021? And, I guess, the
18 first unit.
19 **A** Yeah. Well, the first unit — the first new unit, Unit
20 2, I don't believe is under as much risk as the second
21 unit, because if it's completed on time in 2019 it will
22 be well within the limits established by the Treasury
23 for the production tax credits. Certainly, unit two is
24 close to the deadline, which is why we're so concerned
25 about keeping progress moving forward on these units and

not doing anything to delay that progress. That's really why the 90 percent mechanism was put into the contract, so if we found ourselves in a situation where there was a dispute, that work could continue while we made the effort to resolve the dispute.

Q Is the substantial completion date usually the same as the placed-in-service date?

A There are probably a variety of opinions on that. We have assumed, for our purposes, it's the commercial operation dates. There are some out there that may be of the opinion — I've heard discussions that that could be when the fuel is actually loaded into the reactor and you're producing fuel — I mean, producing electricity. The credit is linked to the production of electricity, so that's a position that we certainly might make some valid effort down the road to evaluate that.

Q In your testimony there on page 11, I guess starting at line four going to the end of line five, you talk about $1.2 billion in interest costs, in future dollars. We've been — throughout these proceedings, there's been a lot of discussion of money in terms of 2007 dollars.

A Right.

Q Why are you talking about future dollars now, here?

A These are debt issuances that have already been sold to the public, and this is interest that will be paid in

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the future, over the life of those bonds — in some cases, 30-year bonds, and in a couple of cases, 50-year bonds. So we've taken the actual amount of interest that would be paid over that period.

Q So, does that necessarily make projections about interest — or, that's a fixed rate on the bonds?

A Those are fixed rates on the bonds. All the bonds that have been issued at this point have been fixed-rate bonds.

Q On page 46 of your prefiled, at line 16, you talk about SCE&G's role as owner of the project. Can you explain a little bit what "owner of the project" means? Does that have something to do with your relationship vis-a-vis Santee Cooper? Or what is special about "owner of the project"?

A There's nothing special there, other than we are an owner of the project, with Santee Cooper, our partner. What I was trying to say was, as an owner, we're going to make sure we maintain all of our claims, to try to keep as much leverage on Westinghouse and CB&I as we can, to eliminate these costs that we believe are not appropriately charged to us.

Q Okay. So Santee Cooper is not involved in negotiating with the contractors.

A Oh, no, they're actively involved with us.

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Q Okay.
A Lonnie Carter sits with me on many occasions, as well as other people on his construction team at the plant site. They are in every conversation with us; they're in every negotiation meeting with us. There's nothing we don't do, from a negotiating perspective, that's not discussed and agreed to with Santee.
Q Okay. Maybe I phrased it a little badly.
A All we're trying to say —
Q They're not in separate negotiations with the consortium.
A Oh, absolutely not.
Q Okay. So whatever applies to SCE&G will apply to Santee Cooper, as well?
A If we reach an agreement, I think it's comfortable to say that it will be an agreement that all the parties sign onto, SCE&G and SCANA — SCE&G and Santee Cooper.

COMMISSIONER ELAM: Nothing further. Thank you.

CHAIRMAN HALL: All right. Commissioner Hamilton.

COMMISSIONER HAMILTON: Thank you, Madam Chair.

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EXAMINATION

BY COMMISSIONER HAMILTON:

Q How are you, Mr. Marsh?

A Doing fine.

Q Mr. Marsh, on page 29, line 13, of your prefiled direct testimony, you state that the company has approximately $3.4 billion of debt and equity that remains to be raised.

A That's correct.

Q Okay. Could you tell us, or provide us with the approximate amounts and types of the instruments to be used, and the dates?

A The timing of those issuances would be consistent with the additional construction expenditures as they occur. So we would look to raise debt or sell equity to finance the project to support the dollars that are being expended in any particular calendar year. It's not a perfect match, but you're not going to sell an odd number of bonds. You're going to sell 100 million or 300 million; you're not going to sell 123 million. It'll be an even amount.

We look at the actual construction expenditures that we expect to spend in a particular year, and we divide that 50-50, because we think about 50 percent of that should be debt and 50 percent should be equity, in

order to maintain our bond ratings. Those are the amounts that we'd sell in those particular years, so it would follow the construction schedule.

Q All right. Are you following, or does the company continue to utilize its original financing plan for the project?

A We have. We made it clear, as we started out, that we didn't feel the need to take the government-guaranteed — the government-subsidized loan guarantees that were offered. We've been able to approach the marketplace on extremely favorable terms. We're in a very low-interest-rate environment, and that's evidenced by the $1.2 billion we expect to save — that we will save on the issues we've issued to this point. I believe it's reasonable to expect that that number will grow, because, as we continue to issue debt, we've got debt — I think it's about $1½ billion hedged today, which means we've locked in the interest rates for just slightly over 5 percent. Well, that's less than the 6.4 we estimated originally, so that'll produce additional savings that aren't included here, that will go directly to customers. The company does not keep those savings; that's passed on directly to customers. So we'll continue to do that and continue to use those instruments. I've been asked in the past, and I believe

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the Commission has asked us in the past, if we were considering the federal loan guarantees.

Q Yes, sir.

A That's a program we have watched since its inception. We have tried to understand as much about that program as we can. The type of debt that's issued on that program is principally amortizing debt, which means, if you sold a bond issue today, you would pay back a portion — you would pay the interest and a portion of the principal back, over the life of that bond. That's very different from what we have in place where we issue a 30-year bond, and you don't have to pay any principal until the end of the 30 years. So if we were to go into the debt — the federal loan guarantees, we would be refinancing capital costs throughout the life of those bonds, which exposes us to great interest-rate risk. I can't predict the future, but I think it's more likely that interest rates are going to go up than they're going to go down, from where they are today. So we've been locking in these low rates and have not felt the need to do the loan guarantees. We also don't know the terms and conditions that come with those loan guarantees. We know there are always terms and conditions and covenants with any deal you would do like that, and we've not been provided those. If we are ever

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provided those, we will certainly do the evaluation, but I think it would be a stretch for me, at this point, to say they would be favorable to what we've been able to secure in the marketplace at this point.

COMMISSIONER HAMILTON: Thank you, very much, Mr. Marsh.

Thank you, Madam Chair.

CHAIRMAN HALL: All right. Commissioner Howard.

EXAMINATION

BY COMMISSIONER HOWARD:

Q Good afternoon, Mr. Marsh.

A Good afternoon.

Q Mr. Marsh, one of the reasons, I guess I'll just say, I'm asking you the questions is because you're the first person up. That gives you the right to pass them on down, if you feel someone else is more qualified.

A I've been on both sides of that test.

[Laughter]

Q I just wanted to make sure. On page 26 – 27 and 28 of your testimony, you said the market is becoming extremely sensitive to SCE&G's regulatory risk in the nuclear context, and you raise the possibility of not being able to finance completion of the units. What plan, if any, do you have, if the financing becomes

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1 unavailable?
2 **A** We have in place lines of credit that we've extended,
3 that apply to SCE&G, where, if we had a short-term
4 period where credit were not available, we could call on
5 those lines of credit, which I believe would transfer
6 into long-term debt — subject to check, on that piece.
7 So we have a backup plan with lines of credit if we had
8 a point in the marketplace where we couldn't sell bonds.
9 I think the biggest concern on my part would be if the
10 Commission were not to support the project as it had in
11 the past in allowing our adjustments, when they were
12 deemed to be prudent, would send a message to the
13 marketplace that there's a greater risk on the recovery
14 of your investment if you make that in SCE&G. That
15 doesn't mean we couldn't sell bonds. There's certainly
16 a possibility you couldn't sell bonds. But they would
17 be a higher interest rate. Just like we're going to
18 benefit from higher interest rates over the next 30 and
19 50 years on the debt issues we put out today, likewise,
20 we would be penalized if we sold debt today at a rate
21 that was higher than what we anticipated when we
22 forecast the project for the Commission.
23 So the risk is not just that you couldn't finance,
24 but that, if you could finance, it would be at
25 significantly higher rates. That's where the BLRA has

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been so important to us, because that's the mechanism that the financial community is relying upon to give them a reasonable level of comfort that they will be able to recover their financing costs.

Q Well, do you plan on utilizing any equity financing?

A We do have plans to do equity financing, as the need arises. Since about 50 percent of the construction would come from equity, you know, whatever remains to be spent, you could take half of that and we'd plan to, you know, put equity into this project or sell additional stock as necessary to raise the equity to support the project. So we will be doing both.

Q What is your debt-equity ratio today, and what would it be if you had to undergo one of these plans? I know that it — the last part of that question is strictly speculative.

A You know, basically, today, for the project itself, it's about 50-50, because that's our plan. It may not be exactly that, because you can't equal an — issue an exact amount. So from a project perspective, on a consolidated SCE&G, I think it's about 54 percent equity — 53 to 54. So that's just a little bit higher.

If we had a negative decision on the project, we may have to sell more equity to support the bond ratings, which would drive costs up on the project,

because the return-on-equity cost is generally higher than the interest rate you pay on bonds. So it's hard to say exactly what it would be. If we had an adverse decision from the Commission, I think we'd have to analyze that carefully and respond to the financial community. But their response would be negative; it's just a matter of how negative it would be in terms of our ability to raise the capital.

Q The last two bond issues, if I'm not mistaken, both of them were for 50 years?

A They were.

Q One of them was oversold, and the last one was — I hate to use the word "undersold," but you didn't sell it in the first —

A You know, we were many times oversubscribed on the bond issue for the first 50-year bond issue. I believe it was only the sixth 50-year bond that had been sold, and the lowest that had ever been done by a utility, so we set a record with that sale. The second 50-year sale was a little more difficult. We had to raise the interest rate just a little bit, in order to have enough investors come into the deal to make the sale. We still got a favorable rate. It was 5.1 percent, compared to what we originally estimated at 6.4.

But I think, in my professional opinion, the

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1 concern in the marketplace, you know, had to do with
2 this proceeding we're in today and the risks associated
3 with changing your capital cost schedule and maintaining
4 the support at the Commission. They watch those issues.
5 They're closely watching this examination to understand,
6 you know, where the Commission will land at the end of
7 the day. As I mentioned earlier, I think the settlement
8 agreement was a positive sign to the marketplace that
9 the regulation is working well with respect to the Base
10 Load Review Act, and the Commission will be making its
11 decision accordingly.
12 **Q** Why did you use a 50-year instead of a 30-year, which
13 would probably have been more attractive to some
14 investors, I would think? Why — how did you come up
15 with the 50-year?
16 **A** We don't like to have all of our issues mature at the
17 same time. We also like to try to match up the lives of
18 our assets with the lives of our bonds, trying to match
19 that up as closely as possible. Since this project is a
20 60-year-life project, once these plants come on-line, we
21 believed it was appropriate to include a reasonable
22 amount of 50-year bonds in the project. Otherwise,
23 whoever's in charge of financing this company 30 years
24 from now is going to wonder why Mr. Addison sold all
25 those bonds that come due at one time —

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1 [Laughter]
2 — and they'll have to be there financing those, you
3 know, back-to-back-to-back, without a new project being
4 on board. We know that's the case now, because we're
5 building the project. So we've done 30-years and 50-
6 years; I wouldn't be surprised, before we're done, to do
7 some 10-year bonds mixed in with those, so we can spread
8 those maturity dates out and not have all that risk come
9 due at once.
10 **Q** The license is 40 years, plus a 20 renewable?
11 **A** It's a 40-year license. Once you've been operating for
12 20 years, and Mr. Byrne can confirm this, at that point
13 you have the right to do the evaluation study to have an
14 additional 20 years added to your license.
15 **Q** I guess my first thought was, a 40-year bond because
16 theoretically that's the life of the asset, as we know
17 it now.
18 **A** I've not seen any 40-year bonds in the marketplace.
19 That would be an unusual term. Generally, the 30 has
20 been the most popular — 10s, 20s, and 30s. The 50 is a
21 new bond for the marketplace, but for the right type of
22 asset and for the right companies and support, it's
23 receiving some good attention.
24 **Q** Since the — just talking about the Base Load Review Act,
25 since the Base Load Review Act, how much has it

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1 increased residential rates just for the nuclear plants?
2 How much have residential rates increased from the
3 beginning till today?
4 **CHAIRMAN HALL**: Mr. Marsh, will you pull your
5 microphone closer, please?
6 **WITNESS**: Oh, I'm sorry [indicating]. I got
7 comfortable because it was working.
8 [Laughter]
9 I believe that number is around, I'm going to
10 say, 17 to 20 percent. I don't have the exact
11 calculation here in front of me. Based on what
12 we've seen since we started the plants in 2008,
13 adding up the increments that have been applied in
14 those years, I believe it's between 17 and 20
15 percent.
16 **BY COMMISSIONER HOWARD:**
17 **Q** And what do you anticipate between now and the
18 completion date, estimated?
19 **A** From a total retail perspective, I believe that number
20 goes to around 35 percent, in total, since you have
21 another number on top of that between now and that time.
22 **Q** Okay.
23 **A** But I want to point out — I know we're focused a lot on
24 rates, and we should be, but the amount that impacts
25 customers is not just the rate increases; it's the

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1 impact of fuel costs and the production tax credits.
2 And our current forecast actually shows, when these
3 plants come on-line, based on the costs we've got today,
4 and you apply first the lower cost of nuclear fuel —
5 because it is cheaper than the coal or natural gas — and
6 when you combine that with the production tax credits,
7 you're going to see a leveling of rates or a decrease in
8 rates at that time.
9 So I understand your question, and I want to
10 respond to that, but that's one piece of what customers
11 see. That's just the base-rate side that's impacted by
12 fuel and production tax credits. And that's the
13 challenge that I think we've missed sometimes in these
14 proceedings is, we're just focused on the capital costs
15 — which is important. We need to focus on that. It's
16 very important, because it's the largest cost of the
17 impact to customers. But we can't discount fuel and
18 production tax credits.
19 **Q** I feel comfortable in asking you about one milestone,
20 and I'm sure you know what the milestone is. It's 146.
21 Are you familiar with an Milestone 146?
22 **A** Well, it's got to be the last one, because there are 146
23 of them. I don't know —
24 [Laughter]
25 **Q** I figured you would remember. My question's on

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1 production tax credit.
2 **A** Yes, sir.
3 **Q** One forty-six says the completion date is June '19?
4 June 2019?
5 **A** Right.
6 **Q** Production tax credit runs out in December of that year.
7 **A** Well, to qualify for the credits you have to have your —
8 you have to do three things. You have you file your
9 license, which we did. You have to pour your basemat
10 for the reactor, which we've done for both reactors, so
11 we've met both of those two requirements. And the third
12 is, your plant needs to be in operation by the beginning
13 of 2021. So if we finish Unit 2, the first unit, in
14 2019, it will clearly qualify for the credits. If we
15 finish Unit 3 in June of 2020, it will qualify for the
16 credits. And once you qualify for the credit, you're
17 eligible to receive those for an eight-year period, once
18 you become eligible to qualify for the credits.
19 **Q** Well, my question is a confusing thing in my mind, and I
20 hope you can clear me. We have a boundary of 18 months
21 on each of the milestones.
22 **A** That correct.
23 **Q** That milestone, 18 months, would take it beyond 2021.
24 It would take that — it would have — I don't want to say
25 flexibility, but according to milestones, they would

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have another year to do the project over there. So my question to you is, what is involved in changing that boundary to six months, so the boundary would be in line with the production tax credit deadline? Can you change the boundary? I don't know; I'm asking the question of somebody. It just seems like, if that boundary was the same as the production credit deadline, there would be more of an incentive to get the project finished within that boundary?

A Right. Certainly, we want to achieve the deadline so we make the deadline of 2020. There does remain an opportunity, we believe, for us, if we find ourselves up against that deadline, potentially to go to Treasury or to go to Congress and have those deadlines extended. That certainly is not an absolute. It's something we have already begun to evaluate and try to define what a strategy might look like to accomplish that.

I would hate to spend the 12 years we've invested in completing these plants and miss a deadline by a very short period of time and not qualify for the credits. So it's something I can't guarantee, but we would make every effort to ensure we would qualify for the credits.

You know, the Commission certainly has the authority to move that deadline back, if it wants to. You know, we had originally asked for 30 months. That

was adjusted to 18 in the original hearing, and I think that's been reasonable. That's worked well for us. It has made us pay attention. I can assure you, without that deadline being moved back to 2020, it's got our full attention. So, certainly, the Commission could do that. I would think, as we approach that 2020 date, if we have issues, my commitment is we would be back before the — back and forth — back in front of the Commission to explain the exact situation and what our strategy has been to resolve it, so our customers do qualify for the credits.

Q This is, for lack of a better word, I'll say a cliché. There's a cliché that's going around right now of, what keeps you awake at night? With all the moving parts of this nuclear power plant, which is one that would keep you awake the most at night?

A You know, certainly, it's staying on the schedule. I don't have nearly as many concerns as I did when we started the project about being able to build the facility. As we told the Commission, this was a new plant, it was a new design. We knew they were under construction in China. As we have monitored their construction in China, we've become more and more comfortable with the constructibility of the plants, and physically their plants are almost complete. The first

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unit is complete. I will anxiously watch as they load fuel and they heat the plant up and it produces electricity for the first time.

I think making sure we finish these plants on time is my biggest concern. I want to make sure we do what it takes to bring these plants in on time and capture the production tax credits for the benefit of our customers.

Q Thank you, very much.

A Yes, sir.

CHAIRMAN HALL: Commissioner Whitfield.

VICE CHAIRMAN WHITFIELD: Thank you, Madam Chairman.

EXAMINATION

BY VICE CHAIRMAN WHITFIELD:

Q Good afternoon, Mr. Marsh.

A Good afternoon.

Q I've only got about four questions for you, and two of them you've already practically answered or at least touched on. The first one has to do — you kind of answered it in a response you gave to Commissioner Hamilton about the federal loan guarantees, and you explained that real, real well. I guess my only remaining question about that is — and, again, not to Monday-morning quarterback that. I know Georgia sought

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them out for Vogtle years ago, and you did not. But I thought there was a — was there not a deadline as to what point you could still get those if you chose to? Or is that still an option? You've still got $3.4 billion worth of capital to raise. Is that something that —

Q There have been deadlines along the way to stay in the pack that would qualify for the loan guarantees. You had to pay certain fees to go to the next level. We were paying these fees to the federal government to stay in the game.

Q Or negotiate the fee, yes.

A So we paid our fees to a certain point. I may need to verify this, but my understanding is we're no longer paying fees because they've not provided us the information we need to continue the evaluation. So, to put it in simple terms, the ball is in their court. If they want us to consider the loan guarantees and their options, they're going to have to provide us with the details we need to complete the evaluation. I'm not concerned if they never provide it to us, because I think our financing we've got in place is going to be extremely tough to beat, with the locked-in interest rates we've got, with none of the covenants and restrictions that come with that.

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1 So I'm comfortable with what we've done, and I
2 don't regret — even looking back today. And Georgia has
3 done that. I'm comfortable they've got a lot of new
4 requirements they're going to have to meet in connection
5 with those loans, to satisfy the federal government,
6 that we won't be subject to.
7 **Q** I think y'all stated that years ago, that —
8 **A** We did.
9 **Q** — there were a lot of strings attached, if you will,
10 with —
11 **A** Yes.
12 **Q** — those loan guarantees. And you've certainly explained
13 it in your answer to Commissioner Hamilton as to why you
14 haven't done it up to this point, and it looks like the
15 possibility of you doing it is getting slimmer and
16 slimmer by the day, I guess.
17 **A** Where we sit now, we're not moving forward unless they
18 provide us additional information to do the evaluations.
19 **Q** Another question I had that you kind of touched on a
20 little bit with Commissioner Elam: We were talking
21 about any monies that might come back as a result of
22 your ongoing negotiations with CB&I and, of course,
23 Commissioner Elam I think used the example of what if —
24 of course, presently, we are still operating under the
25 old schedule and costs, but if this were approved and if

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1 some costs had been put in place and then, somewhere
2 down the road — and we hope for the ratepayers' sake
3 that you do get all of this that you can. Actually, we
4 hope that you get 100 percent of it, but if you were to
5 get a quick resolution or a resolution down the road,
6 and some of the costs were already in place, and I think
7 you said here on the stand that you would return these
8 funds through a revised rate proceeding. But somewhere
9 in somebody's testimony, I thought I read the mention of
10 it being under a fuel proceeding. And this may be a
11 legal question, but the way I read the Base Load Review
12 Act, it possibly could be allowable in a fuel
13 proceeding. But we've got so much else packed into a
14 fuel proceeding now, do you think it would be best to do
15 it in a revised rate proceeding where you educate the
16 public, if you will, and get good press, whatever you
17 want to say, by showing that you have recouped these
18 costs?
19 **A** If you wanted to give the dollars back as quickly as
20 possible and put it in consumers' hands, the reduction
21 to fuel would probably be the quickest way to do that.
22 Through the idea I put in front of you earlier, if we
23 received a refund, it would be credited to the capital
24 costs of the project. Consumers would continue to pay
25 the carrying costs on that project, but that would be a

lower rate than an immediate refund through a fuel cost. That would typically be what's done, is to lower the capital costs, because it is a return of the capital costs. But I think the Commission would be within its bounds to evaluate the best way to handle that when it came back in, which is why I said we would be back in front of the Commission to make sure it was clear how it was to be treated.

Q Well, that's certainly something that we would have to — and that would be a good problem to have, and we hope you have that problem.

A I anticipate having that problem and being back before you, and certainly any options that would be available to us, the Office of Regulatory Staff would be able to fully vet for the Commission and also give you a recommendation.

Q Another question — and it certainly looks like, you know, what Commissioner Howard asked you, what was your greatest worry at night. And certainly I see — I think we all do — that meeting these deadlines to still receive the federal production tax credits is a huge, huge goal, and it's going to be a delicate walk, obviously, to do this. But I think you said earlier on the stand, maybe when you were answering Mr. Guild's questions, you mentioned it would be about $1 billion on

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one, but if I'm doing the math right, it's going to be about $2.1 or .2 billion for both units — that is, if Unit 3 makes the deadline, as well.

A You talking about production tax credits?

Q Yes, sir.

A Yes, it's about $2.2 billion in total.

Q Yes, sir. And we're talking full-blown dollar for dollar. We're not talking about a deduction; we're talking about full-blown dollar-for-dollar federal tax production tax credits.

A That 2.2 would be what I call the grossed-up amount; that's taking the actual amount of the credit and grossing it up so you could see what the customers would receive. They would receive the $2.2 billion benefit.

Q That's where I was headed.

A Yes.

Q Yes, sir. And, lastly, one of the things that ORS is charged with in representing the public interest, one of the three legs is the financial health of all of our utilities. And one question that I seem to understand that Wall Street has a concern about is possibly the financial health of our contractors — of CB&I or Westinghouse — and I have kind of, in my mind, said, "Well, when we started this project, they weren't called CB&I; they were Shaw Group." I've kind of mentally

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1 thought these same people that -- the high-level
2 engineers and people on the consortium's management team
3 and top engineers are going to be with them whether it's
4 Shaw, CB&I, whoever — mergers and acquisitions happen.
5 This is a changing world; we know that. But then — and
6 I'm asking you this because I know you've got an
7 accounting background, but if you want to punt to Mr.
8 Byrne, because I read in his testimony I think where he
9 has some concern about being able to — about the
10 turnover in personnel at the consortium. And could you
11 address that, or if you want to punt to him, I would
12 certainly —
13 **A** I'll let Mr. Byrne address it too, but, you know, we
14 have been concerned about some of the turnover at the
15 higher levels within the organization. We expected to
16 see some turnover when it changed from Shaw to CB&I.
17 That is not unusual. I will say, even though they've
18 had turnover, they generally do a pretty good job of
19 communicating with us and we get the right to interview
20 people they've got coming in, to give them feedback on
21 whether or not we think that person will fit with the
22 team and meets the qualifications. In certain
23 positions, we have an absolute right for that; in
24 others, it's their right, but the relationship is such
25 that they usually involve us at some point during that

process. It'd be nice if they had the consistency that we've had on the project. All our senior leadership team that was here in 2008 is still in place, and you should expect to see them all the way through the completion of these projects. We're working hard to find that level of commitment on the other side.

There are people, especially on the Westinghouse side, that have been there from day one, and those relationships have been good, even though there's been turnover in other positions.

Q I guess, separate from that, from the turnover in personnel, how about the financial health of CB&I? Do you have any concerns there, or could you share any insight there?

A We watch it carefully. We have a credit metrics team within our financial organization that evaluates their creditworthiness. We watch their activities on Wall Street, to understand what they're up to and if we have any concerns we need to put forth in front of them.

VICE CHAIRMAN WHITFIELD: Well, thank you, Mr. Marsh.

That's all I have, Madam Chairman.

CHAIRMAN HALL: All right. Thank you.

Commissioner Fleming.

COMMISSIONER FLEMING: All right.

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1 **EXAMINATION**

2 **BY COMMISSIONER FLEMING:**

3 **Q** Good afternoon.

4 **A** Good afternoon.

5 **Q** I didn't expect you to be here this time of day, sitting
6 where you are. I thought we'd be finished with you long
7 ago. But I just wanted to touch on one particular area
8 that you mentioned in your testimony and Mr. Guild
9 brought out. But the EPA's Clean Power Plan —

10 **A** Yes.

11 **Q** — I know the final plan is not out yet, so we're all
12 waiting anxiously to see what it has to say. But could
13 you talk a little bit about the benefits of these
14 nuclear units that can prove to be beneficial not only
15 to the company but to the customers and to the State, as
16 we look toward meeting the standards that they may
17 potentially define?

18 **A** I'll do my best to do that. The proposed rule that came
19 out, I believe it was last summer, was very complicated,
20 very detailed in terms of how they apply the application
21 of the formulas in there that derive the targets the
22 companies have to achieve. As we dug into the
23 determination of the targets, what we learned was, in
24 terms of the base-load capacity or generating capacity
25 that was in place today, based on which they set the

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1 targets, they had already assumed that the nuclear
2 plants were in operation and running at a 90 percent
3 capacity factor. So that has an impact on setting our
4 target. In essence, that would put us in a position
5 where we would not receive the full benefit that we will
6 achieve when these plants come on-line and start to
7 displace coal and certainly some of our gas-fired
8 generation, which is, while it's a lower producer of
9 carbon, it still does have carbon emissions.
10 We've already seen the benefit of bringing these
11 new plants on-line because when I sat before you in
12 2008, I think it might've been you that asked me the
13 question, "Well, what impact will this have on some of
14 your older coal-fired generation?" And what I told you
15 at the time was these plants gave us flexibility to
16 retire some of those older plants, should that situation
17 arise. And because we had the turndown in the economy
18 and we've seen load growth a little bit slower than we
19 anticipated, we were able to retire or have plans to
20 retire 730 megawatts of older coal-fired facilities that
21 will have a tremendous impact on our future carbon
22 production. It will reduce that significantly.
23 So these plants put us in a position where we can
24 do other things that will help us to respond. The new
25 Clean Power Plan as it's designed today really forces

1 you to take a look at finding additional efficiencies in
2 the heat rate of your existing power plants, which may
3 be hard to do because we've been working hard on
4 improving those heat rates for years. It forces you to
5 look more at natural-gas-fired generation. We're
6 fortunate because we brought our Jasper Plant on-line
7 back in 2004, and we've already got about 30 percent of
8 natural gas. Many utilities don't have that, as they
9 try to find that balanced portfolio. And they also
10 encourage you to look for additional megawatts from
11 renewables. And we've been very active with the
12 Legislature and the environmentalists and others around
13 the State, helping to find ways to define how we move
14 forward successfully with solar power, so we don't find
15 our State embroiled in all the awful discussions and
16 some of the hateful things I've seen go on in other
17 states as they try to figure out what does that solar
18 plan look like. So, we've worked with the other
19 utilities in the State and the environmentalists and
20 people that are focused on solar power, to pass the
21 Distributed Energy Resources Act last year, which has
22 allowed us to come back to the Commission twice now —
23 one to set net-metering rates and one to set distributed
24 energy resource incentive plans in place to help us
25 promote solar energy. So we're well on our way to

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fulfilling that piece of the pie.

So we believe we need that nuclear to help us achieve those targets. It will not get us all the way there, and Mr. Guild pointed that out in his cross-examination of me. We've got more to do. But without the foundation of the nuclear plants, if we don't have this nuclear energy to serve as a foundation and to put us at a 62 percent non-emitting level of production on our system, I think it's going to be very difficult to accomplish.

You know, we told the EPA — I've been to the EPA twice and met with individuals there to talk about the way nuclear is being treated in the Clean Power Plan. The example I gave them was if I hired a group of employees and I was standing up in front of them and said, "Everybody here has to pay the Family Plan for health insurance," and when a young lady in the back stands up and says, "Well, I'm not married and I don't have any kids," I would say, "Well, you're thinking about it, so you have to pay for it." That's what the EPA has done in the Clean Power Plan. So we're trying to get fair treatment for the nuclear plants so they'll serve as the foundation. If we don't get that, it's going to be a very big challenge for us to meet the requirements of that plan.

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1 But we don't know the final results yet, and once
2 the final results are known, it does come back to the
3 State and the State has to actually define its
4 implementation plan. So even though it would come back
5 to the State of South Carolina, they've got to decide
6 between SCE&G and Duke Energy and Santee and all the
7 others that have some sort of production, how they're
8 going to allocate those targets. So there are a lot of
9 unknowns, but what is known is, without the nuclear
10 plants, we won't be able to achieve the 62 percent goal
11 of non-emitting, clean, base-load — and that's key —
12 base-load energy that's there all the time.
13 **Q** And could that be — well, I guess, if they do let you do
14 it once it comes on-line rather than counting it down,
15 is that a financial benefit? Will that be a savings to
16 the company and the customer?
17 **A** It will. I don't have my notes in front of me that I
18 took to the EPA, but the number I recall is, if we don't
19 get the benefits of the nuclear plant, it could be an
20 additional $8-$9 billion in costs for the consumers in
21 South Carolina. That's not just SCE&G; that's the
22 State of South Carolina, us and Santee and others, would
23 have —
24 **Q** Trying to — that would be —
25 **A** Trying to meet the new requirements of the Clean Power

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1 Plan, as it's drafted today. Now, we don't have the
2 final rule, so I hope they fix some of the points we've
3 made to them as they go forward.
4 **Q** But that could be just the reversal, if they do — I
5 mean, there could be a financial benefit, if — depending
6 on how the plan is written?
7 **A** I believe the financial benefit is there today in our
8 making the investment in the nuclear plants.
9 **Q** So they'll already be there.
10 **A** Yes.
11 **Q** And would there be — could there be the potential of a
12 carbon tax that would add —
13 **A** You know, President Obama has made it very clear that he
14 believes carbon is a significant issue for our country
15 going forward. Many others support that position. I'm
16 not here to argue with the science. I firmly believe,
17 you know, carbon emissions are going to be attacked in
18 the future. I believe the writing is on the wall. You
19 know, based on what we said in 2008 about the additional
20 restrictions that would come out from an environmental
21 perspective, that has all come true. And had we not
22 been building these new nuclear plants, I'm not sure how
23 we would've complied with those.
24 So we believe a carbon tax is going to be a reality
25 at some point. There is a value that we believe can be

1 reasonably assigned to carbon for purposes of evaluating
2 the impacts, and the nuclear power construction —
3 continuing with these new plants and completing these
4 plants is, in my mind, just critical to be able to
5 address the challenges. To put the company in a
6 position or make a decision that we were going to stop
7 these plants and build something else at this point,
8 that's a $3 billion decision based on our analysis, for
9 customers. I don't know that that even takes in the
10 impacts of trying to solve the carbon issues.
11 So I believe the State is on the right path. Not
12 just us, but with Santee Cooper and all the customers
13 that are served throughout the State through the
14 electric cooperatives that they serve, this plant is
15 going to impact most customers in the State of South
16 Carolina.
17 **Q** So these units — it sounds like you're looking at these
18 units kind of as an insurance against — or working
19 towards meeting those standards?
20 **A** Yes, that's exactly what we believed in 2008, and I
21 believe that more firmly today than I did in 2008.
22 **Q** And with this plant, with the complexity and scope of
23 it, I'm sure there is great interest in the building of
24 it not only in our State but across the country. And I
25 was just wondering, are you doing any outreach or

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1 educational sessions to various groups about the plant
2 as it's under construction?
3 **A** We have a lot of individuals involved directly in the
4 project that do presentations on a regular basis around
5 town and around the State. We certainly have extensive
6 information on our website about the project, not just
7 pictures but just discussion about what's going on, and
8 there's a lot more informal efforts to help people
9 understand the value of the plants and the impact they
10 can have on the State. So we could probably do more of
11 that. It's certainly something we believe in completely
12 and probably couldn't do too much of that to make people
13 aware of the benefits.
14 **Q** Are you getting — what types of groups are particularly
15 interested?
16 **A** It could be anything from a Rotary club — we've worked
17 with educational organizations; we've had groups of
18 teachers on a regular basis up to the plant. We brought
19 students to the plant, student groups, to help them
20 understand the benefits of nuclear power and how it is
21 used in the State of South Carolina. You know, any
22 group that wants us to come and make a presentation,
23 generally, we are available to do that.
24 We have groups within our organization where we
25 bring in groups of customers on advisory boards in

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different areas around the State and we talk to them about nuclear. We ask them, "What are you hearing from a nuclear perspective," if there are concerns we need to try to address in the State or with particular groups. We've run a number of television ads, at stockholder expense or shareholder expense — not paid for by customers — to help provide more information about nuclear power.

I would expect those activities to increase as we move forward. I probably lost count of the number of tours we've been through at the nuclear plant. We've had commissioners from different states come; we had Nuclear Regulatory Commissioners come all the time. We encourage people to come to the plant site. We are proud of it. I think it definitely leaves an impression on you, when you can go from the dollars on a page to physically looking at the investments that are being made and the complexity of the project and the activity that is taking place on site.

Q Okay. So it's serving as an educational opportunity for others across the country?

A I believe it is, and in the conversations I have with CEOs and in private, in different industry meetings I go to, they're pulling for us. They want our plant, they want the Vogtle plants to be built, because they want to

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1 build plants. I hear comments about the lack of a
2 nuclear renaissance, and there may not be enough plants
3 being built in the United States to convince me there's
4 a renaissance here yet, but there are 65 plants being
5 built around the world, new nuclear plants, so the
6 renaissance is occurring, and I think the United States
7 could benefit from joining the party.
8 **COMMISSIONER FLEMING**: Thank you.
9 **CHAIRMAN HALL**: All right. Thank you.
10 **EXAMINATION**
11 **BY CHAIRMAN HALL**:
12 **Q** Mr. Marsh, I just have a couple of questions. The first
13 is, why is the company requesting Commission approval of
14 a revised schedule when the company hasn't agreed yet to
15 the revised milestones? The new milestones aren't in
16 the EPC contract or an addendum, so —
17 **A** The schedule we have put before the Commission is a
18 schedule we are working to, on site, now, to complete
19 the units. So we have agreed this is the working
20 schedule to complete the units, as we presented to the
21 Commission. When we say we haven't agreed to the
22 schedule, we're talking about agreeing in terms of who's
23 going to pay for the costs that are under dispute.
24 There is no dispute that this is the schedule upon which
25 the plants are being built. The costs have been

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1 evaluated, the costs are known, the derivation of the
2 costs have been fully reviewed by our team on site and
3 the Office of Regulatory Staff.
4 **Q** Okay. Now, I want to go back to Mr. Guild's question
5 about the litigation. And I don't want to jeopardize
6 your position, so don't go far enough to do that, but as
7 far as the negotiations are concerned, when would they
8 tip where you would think that the negotiations were no
9 longer productive and you might have to pursue
10 litigation?
11 **A** If the consortium were to basically quit listening to
12 us, I'd say that's the time to do something else. We
13 have not gotten to that point. We have had very frank
14 discussions. We've had some exchanges of potential
15 opportunities to settle some of the outstanding issues.
16 We've just not reached any final agreements. As long as
17 I believe there's an opportunity for us to do it through
18 a settlement, as I said earlier, I would prefer that to
19 litigation, if it looks like that's a reasonable number
20 or reasonable amounts for our company and our customers.
21 **Q** Okay. And if you had to file litigation — I understand
22 Georgia filed theirs in New York — where does the
23 contract dictate, or where does your contract dictate
24 that it would be filed?
25 **A** We would also file in New York.

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1 **Q** Okay. And I imagine that would be costly, as well. One
2 more question about the difference between Georgia
3 Power's contract and your all's contract, as far as the
4 litigation is concerned. I think you — I can't
5 remember. Their contract is sealed and so you don't
6 know as much, but why was litigation a better option for
7 them?
8 **A** I don't know all the details in their contract, but the
9 general understanding is, and their company officials
10 have made comments to this effect, it is a fixed-price
11 contract. Our contract is fixed for certain items; we
12 have firm pricing with fixed escalation on others, and
13 there's about a third of the project that is targeted,
14 where it's to be determined on actual amounts spent.
15 That's where our disagreement is, on the actual amounts
16 spent in that targeted category. We don't have any
17 disputes over the fixed or the firm with fixed
18 escalation.
19 **Q** Okay.
20 **A** If their project is all fixed, even though they had the
21 same issues we had, I can see how they would have a
22 different position on, you know, whether they should be
23 paying at that time.
24 **Q** Okay.
25 **A** And that might have led them to a decision to start

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1 litigation earlier than later.
2 **CHAIRMAN HALL**: Okay. All right. Thank you,
3 so much.
4 Commissioners, any other questions for Mr.
5 Marsh?
6 [No response]
7 Okay. Mr. Burgess?
8 **MR. BURGESS**: I have one question on redirect.
9 **CHAIRMAN HALL**: Okay.
10 **REDIRECT EXAMINATION**
11 **BY MR. BURGESS**:
12 **Q** Mr. Marsh, before the lunch hour, Mr. Guild was
13 questioning you about the future transaction between
14 SCE&G and Santee Cooper, and I believe I heard you
15 testify that SCE&G would be purchasing an interest in
16 Unit 2. Would you please explain to the Commission
17 exactly what transaction is required of the two
18 companies?
19 **A** Yes. I need to correct my statement on that. The
20 triggering event for the purchase of the 5 percent would
21 be the commercial operation date of Unit 2, but the
22 actual 5 percent purchase would be of Units 2 and 3.
23 **MR. BURGESS**: Okay. Thank you, Mr. Marsh. No
24 further questions.
25 **CHAIRMAN HALL**: All right, thank you.

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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 sworn or 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 31st day of July, 2015.

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