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

HEARING #16-11554 OCTOBER 12, 2016 10:30 A.M.

DOCKET NO. 2016-223-E:
SOUTH CAROLINA ELECTRIC & GAS COMPANY – *Petition of South Carolina Electric & Gas Company for Updates and Revisions to Schedules Related to the Construction of a Nuclear Base Load Generation Facility at Jenkinsville, South Carolina*

TRANSCRIPT OF TESTIMONY AND PROCEEDINGS **VOLUME 3 OF 4**

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

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

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

APPEARANCES:

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

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

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

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

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

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

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1 **MR. ZEIGLER**: Mr. Chairman, Mr. Byrne and Mr.
2 Addison are available for cross-examination and
3 questions from the Commission.
4 **CHAIRMAN WHITFIELD**: Thank you, Mr. Zeigler.
5 Ms. Thompson or Mr. Holman?
6 **MS. THOMPSON**: Thank you, Mr. Chairman. No
7 questions.
8 **CHAIRMAN WHITFIELD**: Ms. Wright.
9 **MS. WRIGHT**: Yes.
10 **CHAIRMAN WHITFIELD**: Come forward, please.
11 **CROSS EXAMINATION**
12 **BY MS. WRIGHT**:
13 **Q** I'm hoping I won't lose my voice. I've lost it three
14 times since the winds came in last week, so I hope I
15 don't lose it. I understand that you are in a panel up
16 here, but I have specific questions for each of you, so
17 I would prefer that you answer the questions that I ask
18 of you. If one of you wants to elaborate after the one
19 I'm specifically asking, I probably would go along with
20 that. But I'm asking the questions directly related to
21 your direct testimonies.
22 **CHAIRMAN WHITFIELD**: Ms. Wright, you can ask
23 either one of these witnesses in the panel
24 questions at this time. If you want to direct it
25 to one of them and if that person is not able to,

then they can hand off, but both witnesses are available if you will just direct your question to the person you would like to start with.

MS. WRIGHT: I understand that, but I'm going with their direct testimony, and that's why I wanted to talk to them.

CHAIRMAN WHITFIELD: Well, let's keep it questions, okay?

MS. WRIGHT: No, I — I'm sorry about that, but I've got them all worded in questions this time.

CHAIRMAN WHITFIELD: Well, go ahead, please.

MS. WRIGHT: All right.

BY MS. WRIGHT:

Q Mr. Byrne, could you tell us what your salary is, per year?

A [BYRNE] I believe it's around $625,000.

Q And with bonuses and everything else, what do you generally make a year?

A [BYRNE] I don't know that number. My guess is it would be about $2 million.

Q Do you oversee all of the nuclear operations for SCE&G?

A [BYRNE] I do.

Q And you're responsible for the two reactors in Jenkinsville.

A [BYRNE] Yes.

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1 **Q** They are the AP1000 design, correct?
2 **A** [BYRNE] That's correct.
3 **Q** Having asked that, so the AP1000 design has been
4 questioned and disputed by senior scientists and
5 engineers, including a John Ma, or "May," from the
6 national — the Nuclear Regulatory Commission, and Edward
7 Lyman and Arnold Gunderson?
8 **A** [BYRNE] I'm familiar with Mr. Ma. I have not looked
9 into anything that would've been claimed or said by the
10 other two.
11 **Q** Was it in December of 2011 that the Nuclear Regulatory
12 Commission approved construction of the first US plant
13 to use this design?
14 **A** [BYRNE] I believe in December 2011, they approved the
15 certified design for the AP1000.
16 **Q** But you all began this in 2008.
17 **A** [BYRNE] We turned in our license application in 2008 and
18 we petitioned the Commission here for construction in
19 2008, yes.
20 **Q** And when did construction begin?
21 **A** [BYRNE] Construction began in 2009, and the safety-
22 related construction had to be constrained until we got
23 our license issued to us, which was end of March 2012.
24 **Q** And — well, I have February 9, 2012, when the NRC
25 approved the construction of the two new reactors.

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A [BYRNE] Well, for us it was the end of March. It may have been the Vogtle unit that was in February.

Q Oh, okay. Who owns the two reactors being built in Jenkinsville?

A [BYRNE] Who is the owner?

Q Yes.

A [BYRNE] SCE&G and Santee Cooper.

Q And SCE&G has a 55 percent — you own 55 percent of it.

A [BYRNE] We own 55 percent.

Q So you have a majority?

A [BYRNE] Correct.

Q And who's building the AP1000s in Jenkinsville?

A [BYRNE] Who's doing the construction?

Q Uh-huh?

A [BYRNE] Fluor Corporation.

Q No. Who do you, SCE&G and Santee Cooper, have building this construction?

A [BYRNE] Who do we have the contract with?

Q Yes.

A [BYRNE] That's Westinghouse.

Q You have it with Westinghouse. And that is the WEC company, correct?

A [BYRNE] Yeah, it's oftentimes abbreviated as W-E-C or WEC, yes.

Q Westinghouse Electric Company.

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1 **A** [BYRNE] Correct.
2 **Q** And they were in a consortium with CB&I.
3 **A** [BYRNE] They were.
4 **Q** And that no longer exists?
5 **A** [BYRNE] That's correct.
6 **Q** Okay. So we don't need to be calling it a consortium
7 any longer, do we?
8 **A** [BYRNE] Well, technically, our contract is still with a
9 consortium of the daughter company of Toshiba, which is
10 Westinghouse, and the daughter company of Chicago Bridge
11 & Iron, or Stone & Webster. It's just that Westinghouse
12 now owns Stone & Webster.
13 **Q** I was getting to that.
14 **A** [BYRNE] Yes.
15 **Q** Okay. Isn't it true that the AP1000 nuclear reactors
16 were designed and sold by Westinghouse?
17 **A** [BYRNE] They were designed and sold by Westinghouse,
18 yes.
19 **Q** And so that's why you went with Westinghouse to be the
20 contractor?
21 **A** [BYRNE] Yeah, we really did not have a choice. When you
22 buy the equipment from an original equipment
23 manufacturer and designer, you get that designer.
24 **Q** And you would also think that they would be able to
25 build what they design, correct?

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A [BYRNE] Yeah, now, their forte is probably not construction, which is why they brought the Shaw Corporation in as a consortium partner, originally.
Q And when did the Shaw Corporation leave?
A [BYRNE] I believe that was February of '13.
Q And that's when CB&I was brought in?
A [BYRNE] That's correct. CB&I acquired the Shaw Group, so we acquired them, I suppose, or inherited them as the —
Q You all seem to —
A — construction contractor.
Q — buy each other around. So, now, the Shaw Company is still kind of here, but they're bought by CB&I, correct, at this point?
A [BYRNE] No, the Shaw Corporation no longer exists.
Q Were the employees of the Shaw Company absorbed by CB&I?
A [BYRNE] Some of them were. Many of them were not.
Q In the direct testimony of you and a couple of the other fellows, you say that this is a first-of-a-kind build, but it really isn't, is it?
A [BYRNE] I'm not sure what you mean by —
Q Aren't the ones being built in the Vogtle, in Georgia, aren't they AP1000s?
A [BYRNE] They are.
Q And isn't the one in China an AP1000 that's about to be

fired up?

A [BYRNE] It is.

Q And in building these — and the one in China is almost done. I don't — I'm having trouble. Why are we having so much construction error going on with ours, instead of learning from China or even as far along as the ones in Vogtle are?

A [BYRNE] Well, the Vogtle project and our project are on the same timeline. So, for example, when I showed the picture of the reactor vessel being set, the Vogtle project hasn't yet gotten to that point. So it would be an unfair characterization to say we should be learning lessons from them because they're ahead of us. We certainly collaborate with Southern Company, and as we get to something before them, they observe it at our place, and as they get to something before us, we go over there and observe theirs. So we collaborate a lot with the Southern Company.

The Chinese reactors, there are a couple of differences between the Chinese reactors and ours. The shield building, for example, is different. They use a more traditional, reinforced-concrete shield building as opposed to our composite structure.

Q And why do we have the composite structure?

A [BYRNE] Because it is more resistant to things like

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1 aircraft impact. But the Chinese were at the point
2 where, when the US Nuclear Regulatory Commission was
3 evaluating that shield building structure, they had to
4 make a decision to go forward and they wanted to go
5 forward with what was already certified, rather than
6 take a chance on something maybe not being certified.
7 So it was just a decision that the Chinese made.
8 **Q** Okay, and I understand that. But I have a question as —
9 when the US builders were given permission to use this
10 AP1000, wasn't one of the requirements that they all be
11 built the same?
12 **A** There's no requirement that they all be built the same.
13 The US Nuclear Regulatory Commission only has authority
14 over US builds, so the Chinese reactors wouldn't
15 necessarily have to be the same. They licensed a
16 specific design. So we have to build to that design.
17 So from that respect, the Vogtle project and our project
18 will be the same, save for site-specific differences.
19 One example might be the cooling towers. The Vogtle
20 project is using large hyperbolic cooling towers, and
21 we're using the smaller low-profile forced-draft cooling
22 towers.
23 **Q** Why did you decide on the smaller tower?
24 **A** [BYRNE] Personal preference, landscape issues. They
25 can, at times, be in migratory bird paths, those kind of

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things. I worked for a plant that had one of the big hyperbolic cooling towers, and people assume that they're low maintenance or no maintenance, and that's not the case.

Q You didn't do it because you didn't want it recognized as a nuclear plant at a distance?

A [BYRNE] No, I said I did it because they can get in migratory bird paths; landscape issues, because people that live around the plants don't necessarily like something that dominates the landscape that's 600 feet tall. So we can understand that, so we built something that's 60 feet tall.

Q And four of them?

A [BYRNE] There are four.

Q Was that in the plan when we first — when you first approached the Commission?

A [BYRNE] Yes.

Q Those four cooling towers were in the plan?

A [BYRNE] They were.

Q What were some of the redesigns that you list, when you talk in your direct testimony — you list "rework." You use that terminology, and you used "redesign." What is the redesign? What are some of those examples that you would have?

A [BYRNE] There have been some issues where — the shield

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1 building is a good example. When we were pursuing the
2 license, the then-approved version of the certified
3 design did not have this composite shield building.
4 There were some questions on the US side about the
5 integrity of the shield building in a traditional
6 reinforced-concrete design, so to improve that to
7 account for the regulation that we have in the US that
8 they don't have in other countries, to be resistant to
9 aircraft impact, that redesign had to take place on the
10 shield building.
11 **Q** Were you in the meetings with the NRC when they were
12 talking about your design of the shield building, in
13 relationship to the AP1000 at Jenkinsville?
14 **A** [BYRNE] There were probably dozens to 100 meetings. No,
15 I was not in all those meetings. I certainly was in
16 some of the meetings where the shield building design
17 has been discussed.
18 **Q** Did they not say something about feeling that those —
19 the way that you are constructing the shield building at
20 this time was brittle and would not withstand the impact
21 of an aircraft?
22 **A** [BYRNE] There were some questions about embrittlement,
23 and the design was reconfigured to account for those
24 questions.
25 **Q** I thought you had said that you weren't going to change

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1 those, that you were going to keep the ones that you
2 had. You didn't?
3 **A** [BYRNE] I'm not sure what you're referring to.
4 **Q** I'll have to go back over that and maybe look that up.
5 Would you say Westinghouse has had some problems with
6 this build?
7 **A** [BYRNE] Yes, I'd say Westinghouse has had some issues.
8 **Q** And could you tell me how many projects you have any
9 idea that Westinghouse is involved in?
10 **A** [BYRNE] How many are they involved in?
11 **Q** Uh-huh?
12 **A** [BYRNE] You talking about new nuclear build projects?
13 **Q** Well, let's go with that.
14 **A** [BYRNE] Okay. So they're involved in the projects at
15 Haiyang, Sanmen, Vogtle, and V.C. Summer. Those are new
16 nuclear build projects they're currently involved in.
17 **Q** At Jenkinsville.
18 **A** [BYRNE] Yeah, in Jenkinsville, the V.C. Summer project,
19 right. They've been involved in many nuclear
20 construction builds in the past. They probably have, I
21 don't know, 200 reactors around the world that they've
22 been involved in the construction of.
23 **Q** Okay. How many, with the AP1000?
24 **A** [BYRNE] Only the four different projects, eight
25 different units.

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1 **Q** Okay. Would you think that they would have better
2 working camaraderie with the people they're working with
3 than they seem to show here in our build in
4 Jenkinsville?
5 **A** [BYRNE] Working camaraderie. I would say that, from a
6 working camaraderie perspective, what I'm most concerned
7 about is the on-site relationships, the people getting
8 the work done. That is actually pretty good. Their
9 leadership team, you know, we certainly have some issues
10 with them. I would certainly expect they would have
11 been better prepared to do a construction project like
12 this, and we have had issues with Westinghouse that have
13 been pretty well documented.
14 **Q** They have been documented, but I don't think the public
15 knows much about that documentation, and that's the
16 thing that bothers me. Now, when they brought — when
17 they came in, you — when you asked Westinghouse to do
18 this, Shaw was with them at that time?
19 **A** [BYRNE] Shaw was their consortium partner, yes.
20 **Q** And that didn't work out. So they — is that right?
21 **A** [BYRNE] Shaw sold themselves to Chicago Bridge & Iron.
22 **Q** Well, you could say CB&I sold themselves, too, wouldn't
23 you?
24 **A** [BYRNE] They sold the subsidiary because they desired to
25 get out of these projects.

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1 **Q** Well, don't you imagine that's why Shaw wanted to get
2 out?
3 **A** [BYRNE] I don't know what Shaw's motives were, to get
4 out. They were — you know, we got them as a constructor
5 — remember, they were a 20 percent or 25 percent owner
6 of Westinghouse when we got that consortium. So they
7 divested themselves of that ownership and then they sold
8 the company, and these nuclear projects were probably
9 not the major portion of the company.
10 **Q** So when CB&I was brought in, you all thought they were
11 going to be the cat's meow, like you are with Fluor
12 right now?
13 **A** [BYRNE] When CB&I came on the project, we thought that
14 they would be an improvement over the Shaw Group, and we
15 were optimistic based on the performance of the CB&I
16 Services group on the site with the shield building
17 construction, that we would see an improvement in worker
18 efficiencies and those kind of things. That did not
19 materialize.
20 **Q** When did you realize that wasn't materializing?
21 **A** [BYRNE] Exactly when, I don't know. But we gave them
22 some opportunities over a year, or so, to come up with
23 improvements. Those improvements weren't happening, and
24 then we started challenging them on those and started
25 withholding money.

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1 **Q** How many projects was CB&I involved in?
2 **A** [BYRNE] Nuclear construction projects?
3 **Q** That's good.
4 **A** [BYRNE] They've been involved — they're involved in a
5 lot of projects. They were previously involved in our
6 project and in the Vogtle project. And they were doing
7 some nuclear work, but not nuclear plant construction
8 work. So they did try to bring in a significant amount
9 of talent. They tried to retain as many craft employees
10 as they could. Their management team did do, basically,
11 a complete change-over.
12 **Q** I have a problem in your past experience in this build —
13 I'm not aware of what you've done in any of the other
14 constructions that you've done. But it just seems to me
15 that you get all excited about the new guy coming in.
16 **MR. ZEIGLER**: [Indicating.]
17 **BY MS. WRIGHT**:
18 **Q** Have you really checked — I'm sorry — have you really
19 checked into these companies before you bring them in?
20 Because doesn't it seem to you that we're consistently
21 getting construction and contractors' companies that
22 aren't living up to what you anticipated when you
23 brought them in?
24 **A** [BYRNE] Yeah, I would say, certainly, the two previous
25 companies did not live up to what we anticipated when

they came in. We didn't necessarily bring them in. We got Shaw as a function of the consortium when we signed the contract with Westinghouse. Again, they were a part-owner of Westinghouse. And then Shaw sold themselves to CB&I, so we didn't bring them in. It was not our choice to bring them in. The only ones I would say we had a choice over was the current one, which is Fluor, inasmuch as when we — we would have had an option to not renegotiate the amendment to the EPC contract that we did recently, and in which case they would not have brought Fluor in. So from our perspective, the only ones we've had a say in bringing them in has been Fluor.

Q I'm confused in what you just said. Would you say that again for me, please?

A [BYRNE] Certainly. Certainly. When we signed the original EPC contract, it was with a consortium, and we didn't necessarily choose the Shaw Group; it was the consortium partner. At the time, most of the reactor vendors, the ones who were proposing doing new builds, were partnering with a constructor to do the projects. So when we went with Westinghouse, they came with the Shaw Group, and Shaw was a 20 or 25 percent owner of Westinghouse. So not a big surprise that they picked somebody who is their owner.

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Shaw elected to sell themselves. We had no input into that decision. And so *de facto* we got CB&I into the project in place of the Shaw Group.

The only choice we have had is in bringing in Fluor Corporation. When Westinghouse and CB&I brought this proposal to us to allow CB&I to exit, we could've said no, and then we would still be with CB&I. I think that would've been to our detriment. So, they needed us to agree to this amendment in order to bring Fluor Corporation.

Q But — and I understand now what you just said; in repeating, it did clarify it for me. But my question is, in allowing CB&I to go before you managed to take care of the invoices that were in dispute over contract — over construction, over labor, why would you, SCE&G, even if CB&I left, why would you not litigate for those costs that are ultimately going to go to the ratepayer? Why did you, in this amendment, write them off? They still have to be paid, do they not?

A [BYRNE] I don't think the characterization that we wrote them off is accurate. We settled with Westinghouse and CB&I on the issues that were outstanding between us. When CB&I exited the program, they did take a write-off that I believe they advertised was $1.2 billion on the nuclear project. So they're the ones that took the

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1 write-off. And we resolved through negotiation the
2 commercial issues that existed between us.
3 **Q** But — okay. I own a small business. I understand what
4 write-offs are. But isn't that $1.2 billion that CB&I
5 is claiming they are writing off, that's not a loss they
6 had; that's a loss of would-be income. That was not a
7 loss that they absorbed from the costs that I'm talking
8 about.
9 **A** [BYRNE] No, that was a write-off; they absorbed those
10 losses.
11 **Q** They had paid money out.
12 **A** [BYRNE] They had paid money out, and they recognized
13 that they were not going to be able to get recovery of
14 those funds.
15 **Q** So you're telling us, right here, that they paid out
16 $1.2 billion?
17 **A** [BYRNE] Correct.
18 **Q** To whom?
19 **A** [BYRNE] To a variety of vendors. Remember, I said in my
20 testimony that some portion of our contract was in the
21 fixed and firm category. Things like module fabrication
22 was in that fixed and firm category. So when they made
23 decisions to expedite, when they made decisions to bring
24 other vendors into the mix to diversify the supply
25 chain, that increased their cost, and it was a cost they

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were not allowed to pass on to us. So those are examples of the things that they would have paid money out, and they recognized they were not going to get money back in, and they took the write-off when they exited the business.

Q And you're telling me, through all of these figures that you've thrown out to minimize what the ratepayers are going to have, that you're telling me that CB&I has paid out $1.2 billion of their money that they are just walking away from?

A [BYRNE] Yeah, they're the ones that put that announcement out. They're the ones that took the write-off. So, yes, they took $1.2 billion in losses.

Q But that still does not pay us for the construction errors and the costs of the labor to repair those, that — do you not, in your direct testimony, use the term "rework"?

A [BYRNE] I may have used the term "rework".

Q That's repair, isn't it?

A [BYRNE] Rework would be repair.

Q Okay. Where is CB&I now?

A [BYRNE] Where are they now?

Q Uh-huh?

A [BYRNE] They still exist as an entity in the US; they are headquartered in The Woodlands, in Texas.

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1 **Q** But they're going to be totally out of the nuclear
2 building business.
3 **A** [BYRNE] They're going to be out of the nuclear
4 construction business. They still want to stay in the
5 nuclear services business, is my understanding, and they
6 are still at our site doing the fabrication on the
7 containment vessel and the shield building.
8 **Q** So they are still there.
9 **A** [BYRNE] They are still there. Again, as a subcontractor
10 to Westinghouse, not as a consortium partner.
11 **Q** Okay. So they left as a consortium partner.
12 **A** [BYRNE] Correct.
13 **Q** But they are still on-site.
14 **A** [BYRNE] A small subset of CB&I employees. The way that
15 CB&I works is they are organized in a number of
16 different divisions. I think it was four or five
17 divisions. We had our contract with an entity called
18 Power to do the construction. And this is a different
19 entity, called CB&I Services that's doing the tanks for
20 us. So, one of the things they do very well is large
21 tanks. For example, they do LNG — liquefied natural gas
22 facilities, or LNG facilities. So we still have them on
23 the site in a limited capacity doing specific tasks.
24 **Q** When you talk about tanks, you're not talking about
25 those things that you were talking — that you laid those

rings on?

A [BYRNE] Yes, those are what I'm talking about. They do tanks very well, and —

Q And you're saying they —

A [BYRNE] — they're doing those tanks.

Q — do those — but wasn't there a point in this build where they dropped one of those with a crane and it cost like $10,000 to fix?

A [BYRNE] I'm not aware of any dropping of any tank with a crane, no.

Q Okay. Where is — when this build began, was there a subcontractor construction company called Stone & Webster involved?

A [BYRNE] Yes, Stone & Webster was an entity of the Shaw Group that was doing the construction.

Q And are they still there?

A [BYRNE] Stone & Webster still exists. Very few of the same people are around —

Q Okay. Did —

A [BYRNE] — but Stone & Webster still exists as an entity.

Q Did Fluor take Stone & Webster?

A [BYRNE] No.

Q They did not?

A [BYRNE] Fluor took — all the craft that stayed, that worked previously for CB&I, rolled over to Fluor

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1 employees.
2 **Q** Those were not Stone & Webster employees?
3 **A** [BYRNE] Well, technically, they may have been Stone &
4 Webster employees, but they wore CB&I hardhats and their
5 paychecks said "CB&I."
6 **Q** Well, technically, they were Westinghouse employees,
7 too, weren't they?
8 **A** [BYRNE] Were they Westinghouse employees? No, they were
9 not Westinghouse employees.
10 **Q** They were hired by Westinghouse as a subcontractor, were
11 they not?
12 **A** [BYRNE] They were a consortium partner with
13 Westinghouse.
14 **Q** Stone & Webster?
15 **A** [BYRNE] Stone & Webster.
16 **Q** Was a consortium partner. I thought it was just CB&I
17 and Westinghouse.
18 **A** [BYRNE] Stone & Webster is the subsidiary of CB&I that
19 was doing the construction.
20 **Q** Is Stone & Webster on the site, building? Are there
21 employees of Stone & Webster building on the site?
22 **A** [BYRNE] No, not doing construction, no. Fluor is doing
23 the construction.
24 **Q** And who is — who is their subcontractor that is the
25 construction company?

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1 **A** [BYRNE] Fluor is the constructor. They're actually
2 doing the physical construction at the site, the Fluor
3 Corporation.
4 **Q** So Fluor doesn't have all these little things like
5 you're saying CB&I had, that they have this subsidiary
6 and they have this subsidiary; you're saying Fluor
7 doesn't, Fluor is the construction company?
8 **A** [BYRNE] Fluor is the construction company at our site,
9 yes.
10 **Q** Are they also the site managers that are watching what
11 is going on?
12 **A** [BYRNE] The site managers watching — they are doing
13 construction management?
14 **Q** Yes.
15 **A** [BYRNE] They are doing construction management at our
16 site.
17 **Q** Who is overseeing them?
18 **A** [BYRNE] That would be a combination — they certainly
19 have their own quality control, quality assurance, field
20 engineers. Westinghouse also has field engineers,
21 quality control, quality assurance. And then we have a
22 Quality Group that oversees what they are doing, as
23 well. The Nuclear Regulatory Commission also has a
24 permanent staff at the site.
25 **Q** So, right now, you're telling us that Stone & Webster is

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1 no longer there, that when CB&I left, Stone & Webster
2 left with them?
3 **A** [BYRNE] When Westinghouse purchased the nuclear
4 construction assets of CB&I, it was in the form of the
5 subsidiary Stone & Webster. So, technically,
6 Westinghouse owns Stone & Webster. The people — what
7 they did is they changed the structure at the site, so
8 it's not Stone & Webster doing the construction any
9 longer. Stone & Webster still exist as an entity — not
10 for CB&I; they're now owned by Westinghouse. But the
11 construction was turned over and the construction
12 management was turned over to the Fluor Corporation.
13 **Q** And they're not the same employees that were doing the
14 construction. The manual labor, the craft labor, is not
15 the same people?
16 **A** [BYRNE] Many of the craft labor are the same people.
17 **Q** That was what I'm getting at. All right. So we have
18 the same people that have been making these construction
19 errors are still working on the site.
20 **A** [BYRNE] I'm not sure what construction errors you're
21 talking about.
22 **Q** Okay. Well, we'll —
23 **A** Any large construction site is going to have errors and
24 rework.
25 **Q** You wrote off some — you had questionable invoices and

you wrote them off when you went with the amendment and the settlement, and you settled for pennies on the dollar for those 10 percent of those invoices, and you settled for 1.4 percent — which is nothing — for the money that was spent and has to be paid out, and these things —

MR. ZEIGLER: Mr. Chairman, I —

CHAIRMAN WHITFIELD: Mr. Zeigler?

MR. ZEIGLER: I believe that's testifying and not asking a question.

CHAIRMAN WHITFIELD: Let's keep it to a question, Ms. Wright.

MS. WRIGHT: Right, sorry.

CHAIRMAN WHITFIELD: And please don't testify.

MS. WRIGHT: I'm sorry.

CHAIRMAN WHITFIELD: You're just —

MS. WRIGHT: I'm sorry.

CHAIRMAN WHITFIELD: — here to ask questions.

BY MS. WRIGHT:

Q All right. Doesn't it seem to you that we keep changing these people around under different names?

A [BYRNE] Well, one, we aren't doing it, necessarily. And, two, if a company gets acquired by another company, the logos will change but some of the people will remain. Largely, what happens is the leadership and the

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1 management team will be changed out or leave, and then
2 the new company brings their own people in to oversee
3 the project. The craft labor actually have done a
4 pretty good job, and we want to retain as many of the
5 craft labor as we can.
6 **Q** All right. How much of the costs are the responsibility
7 of Santee Cooper with the BLRA?
8 **A** [BYRNE] Santee Cooper doesn't operate under the BLRA,
9 but Santee Cooper is responsible for 45 percent of the
10 cost of the project.
11 **Q** How much of the costs, so far, have there been in
12 building this — these two units?
13 **A** [BYRNE] I don't know the exact number. I'm sure Mr.
14 Kochems would have that at the tip of his tongue.
15 **Q** Do you have it, Mr. Kochems?
16 **A** [BYRNE] This is Mr. Addison.
17 **Q** Huh? Oh, I'm sorry. He's not up here yet. Okay.
18 **CHAIRMAN WHITFIELD**: You'll get a turn at him,
19 Ms. Wright.
20 **MS. WRIGHT**: Okay. Sorry.
21 **BY MS. WRIGHT:**
22 **Q** On page three, lines 9 through 12, of your direct
23 testimony, you say that the majority of the 3700
24 contractor personnel and subcontractor workers' jobs are
25 held by South Carolina residents. Page three, lines 9

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1 through 12. The majority. How many?
2 **A** [BYRNE] We have our contractors track the craft for how
3 many are South Carolina residents. That number is
4 generally running in about the 55-56 percent range.
5 **Q** And they're South Carolina residents who are craft
6 labor?
7 **A** [BYRNE] That's correct.
8 **Q** Okay. How many of the non-craft?
9 **A** [BYRNE] I don't know. We don't keep that number. We
10 don't track that number.
11 **Q** Really?
12 **A** [BYRNE] Yes.
13 **Q** Okay. How many are security?
14 **A** [BYRNE] How many people are security?
15 **Q** No, how many — well, how many employees do you have on-
16 site for security? Because I understand that you have
17 your craft labor, you have your non-craft labor, and
18 when they're working, you have to have security on-site
19 every time there is somebody working. So how many
20 security workers do you have?
21 **A** [BYRNE] The exact number, I don't know. The contractor
22 uses a subcontract security company to do the site
23 security. Now this is different than the security we
24 would employ when the plants go operational.
25 **Q** I understand that.

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A [BYRNE] Okay. And so the security company will change. This contractor won't be there. I'm going to guess now, but just from riding around the site and looking at the security force, they probably have 15 or 20 security personnel there on each shift.

Q Oh, I thought there would be more than that.

A [BYRNE] No.

Q Okay. How many contractors are there, in total?

A [BYRNE] At the time this testimony was written, it was about 3700. It's probably up to 4000 now.

Q Okay. That's supposed to be contractor personnel.

A [BYRNE] Correct.

Q I'm talking about companies.

A [BYRNE] Oh, companies, I'm sorry.

Q Uh-huh. That's okay. I switched really quickly.

A [BYRNE] Yeah. The exact number changes relatively frequently. We probably have — obviously, the big contractors are Westinghouse and the Fluor Corporation. The subcontractors — I'm going to guess — there are probably, at any one point in time, 25 or so that work there. And then on a periodic basis we'll bring in other subcontractors. You know, if we move fencing, for example, we'll bring him Bagwell Fence to do that fencing. If we're moving lighting around the site, we'll bring in Gregory Electric to move the lighting.

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1 But they may not be there full-time.
2 **Q** Okay. When you say, "Establishing the company's ability
3 to finance the nuclear construction successfully under
4 the BLRA," who is "the company"?
5 **A** [BYRNE] Well, what —
6 **Q** It should be still on that same page.
7 **A** [BYRNE] Which line, ma'am?
8 **Q** I didn't write it down. Let me see [indicating]. This
9 may be the next page. Let me see.
10 [Brief pause]
11 Yeah, I'm sorry. It's on page four, line 14.
12 **A** [BYRNE] You're talking about line 14, which is number
13 six, "Establishing the company's ability to finance the
14 nuclear construction successfully under the BLRA"?
15 **Q** Right.
16 **A** [BYRNE] Yes, what we're talking about there is — the
17 company is our company.
18 **Q** SCE&G?
19 **A** [BYRNE] And it's our ability to finance the project;
20 that's what we are referring to.
21 **Q** Okay. And you have to meet certain criteria for those —
22 for certain things to go under the BLRA, correct? It
23 has certain specific — I don't know what term I want to
24 use — validations?
25 **A** [BYRNE] They have to be costs associated with the

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1 construction of the plant.
2 **Q** That's good.
3 **A** [BYRNE] Yes.
4 **Q** And it's very specific, is it not?
5 **A** [BYRNE] It is fairly specific.
6 **Q** Fairly. How much money are you getting towards this
7 build right now from the ratepayers?
8 **A** [BYRNE] How much money are we —
9 **Q** How much are you —
10 **A** [BYRNE] — getting towards the build.
11 **Q** How much of the rates that we are paying you are going
12 toward this construction site?
13 **A** [BYRNE] I'm not sure what percentage of the rates are
14 going towards the construction site. I'm not sure if
15 Mr. Addison may have that.
16 **A** [ADDISON] May I?
17 **Q** Do you? Yeah, uh-huh.
18 **A** [ADDISON] So, I don't have an answer to that, but I can
19 tell you that the investors, either through buying stock
20 or buying bonds, provide all the cost of the
21 construction. The only cost that ratepayers or
22 customers are paying today is the carrying cost of that
23 financing, the interest on the bonds or the dividends or
24 the return on stock. So there's no payment by the
25 customers for the cost of the construction.

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1 **Q** And what are you saying the ratepayers are paying, then?
2 **A** [ADDISON] The carrying costs of it. If I could use an
3 analogy, if you were building a home, the customer isn't
4 paying for the construction of the home; they're paying
5 interest on the loan while it's being built, so that the
6 loan doesn't cost more than the house when it's
7 completed.
8 **Q** But in doing that, wouldn't the customer of the house,
9 the owner of the home, then be minimizing the interest
10 as it came to the finish of the build?
11 **A** [ADDISON] Absolutely, and that's the crux of the BLRA.
12 The BLRA, we've calculated, will save customers over $1
13 billion of costs to the plant at the time it goes on-
14 line and save them over $4 billion over the life of the
15 plants, and that was independently verified by the
16 accounting firm that ORS hired.
17 **Q** I hear you saying those words, but, as a layman, saying
18 that you are —
19 **CHAIRMAN WHITFIELD**: Mr. Zeigler?
20 **MR. ZEIGLER**: Could we hear a question, Mr.
21 Chairman.
22 **CHAIRMAN WHITFIELD**: Excuse me, Ms. Wright.
23 Let me recognize Mr. Zeigler.
24 **MR. ZEIGLER**: I think a question would be
25 helpful.

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CHAIRMAN WHITFIELD: Sir?

MR. ZEIGLER: I think a question would be helpful.

MS. WRIGHT: Well, I'm trying to lay groundwork for the question.

CHAIRMAN WHITFIELD: Well, let's get to the question real quick.

MS. WRIGHT: Okay. Now, if I can remember what the question was.

WITNESS ADDISON: About the interest.

BY MS. WRIGHT:

Q Yes. Okay. If you were building a house and you were paying this interest ahead of time, when the house is finished the interest you paid toward that house at the time would apply to the interest on the loan. My question to you is, how can you continue to say that this is saving the customer money when we are not investors; it is not applying to our loan. How can you continue to use the term "saving the customers money"? I don't understand how it's going to save us money when this build is done. I don't — are we going to get increases in our — I mean, money back on our bills?

A [ADDISON] If I can, let me contrast it to V.C. Summer Unit 1 that operates today — I would say probably the most valuable generation asset in our portfolio for the

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1 customers, because of the fuel costs of the plant, et
2 cetera. A third of the cost of that plant today that
3 customers are still paying for is interest, because
4 there was no BLRA when that plant was built. That cost
5 was added onto the top of the loan, so at the completion
6 of V.C. Summer Unit 1, when it went into production, the
7 ballpark cost of that was 50 percent more than the
8 construction cost because the interest had been layered
9 on the top of it and the customers have to pay interest
10 on the interest, over the life of the loan. Back to our
11 home analogy, if you were building a $100,000 loan and
12 didn't pay any interest, and at the end you'd added
13 $10,000 in interest on it, then you've got a $110,000
14 loan on a $100,000 house, or you were upside down, and
15 you've got the power of compounding working against you
16 over the life of that asset.
17 **Q** But in the end, isn't it the ratepayer that's going to
18 pay it in any case, and you can only go so high before
19 you have ratepayers who can't have electric, especially
20 since you're a monopoly?
21 **A** [ADDISON] I don't know how to answer that. I do know
22 that, at some point, we've got — we, as a country and as
23 a state, have social responsibility to help deal with
24 that. I know we've got a graduated tax table in our
25 State and our country to help address some of those kind

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of issues.

Q Well, we won't get into the taxes.

A [ADDISON] And we personally contribute, as well — or, corporately contribute to funds that help address that, as well.

Q All right. Mr. Byrne, back to you. Contractual disputes. I keep coming back to those. How many did you have? How many invoices that you disputed did you have? You said a number of invoices, but you never specified how many.

A [BYRNE] Oh, that number would probably be in the hundreds.

Q Only the hundreds?

A [BYRNE] Yes.

Q Okay. And of those, you only brought forward, in the discussions for the amendment, 10 percent of those?

A [BYRNE] I'm not sure we — where you say 10 percent.

Q I'll have to come to it; I haven't come to that question yet. But you specified there were 10 percent of the invoices that were brought up, and that you only — well, I'll wait until I get to it. Sorry.

A [ADDISON] If I might help you, I believe you may be referring to the 10 percent of an invoice that we withheld, if we were disputing the entire invoice.

Q Well, I'll get to it, because I have a problem with

that.

Mr. Byrne, you say that you have — and I'll have to see what page this is on. You say that you feel there's been an improvement in the nuclear supply chain since 2015?

A [BYRNE] Yes.

Q What was that, and why was that?

A [BYRNE] One is lessons learned. So, as vendors figure out how to do things better, smarter, they apply those lessons learned and we get the benefit of that. Some of it is we have diversified the supply chain. Originally, the premise, from starting with the Shaw Group, was that they were going to do all of the big modules at one place. That was something that we pushed them to change as soon as they started that project. They were loath to change that. Chicago Bridge & Iron, when they took over, they saw the single facility bottleneck as a problem and started to finally diversify the supply chain.

So, as opposed to relying on a facility that's called CB&I Lake Charles, in Lake Charles, Louisiana, for all the big modules and a number of mechanical modules, we now have moved those to different fabricators around the country, and we're getting better quality and more timely deliveries.

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1 **Q** So, to begin with, when the bottleneck was, it was a
2 CB&I subsidiary?
3 **A** [BYRNE] Actually, what started it was the Shaw Group.
4 But then when they acquired the Shaw Group – when CB&I
5 acquired the Shaw Group, they also got this facility.
6 **Q** And that was who they were using, their own facility?
7 **A** [BYRNE] Correct.
8 **Q** Were there any other choices besides the Shaw Group when
9 CB&I left? Were there any other choices to use? And
10 I'm loath to use "subcontractor" or "contractor" because
11 they keep getting mixed up here. The contractor on the
12 whole job as Westinghouse. Now we have a contractor
13 called Fluor. We had a contractor –
14 **CHAIRMAN WHITFIELD**: Ms. Wright, I need a
15 question. I need a question.
16 **BY MS. WRIGHT:**
17 **Q** I need to know, was there – I had one – was there
18 another company you could've gone with, besides the Shaw
19 Company – I mean, the Fluor Company?
20 **A** [BYRNE] Was there another company, other than Fluor,
21 that we could've gone with? Yes. We are getting short
22 on people with nuclear construction experience. I have
23 told people before that, when they ask me, "Why did you
24 select Shaw" or "Why did you select CB&I," that we
25 didn't. If we had our choice, we would've selected

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1 either the Fluor Corporation or Bechtel. There's
2 probably one or two others, but I don't know that they
3 have the requisite level of experience, so probably
4 Fluor and Bechtel would've been the two.
5 Our experience with Fluor has been very positive.
6 They built V.C. Summer Unit 1, for example. Most
7 recently, they put in the scrubbers at our Williams
8 Station and our Wateree Station. They built just about
9 every base-load plant that we operate. So our
10 experience with Fluor has been good.
11 **Q** So, you're telling us that Fluor is with the Vogtle
12 site?
13 **A** [BYRNE] Yes, Fluor has replaced CB&I at Vogtle, just
14 like they replaced them at our site.
15 **Q** At the same time.
16 **A** [BYRNE] At the same time.
17 **Q** Don't you think that some of these construction
18 companies are spread too thin for these big jobs?
19 **A** [BYRNE] Well, I — and that's a reason why you go with
20 somebody that has a significant amount of megaproject
21 experience, and, certainly, Fluor has a significant
22 amount of megaproject experience.
23 From a leadership perspective, what we have seen is
24 very positive on leadership. The craft generally are
25 going to come from the area. Now they'll spread out to

the extent that they can, but, you know, if Fluor Corporation is building a plant in California or Mexico or Saudi Arabia, that's not competing with resources for us.

Q Well, I really wasn't talking about the resources as much as their management ability with that many projects going at the same time. You only have a certain number of people who really know what they're doing, do you not?

CHAIRMAN WHITFIELD: Mr. Zeigler.

MR. ZEIGLER: Well, I think we got to a question, Your Honor.

CHAIRMAN WHITFIELD: All right.

MS. WRIGHT: I'm sorry. I have them as questions in here, but when I get them in my head —

CHAIRMAN WHITFIELD: Well, let's try to refrain from the commentary and just stick strictly to the questions; and when they give an answer, let's move to the next question.

MS. WRIGHT: I really am trying. I really am.

CHAIRMAN WHITFIELD: Well, let's try a little harder.

MS. WRIGHT: Okay.

WITNESS BYRNE: There are limitations on the amount of leadership talent that have megaproject

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experience. What Fluor brings is megaproject experience, so we can take people from other projects and they relocate them to our project. So, so far we've been very satisfied with the talent that Fluor has put on our project.

BY MS. WRIGHT:

Q And what length of time are we talking here, that you're saying so far?

A [BYRNE] Well, so far, they've had their management people on-site since January.

Q Not quite a year?

A [BYRNE] Not a year.

Q Okay. You have this about the guaranteed substantial completion dates, the GSCDs, for these reactors. And you're thinking now that Westinghouse is going to keep those, the new dates, correct?

A [BYRNE] Yes.

Q And why didn't they keep them up until now?

A [BYRNE] They have had a myriad of problems and issues. One of the biggest problems and issues is that the consortium partners were not getting along. You know, we saw some of that. We certainly didn't see all of it. Obviously, as a consortium, they had a consortium agreement that we were not privy to, so they had commercial disputes between the two companies. They

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1 resolved those as they have exited. So Westinghouse
2 won't have the excuse that they can point at CB&I any
3 longer, and CB&I would, at times, point at Westinghouse,
4 so they were pointing fingers at each other. That issue
5 has gone away because it's now Westinghouse's
6 responsibility.
7 **Q** So they really didn't resolve anything, did they; they
8 just — CB&I just walked away?
9 **A** [BYRNE] No, they had some form of commercial resolution
10 between those two companies. Exactly what it is, I
11 don't know.
12 **Q** Who do SCE&G — who do they have on-site to make sure
13 that some of the errors and some of the problems that
14 brought up the questionable invoices are not going to
15 happen again?
16 **A** [BYRNE] We have a team of people on-site in different
17 areas. We've got a team that's in the accounting area
18 that do track invoices. And, you know, the way we found
19 some of the problems was our team was tracking invoices.
20 Office of Regulatory Staff also oversees the invoices
21 and looks over the accounting. And we have a team of
22 quality assurance/quality control. We also have
23 construction management that's there on-site. The
24 consortium — or the consortium before they disbanded —
25 had established a new methodology for dealing with

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1 issues as they would come up, so they established a new
2 team that was more minute-to-minute issues. We now have
3 people that mirror the positions of those folks, the
4 contractor folks, on that team.
5 **Q** So how often do these people meet?
6 **A** [BYRNE] Oh, every day.
7 **Q** Your oversight people with SCE&G —
8 **A** [BYRNE] Yes.
9 **Q** — meet every single day?
10 **A** [BYRNE] Yeah.
11 **Q** Where do they meet?
12 **A** [BYRNE] At the construction site.
13 **Q** So they have a building there they go to, to meet?
14 **A** [BYRNE] They do.
15 **Q** And how many would you say there are?
16 **A** [BYRNE] People involved?
17 **Q** Yes.
18 **A** [BYRNE] We probably have 600, or so, SCE&G employees
19 dedicated to the new nuclear construction. If I take
20 out the folks who are licensed operators and trainers,
21 we're probably in the — between accounting, QA/QC,
22 construction oversight — we're probably in the 200
23 range.
24 **Q** Okay. Has Fluor had past experience, other than the
25 Vogtle site, with the AP1000s? Are they working at the

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1 China site?
2 **A** [BYRNE] They did not have any prior experience with
3 AP1000s before coming to our site, save for some design
4 work that they had helped Westinghouse with back in the
5 early days.
6 **Q** But that had nothing to do with China; it had to do with
7 the design of the AP1000, correct?
8 **A** [BYRNE] Correct.
9 **Q** What do you think is going to keep Westinghouse on point
10 now, from now out?
11 **A** [BYRNE] What do I think is going to keep Westinghouse on
12 point? It's a couple of things. First of all, we've
13 taken away the excuse-making that it's the other guy, so
14 they can't point fingers at CB&I any longer. We've
15 resolved the commercial issues that were tying down our
16 commercial teams, both theirs and ours, which bleeds
17 over onto the site for construction, so any of those
18 disputes now get pushed to the end. We brought in a
19 Dispute Resolution Board, said that there is some
20 independent body that will now help us resolve any
21 dispute we have between ourselves and the contractor.
22 And having Fluor as a subcontracted entity is
23 probably the better way to go, and a company like Fluor
24 that has the kind of experience that they have and has
25 been successful bringing in as many people as they have,

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I think, is hugely positive. And, for Fluor this is a reputational issue. They would tell you that. They headquarter their nuclear group out of Greenville. You know, they've been at our site for a long period of time. We have a lot of experience with them. So I think Fluor is going to help Westinghouse stay on track with the construction aspects.

Q But isn't Westinghouse interested in how they come out looking, as well? I mean, you say Fluor is very interested in keeping this up for — but Westinghouse is, too, even though they've had these problems, aren't they?

A [BYRNE] They absolutely are interested in their reputation and how they come across looking at the end of this project.

Q But they were before. They were before this amendment.

A [BYRNE] They —

Q They were —

A [BYRNE] They were, before the amendment. However, they've had some sales recently, and they really need to perform in order to cement those deals in places like the UK and India.

Q And they're watching what's going on here now.

A [BYRNE] Absolutely. They are coming to visit.

CHAIRMAN WHITFIELD: Ms. Wright, let me stop

you just a minute. It's 12 o'clock, and I'm only going to go a few more minutes before we break for lunch. How much longer do you think you have? We've got — I still have to get —

MS. WRIGHT: A lot.

CHAIRMAN WHITFIELD: Well, I still need to give Mr. Guild the opportunity to cross, and you stated the other day that you were a *pro se* litigant, meaning you're a nonattorney, and I realize that, and I've given you wide latitude.

MS. WRIGHT: I realize that.

CHAIRMAN WHITFIELD: As far as testimony goes, you've testified in some of your questions. I've given you wide latitude in terms of relevance. But we're going to have to move on, and I'm going to ask that you wrap it up. We're going to go a few more minutes. And I do need to give Mr. Guild the opportunity. We still have numerous witnesses to go in this case, so I'm going to ask that you wrap it up. I've given you about as much leeway as I can.

MS. WRIGHT: Could I ask you to do this instead? Could you let us go to lunch, and when I come back I'll minimize my questions that I have left?

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CHAIRMAN WHITFIELD: I'd prefer to continue on about 10 or 15 minutes right now, and then we're going to break. We're going to come back around 1 for lunch, and we're going to go about 45 minutes and break again for our Commission Meeting. We've still got a lot of other business to tend to, and I've given you about as much latitude as I can give anyone — attorney, or not — so I'm going to ask you to wrap it up.

MS. WRIGHT: That's going to be hard, because I have a lot of questions I had yet to ask him.

CHAIRMAN WHITFIELD: Ms. Wright, I need to be fair to —

MS. WRIGHT: I understand.

CHAIRMAN WHITFIELD: — Mr. Guild and to all the other parties in this case, and I've been more than fair to you.

MS. WRIGHT: You have. You have.

BY MS. WRIGHT:

Q How much have we spent on this site so far, this build?

A [BYRNE] How much money?

Q How much money?

A [BYRNE] Through the end of '15, I think we've spent 3.8, or so. We're forecasted to be about 4.4 at the end of this year. So my guess is that we have probably spent

about 4 to 4.1, somewhere in that range.

Q Okay. And with this amendment, what are you saying is going to be the amount spent from now, or from when you said, the date you had?

A [BYRNE] From the amendment, going forward?

Q Yes.

A [BYRNE] Three-point-four-ish [$3.4-ish] billion.

Q That's if they can manage to stay under that; is that correct?

A [BYRNE] Well, if they're not able to stay under that, then they have to absorb these costs, unless they have something they can say qualified as a change order, either something that we would request, a *force majeure* type issue, uncontrollable circumstances, or a change in the law.

Q Could you explain to me — that's very wide — that unforeseen circumstances?

A [BYRNE] So, that's things like, were they to get a strike, if war were declared, if a tornado were to rake the site, those kind of things.

Q Well, that's weather, though; I thought that was listed separately.

A [BYRNE] Well, they're all unforeseen circumstances.

Q Who is paying for the craft labor, the nonlabor, and the — on the site?

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1 **A** [BYRNE] Who is paying for the craft labor?
2 **Q** Well, the craft labor, the indirect labor, the non-
3 manual labor, who's paying for that?
4 **A** [BYRNE] The owners pay for —
5 **Q** So South Carolina Electric & Gas.
6 **A** [BYRNE] And Santee Cooper, yes.
7 **Q** All right. There was some mention in your testimony on
8 page 40 about using financial pressure. Page 40, lines
9 14 through 15. You talked about bringing in financial
10 pressure on the consortium, which is now Westinghouse.
11 And how are you managing to do that now?
12 **A** [BYRNE] Well, we don't have to do that now. This was
13 the issue that we had under the previous EPC contract,
14 where we were withholding payments to them, bringing
15 financial pressure on both Westinghouse and CB&I.
16 **Q** And what is Westinghouse's incentive to finish this job,
17 it's just to save face?
18 **A** [BYRNE] No, they have some incentives to finish on time,
19 they have some penalties if they don't finish on time.
20 Under the old contract, those penalties were relatively
21 small and had already been — we had already gone past
22 the dates where they know they would have to pay them
23 out. So there was no incentive for them, under the old
24 contract, to pay any attention to liquidated damages.
25 So —

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1 **Q** And what are the incentives now?
2 **A** [BYRNE] So we now have liquidated damages that were
3 increased about fourfold over what they used to be.
4 **Q** Which is?
5 **A** [BYRNE] Which is —
6 **A** [ADDISON] [Indicating.]
7 **A** [BYRNE] [Indicating.] Our portion of those liquidated
8 damages would be about $372 million. The total 100
9 percent, when you include Santee's piece, what
10 Westinghouse is concerned about would be $676 million.
11 **Q** I'm sorry, you'll have to give those to me again.
12 **A** [BYRNE] Okay. The amount that Westinghouse is concerned
13 about would be the 100 percent number, which is $676
14 million.
15 **Q** And they would have to pay this if they go beyond the
16 date?
17 **A** [BYRNE] It's graduated, so it's not day one they would
18 pay $676 million, but it's graduated and goes over about
19 a two-year period.
20 **Q** About how long a period?
21 **A** [BYRNE] A two-year period.
22 **Q** A two-year period.
23 **A** [BYRNE] Correct.
24 **Q** And you just said warranties and extensions on licenses
25 and — extensions on warranties and licenses and things

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like that, that would run out in that two-year period?

A [BYRNE] The new agreement has us go out for two years beyond the completion dates.

Q So that's in that contract?

A [BYRNE] Correct, in the amendment. In the amendment.

Q The amendment. I don't —

A [BYRNE] Right.

Q Well, you call it "amendment" and you call it "contract."

A [BYRNE] I've call it an amendment.

Q Okay. All right. I did want to get into — do you have — did you have any experience in the past with nuclear waste?

A [BYRNE] Did I have any experience with nuclear waste?

Q Uh-huh.

A [BYRNE] Yes.

Q In your job, okay. I have some questions about this site and the nuclear waste.

A [BYRNE] Okay.

Q In proposing this in 2008 when you came before the Commission and in the Legislature to build it, did you have plans to deal with the waste?

A [BYRNE] Yes.

Q What were your plans at that time?

A [BYRNE] The plans were we have 18 years, per unit, of

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on-site storage in the wet storage pools. We signed a contract with the government to take the waste, and then we would do dry fuel storage beyond that.

Q There was a contract?

A [BYRNE] There was.

Q And you said "to take the waste." Do you mean for the 18 years, or do you mean the government is going to take the waste?

A [BYRNE] The government has an obligation to take all of the waste.

Q And when did you sign that contract with the government?

A [BYRNE] It was signed with the DOE. I don't remember the date that we signed it.

Q What year was it?

A [BYRNE] I don't even remember the year.

Q Could you get that to me?

A [BYRNE] I certainly could.

Q And you're saying that there was 18 years, per unit, of storage space on-site. Wasn't that temporary storage space until it could be moved out?

A [BYRNE] Yes.

Q That you would move — am I correct you would move out parts and put new in?

A [BYRNE] Yeah, this is similar to what the industry does and what we've done on V.C. Summer Unit 1. So, prior to

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1 this year, every assembly that we had ever used at Unit
2 1 was in our wet storage pools. So, this year, we
3 completed construction of a dry storage pad, and we
4 transferred four casks' worth of assemblies to that dry
5 fuel pad, and each cask has 37 assemblies in it.
6 **Q** This is a new thing.
7 **A** [BYRNE] This is a new thing.
8 **Q** When did you do this?
9 **A** [BYRNE] We did it in April of this year.
10 **Q** So, that —
11 **CHAIRMAN WHITFIELD**: Mr. Zeigler.
12 **MR. ZEIGLER**: Mr. Chairman, this is an
13 interesting line of questioning, but in this
14 proceeding, the only question is whether there was
15 imprudence in managing the construction project
16 that would lead to additional costs that are before
17 the Commission today. I don't see this going
18 anywhere toward the prudency of the management of
19 the project vis-a-vis the costs before you today,
20 so I'd object on the grounds of relevancy.
21 **MS. WRIGHT**: Where's the —
22 **CHAIRMAN WHITFIELD**: I concur, Mr. Zeigler, to
23 the question of relevance. And I'm going to give
24 you about two more minutes, and we're going to
25 break for lunch, and I need your questions to stick

to the relevance of this proceeding only.

MS. WRIGHT: But they're asking for money to make those platforms.

CHAIRMAN WHITFIELD: Well, you stick to the relevance of this proceeding, what's in Mr. Byrne's testimony and what's in Mr. Addison's testimony. That's the two witnesses you have up now.

WITNESS BYRNE: We're not asking for any money for spent-fuel platforms in this proceeding, or under the BLRA.

BY MS. WRIGHT:

Q But you're asking for more money, and doesn't that include what you're constructing on the site?

A [BYRNE] No. That's a Unit 1 construction project; it has nothing to do with Units 2 and 3. We will, at some point in the future, build a dry fuel storage pad — unless the government lives up to their obligation and takes the fuel, which I would be happy to see. But if they don't, at some point in the future 18 years from now, 20 years from now, we will have to construct a pad for Units 2 and 3. But it's got nothing to do with this proceeding or this case.

CHAIRMAN WHITFIELD: Mr. Byrne has graciously answered your question —

MS. WRIGHT: He did.

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1 **CHAIRMAN WHITFIELD**: — and it has nothing to
2 do with this proceeding. I would ask you —
3 **MS. WRIGHT**: Thank you.
4 **CHAIRMAN WHITFIELD**: You've got 60 more
5 seconds, and we're going to break for lunch, and
6 that's going to be it for these two witnesses, Ms.
7 Wright.
8 **MS. WRIGHT**: Let me see if I have another one
9 to ask.
10 [Brief pause]
11 I think I'm done.
12 **CHAIRMAN WHITFIELD**: Okay, thank you. We are
13 adjourned. But before I adjourn, Mr. Zeigler, do
14 you want to take up any redirect after lunch?
15 **MR. ZEIGLER**: I wasn't planning on it. I'll
16 have to see what Mr. Guild has to say, though.
17 **CHAIRMAN WHITFIELD**: I'm sorry. I haven't
18 even gotten Commissioners or Mr. Guild. I'm ahead
19 of myself.
20 We'll adjourn, and I'll see you back at 1
21 o'clock. We do — I would like to make an
22 announcement. We've got word that there's a
23 vehicle on fire out here at I-20 and Bush River
24 Road, so you may be encountering some traffic
25 concerns right here at the exit. I don't know what

lane or anything. But I just wanted to make you aware of that. See you at 1 o'clock.

[WHEREUPON, the witnesses stood aside.]

[WHEREUPON, a lunch recess was taken from 12:10 to 1:05 p.m.]

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A F T E R N O O N P R O C E E D I N G S

THEREUPON came,

S T E P H E N A . B Y R N E ,

J I M M Y A D D I S O N ,

resuming the stand as witnesses on behalf of the Petitioner, South Carolina Electric & Gas Company, who, having been previously duly affirmed, were examined and testified further as follows:

CHAIRMAN WHITFIELD: Please be seated. I'll call this hearing back to order, and we still have Mr. Byrne and Mr. Addison on the stand. Mr. Guild, you are up.

MR. GUILD: Thank you, Mr. Chairman.

FURTHER CROSS EXAMINATION

BY MR. GUILD:

Q Good afternoon, Mr. Addison and Mr. Byrne.

A [PANEL] Good afternoon.

Q Mr. Addison, I guess it's safe to say that this Commission has been responsive to the company's needs by approving all of the cost increases and schedule changes that you have asked them to consider under the Base Load Review Act, to date?

A [ADDISON] I think they have. I think they've complied with the law.

Q I see. But they haven't found any of your costs'

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1 increases imprudent, haven't rejected a dime of the cost
2 hikes for building the plants over time, have they?
3 **A** [ADDISON] That's correct.
4 **Q** And notwithstanding this extraordinarily favorable
5 regulatory treatment, the rating agencies have expressed
6 great skepticism about the health of the company and
7 this project, haven't they?
8 **A** [ADDISON] Well, they do have concerns. I don't know if
9 I would say "great skepticism." But SCE&G's an
10 investment-grade-rated company.
11 **Q** Moody's, last year in September, changed the outlook for
12 SCANA and its subsidiaries from stable to negative,
13 didn't they?
14 **A** [ADDISON] That's correct.
15 **Q** Uh-huh. And they said, and I quote, "We see the annual
16 BLRA revenue increases, which recover construction-work-
17 in-progress costs, as insufficient to improve the
18 current negative trend of financial performance through
19 2019." That's what Moody's had to say in September,
20 correct?
21 **A** [ADDISON] Correct.
22 **Q** 2019 would be when you most optimistically think Unit 2
23 would be complete.
24 **A** [ADDISON] That's the current schedule.
25 **Q** And Fitch Rating Service, while maintaining your BBB-

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1 ratings for long-term issuer default and maintaining
2 your outlook as stable, evaluate this company as facing
3 what they call high project-execution risk. Isn't that
4 the case?
5 **A** [ADDISON] That's correct.
6 **Q** Fitch is concerned with the weakening credit profile of
7 Toshiba. That's the parent corporation of Westinghouse,
8 with whom you just renegotiated this contract, correct?
9 **A** [ADDISON] Correct.
10 **Q** Quote, "Even under the fixed-price contract, project
11 costs would remain susceptible to further increases due
12 to remaining disputed items: owner's costs of about $10
13 million per month related to any future delays, and
14 changes of nuclear regulatory law." Fitch said that, as
15 part of their explanation for why they considered you're
16 facing high project-execution risk, correct?
17 **A** [ADDISON] They did.
18 **Q** Further, Fitch goes on, "Each petition to update the
19 construction capital cost heightens the potential for
20 the South Carolina Public Service Commission, PSC, to
21 impose penalties, notwithstanding the provisions of the
22 law." They said that.
23 **A** [ADDISON] They did.
24 **Q** Fitch remains concerned that investors would be required
25 to share the burden of these or any future cost

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1 increases in a manner that would materially weaken
2 credit metrics. They said that?
3 **A** [ADDISON] They did. That's their job, is to point out
4 any type of concerns like that. But despite all of
5 those, both of those ratings, as well as Standard &
6 Poor's, remain investment-grade.
7 **Q** Yes, remain investment grade. To date, the Commission
8 has not made shareholders bear any of the cost increases
9 associated with this project, notwithstanding the fact
10 that my client and others continue to ask them to make
11 stockholders bear responsibility for these cost
12 overruns. Haven't made you pay a dime.
13 **A** [ADDISON] That's correct, and I would say, because they
14 haven't — they haven't, because we've not been imprudent
15 and, as a result of that, the customers are saving
16 substantially on the interest cost of the debt because
17 the compact of the BLRA is holding together.
18 **Q** [ADDISON] Well, as someone pointed out, in your analogy
19 about a homeowner financing their costs of building a
20 house, at the end, that homeowner that you wanted to
21 analogize us to ends up with an equity interest in the
22 home, don't they? They own the house?
23 **A** [ADDISON] Yes.
24 **Q** What's my equity interest in your nuclear plants? Zero,
25 right?

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1 **A** [ADDISON] Equity interest, yeah. I would say that the
2 value of the generation will last for decades.
3 **Q** Yeah, but if I want to go get my electricity from
4 somebody else, I can't. I'm an SCE&G assigned
5 territorial residential customer. I'm stuck. I own
6 zero equity in your nuclear plant, but I'm a captive
7 customer and I will pay the bills. Pretty good deal,
8 I'd say, for the company, that BLRA.
9 **A** [ADDISON] Well, in my opinion, it's a good deal for the
10 customers and the company. That's the construct of the
11 law.
12 **Q** And I respectfully disagree with you, and if I had the
13 option would choose not to be an SCE&G customer or —
14 **MR. ZEIGLER**: Your Honor, I believe that Mr.
15 Guild —
16 **BY MR. GUILD:**
17 **Q** — a BLRA —
18 **MR. GUILD**: Excuse me, let me finish my
19 question there, Counselor.
20 **BY MR. GUILD:**
21 **Q** But I don't have the choice of not being an SCE&G
22 customer if I choose to live in Columbia, South
23 Carolina, do I?
24 **A** [ADDISON] That's correct.
25 **Q** And I don't have a choice of giving you a loan under the

BLRA, no matter what the cost of the plant is, as long as this Commission passes it on to ratepayers. I'm stuck, aren't I?

A [ADDISON] Well, I'm not trying to quibble with you, but it's not a loan. The investors are putting up the money.

Q Oh, needless to say. It's not a loan, because I don't have any equity in it. You're just making me pay the financing costs for this plant, with no ownership stake whatsoever and as a captive customer. That's the bottom line, isn't it?

A [ADDISON] That's the law.

Q Mr. Byrne, I've got some questions for you, sir. It's accurate to say, is it not, that, as of June 30, 2016, the project was at a 22.4 percent completion, using the measure of estimated direct construction labor man-hours?

A [BYRNE] That is a number that the contractor gives to us for only the construction tabletop that they are responsible for, based on man-hours.

Q That's the number you reported, is it not?

A [BYRNE] It's a number that we have reported. The real percent complete would be higher than that. They do not count things that are not — that are — that are largely controlled by contractors. For example, the cooling

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1 towers, the switchyard. Those kinds of things are not
2 included in those numbers.
3 **Q** All right.
4 **A** [BYRNE] Also, when they build modules, you know, the
5 majority of the module construction actually takes place
6 somewhere else, and when those modules are placed
7 they'll get the credit for them. But the modules are
8 not factored into those calculations. So the real
9 number would be much higher.
10 **Q** But 22.4 percent is the complete — the construction
11 completeness status as of June 30, 2016, using the
12 metric of estimated direct construction labor man-hours,
13 correct?
14 **A** [BYRNE] Yeah, what the contractor reports to us actually
15 is 57 percent complete.
16 **Q** Did you hear my question? Using the metric that I just
17 quoted, is it accurate to say that, as of June 30, 2016,
18 you were 22.4 percent complete, using estimated direct
19 construction labor man-hours as the metric. Yes or no?
20 **A** [BYRNE] Using that metric, which I think I explained was
21 a little misleading, yes, that's accurate.
22 **Q** All right. Well, misleading or not, that's the very
23 metric that ORS Nuclear Expert Witness Jones uses in his
24 testimony assessing the prudence and reasonableness of
25 your Petition to this Commission. That's the metric he

uses, isn't it?

A [BYRNE] I believe I do recall seeing that number in his testimony.

Q And if, indeed, 22.4 percent is the accurate measure as he sees it and ORS sees it, that implies to the contrary that there's 77.6 percent of this project left incomplete, using that same metric of estimated total direct construction labor man-hours, correct?

A [BYRNE] Of the project? I don't know that I would characterize it that way.

Q Well, that's — I mean, I did the math. It's 100 less 22.4. Did I subtract accurately?

A [BYRNE] No, but you're not including in that — if you're taking the number that was in Mr. Jones' testimony, you're not including in that the things that I mentioned earlier.

Q Understood. Using Mr. Jones' metric, ORS's expert's metric, the metric that your contractors used, it implies, does it not, that we've got 77 percent of the project yet to be built?

A [BYRNE] I think I testified a few minutes ago that the metric our contractor uses would say that they're 57 percent complete.

Q And what metric would that be?

A [BYRNE] It's a metric they report to us on percent

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complete every month, and it includes things like the one factor that you just talked about, but it also includes engineering activities, procurement activities — because, as I said, the other factors don't take into account things like modules that are fabricated off-site.

Q Well, it was good enough for ORS and Witness Jones. Let's just stick with this metric for the time being, notwithstanding your explanation there, sir.

CHAIRMAN WHITFIELD: Excuse me, Mr. Guild. Mr. Zeigler.

MR. ZEIGLER: You know, the witness has testified that's not an accurate measure. I do not believe it's appropriate for Mr. Guild to continue to put that number in his mouth.

MR. GUILD: I don't think I heard him say that, at all, Mr. Chairman — if I may be heard on this point. I think I heard him say it was an accurate measure; he just doesn't think it's the appropriate measure. It's the measure ORS uses. It's the measure I choose to use in my questions.

CHAIRMAN WHITFIELD: If you would, stick to the measures used in his testimony.

MR. GUILD: Mr. Chairman, with all respect, I don't believe there's a law that says I'm

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1 restricted to his testimony for the scope of my
2 cross-examination. I'm relying on a number in
3 ORS's testimony.
4 **MR. ZEIGLER**: Your Honor, the witness has said
5 the number is 57 percent. That is the number which
6 has to be used in examining the witness. You can't
7 fabricate your own number, say another witness has
8 another number, and go down a cross-examination
9 line based on something the witness says is
10 completely inaccurate and not his testimony.
11 **MR. GUILD**: Mr. Chairman, if I may —
12 **CHAIRMAN WHITFIELD**: Mr. Guild, I think I'm
13 going to answer you. I'm going to allow you to
14 question a little further because it's in ORS's
15 testimony.
16 **MR. GUILD**: Thank you, Mr. Chairman.
17 **BY MR. GUILD:**
18 **Q** That was the number, again, 22.4 percent complete, using
19 the estimated direct construction labor man-hours, as of
20 June 30th. What's the comparable number today, nearest
21 as you know — to the best of your knowledge, I should
22 say — using that same measure, percent complete in
23 estimated direct construction labor man-hours, as of
24 today?
25 **A** [BYRNE] I'm not sure what that number is today.

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1 **Q** What's the most recent number that you have, using that
2 metric, sir?
3 **A** [BYRNE] I believe the most recent number I've seen is
4 somewhere just under 28 percent.
5 **A** Twenty-eight percent. Now, labor man-hours is something
6 you dispute as appropriate, but it's what your Dr. Lynch
7 uses in his sensitivity analysis to tell this Commission
8 what a great deal you're going to get under the proposed
9 fixed-price contract option that you want to exercise.
10 Dr. Lynch uses labor man-hours, does he not?
11 **A** [BYRNE] He does.
12 **Q** Okay. And that number, the 22.4 percent or the about-28
13 percent more currently, that number represents a
14 fraction of what total estimated direct construction
15 labor man-hours is associated with completion of the
16 project, Mr. Byrne?
17 **A** [BYRNE] It's associated with completion of the
18 construction portion of the contract, not including the
19 other things I discussed earlier.
20 **Q** I hear you say that, but what number is 100 percent
21 complete — if 22.4 percent is where you were June 30th
22 and about 28 percent now, what is the total number of
23 direct construction labor man-hours, in your opinion as
24 the company, necessary to complete this project?
25 **A** [BYRNE] 100 percent.

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1 **Q** Yeah, it's 100 percent. What's it in numbers?
2 **A** [BYRNE] I'm not sure what the number is. It would —
3 **Q** You don't know.
4 **A** [BYRNE] — be on the order of 3-4 million.
5 **Q** Three or four million labor man-hours?
6 **A** [BYRNE] Right.
7 **Q** And that number, 100 percent, whatever it actually is,
8 100 percent complete represents whose number? Your
9 number or the consortium's number?
10 **A** [BYRNE] That number is a number that came from the
11 consortium and has been adjusted somewhat by Fluor
12 Corporation since their arrival.
13 **Q** All right. That's my question. How much has Fluor
14 adjusted the number since they've been on the job last
15 year and are reconsidering what it's going to take to
16 get the job done, Mr. Byrne?
17 **A** [BYRNE] They have adjusted it upwards. I don't know the
18 exact number, but they've increased the number of hours,
19 which is another reason why, in Dr. Lynch's chart or his
20 testimony, we looked at man-hours and the prospect of
21 increasing man-hours and looking to limit that cost.
22 **Q** Exactly. Exactly. And I want to know what Fluor is now
23 saying those adjusted man-hours — to the best of your
24 knowledge right now — what's Fluor saying it's going to
25 take to get the job done, and how does that differ from

what the consortium was telling you in June?

A [BYRNE] Well, it differs from what the consortium told us last year. Fluor has come in and increased the number of hours it takes, and they don't necessarily look at it as a project overall but they look at it by area or by building or by job. So they're increasing the unit rates, so the number of hours it takes to perform a certain task has increased. And I imagine Fluor is going to continue to refine those numbers, and we expect that those numbers are going to increase further.

Q All right. And you expect they'll increase further. By what percentage do you expect them to increase, over and above the numbers for project completion that you reported end of June of this year?

A [BYRNE] Yeah, I'm not sure what the final number is going to be. I'll have to wait for Fluor to do their analysis, to give us their final numbers.

Q Sure, I expect you will. But what are they telling you now? Is it going to be 10 percent higher, 20 percent higher, 30 percent higher? What's it going to be, Mr. Byrne?

A [BYRNE] I haven't been involved with the direct conversation relative to what percentage —

Q What's your understanding —

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1 **A** [BYRNE] — increase in hours —
2 **Q** — as you sit — I'm sorry, I didn't mean to interrupt.
3 Go ahead.
4 **A** [BYRNE] I have not been involved in direct conversations
5 relative to what percentage increase in hours I should
6 expect.
7 **Q** All right. I hear you say that. What's your best
8 estimate? Asking this Commission to approve $850
9 million in cost increases, what's your best estimate
10 today, Mr. Byrne — I hope you're on top of this, now —
11 of what percentage increase, over and above the prior
12 number of labor man-hours to complete the project, you
13 expect Fluor to estimate it's going to take to get the
14 job done? What's your best estimate?
15 **A** [BYRNE] I don't know what my best estimate of somebody
16 else's estimate might be. Suffice it to say that we
17 think those numbers are going to be higher. They could
18 be significantly higher. And that was one of the things
19 that drove us towards selecting the fixed-price option.
20 **Q** Could be significantly higher. Significantly higher.
21 All right. Now, in order to evaluate that fixed-price
22 option, your management asked Dr. Lynch to do the
23 sensitivity analysis to evaluate the comparison what of
24 the fixed-cost versus the prior EPC contract cost is
25 likely to be, under various sensitivities, correct?

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1 **A** [BYRNE] Correct.
2 **Q** And those sensitivities largely were driven by labor
3 man-hours, correct?
4 **CHAIRMAN WHITFIELD**: Mr. Guild, you're getting
5 a little away. I need to let Mr. Richardson put a
6 Lavalier on you.
7 **MR. GUILD**: I don't get a second chance this
8 time, all right.
9 **CHAIRMAN WHITFIELD**: I don't want to cramp
10 your style.
11 [Laughter]
12 **MR. GUILD**: I don't get a second chance, all
13 right.
14 [Brief pause]
15 **BY MR. GUILD:**
16 **Q** So, in Dr. Lynch's analysis, he employs sensitivities
17 for productivity to assess what the potential range of
18 additional cost might be that would be either covered or
19 not covered by the fixed-price contract option exercise,
20 correct?
21 **A** [BYRNE] He does.
22 **Q** And you employ a number taken from Dr. Lynch's table, I
23 take it, as a high of $981 million, as the potential
24 extra cost that Westinghouse might bear if you exercise
25 the fixed-option contract, correct?

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A [BYRNE] I think that was the upper bound.

Q And you have read ORS Witness Jones' testimony?

A [BYRNE] I have.

Q He uses a number of $855 million. Can you explain the variance between the higher number that you derive from Dr. Lynch's testimony and the number that Mr. Jones uses?

A [BYRNE] I don't know what the difference is. You'd probably have to ask Witness Jones why he used that number. My guess is that it was — when we did our sensitivity, we kind of tossed out the high and the low, and we came up with what we think is a reasonable expectation.

CHAIRMAN WHITFIELD: Mr. Byrne, could you get a little closer to your mic? I'm sorry.

WITNESS BYRNE: Sorry [indicating].

I think he was using the upper bound of the reasonable expectation.

BY MR. GUILD:

Q Yes. And it may just have been a difference in interpolating from a regression analysis, or a chart?

A [BYRNE] No, I don't think so. I think what we did was, we said some values may not be realistic, so if you discount what they consider to be realistic you'll come up with the number I think Mr. Jones had in his

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1 testimony.
2 **Q** All right. But you used the number as high as $981
3 million — and, again, that's not the worst case; that's
4 a base case, but a higher range of the base case,
5 correct?
6 **A** [BYRNE] You'd have to ask Mr. Lynch for some of those
7 specifics, but I think it was an upper bound.
8 **Q** You think it was an upper bound of a worst case, not a
9 base case?
10 **A** [BYRNE] Well, I don't know — I don't know what you mean
11 by "worst case," but I think we used the sensitivity
12 analysis that was based on productivity factors and wage
13 rates increasing or decreasing — but likely increasing —
14 and he came up with those numbers.
15 **Q** Your testimony at page 45, line 18, "Dr. Lynch's study
16 shows that this benefit alone could be worth between
17 approximately $363.0 billion and $981.0 million before
18 the project is concluded." And that's your testimony
19 about what the benefit is to SCANA of the fixed-price
20 contract in that regard, correct?
21 **A** [BYRNE] It is.
22 **Q** And that $981 million is what, on that reasonable
23 measure — reasonable, by your testimony, Dr. Lynch's
24 testimony, and I think ORS's testimony — that $900-odd
25 million cost is a potential cost that would be borne by

Toshiba/Westinghouse, should they not — if they deliver the contract, on time, under the fixed-price option, correct?

A [BYRNE] No, I don't think that that is an accurate representation. That was our estimate for hours exceeding by certain factors. Now, Westinghouse would certainly not necessarily agree with the analysis that we used. I'm sure they would say that they don't expect the productivity factors to be that high, that they don't expect wage rates to be that high. We tried to put some upper bounds on both of those: higher wage rates and poor productivity factors. So they would certainly anticipate that they will improve, and certainly improve for the second new unit, or Unit 3.

Q Well, I mean, either it is a good number or not a good number Mr. Byrne. You're telling this Commission they may save as much as $981 million. Are you now retracting that testimony?

A [BYRNE] I'm not retracting any testimony, Mr. Guild.

Q So let's take it at $981 million. If the company saves $981 million, somebody else bears that cost, and it's true that under those circumstances it would be Westinghouse and the consortium that would bear those costs; isn't that right?

A [BYRNE] If we made the assumption that the costs above

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and beyond the fixed-price option were $981 million, then, yes, Westinghouse/Toshiba would have to bear those costs.

Q All right. That's what I want to get to. So let's talk about Westinghouse/Toshiba bearing $981 million in losses, from completing this project. What have you done to assess the prospect that Westinghouse refuses to bear those losses and, instead, walks away from this job?

A [BYRNE] What have we done to assess it?

Q Yes.

A [BYRNE] Well, a couple of things. One, we've addressed the issue with Westinghouse management. Westinghouse management has assured us that they have not walked from a project before, and they don't intend to walk from this one. Their issue is they understand that this is — they're going to lose money on this project, and they're looking at the longer game, which is sales of AP1000s around the world, certainly more in this country but certainly around the world.

We think that Fluor is going to help them improve things like labor efficiencies, so bringing Fluor in, we think, is very positive. And then, from the Toshiba perspective, we did have Toshiba reaffirm their parental guarantee for the project. And we do — we have asked

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the Toshiba executives to tell us what their plans are, going forward, and where they see themselves from a financial perspective in the future. So they have let us know about the businesses that they consider core, and nuclear — the energy business and nuclear is one of those businesses that they consider core. And they've decided to offload some other businesses to bring in cash flow, and they have largely completed that. They have a plan to improve their position on the Japanese stock exchange, which they have been executing on. In effect, the Westinghouse CEO has now been promoted into the Toshiba organization even further.

Q Does that complete your answer?

A [BYRNE] It does.

Q So Westinghouse has guaranteed this contract — I'm sorry. Westinghouse's parent, Toshiba, has guaranteed this contract. Is that right? Is that your testimony?

A [BYRNE] They have.

Q And is that in writing? Is there a written contract where the Westinghouse parent stands behind the contract entered into by its Westinghouse subsidiary?

A [BYRNE] There is a parental guarantee portion of the contract.

Q And where is that?

A [BYRNE] It's in the contract.

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1 **Q** Is that attached to your testimony?
2 **A** [BYRNE] The original guarantee is not. The guarantee
3 associated with the amendment is in my testimony.
4 **Q** Can you point us to that, please?
5 **CHAIRMAN WHITFIELD**: Mr. Byrne, if I could,
6 let me get you to get a little closer to that mic
7 again.
8 **WITNESS BYRNE**: [Indicating.] All right. The
9 parental guarantee is Exhibit F to my testimony, so
10 it would be page 32-of-43, Exhibit SAB-3.
11 **MR. GUILD**: Can I have a moment, Mr. Chairman,
12 please.
13 **CHAIRMAN WHITFIELD**: Yes.
14 [Brief pause]
15 **BY MR. GUILD:**
16 **Q** Say again the page, please?
17 **A** [BYRNE] Exhibit F, for Foxtrot, is page 32-of-43.
18 **MR. GUILD**: It's 33-of-43 in this copy, in any
19 event, Mr. Chairman.
20 **CHAIRMAN WHITFIELD**: It's 33 and 34 of our
21 copy, Mr. Guild, if that helps you.
22 **MR. GUILD**: Thank you. Yes, it does.
23 **BY MR. GUILD:**
24 **Q** All right, thank you. Now, were you present, Mr. Byrne,
25 for a presentation by Toshiba with regard to their

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1 response to the, shall we say, scandal associated with
2 their accounting misrepresentations, et cetera?
3 **A** [BYRNE] I was.
4 **Q** And I'm holding up what was given to me in discovery
5 today. "Toshiba Rebuilding Initiative," TRI. Was that
6 the subject of the presentation you heard?
7 **A** [BYRNE] It was.
8 **Q** Any idea how much Toshiba paid for that nice logo and
9 the slogan of their campaign: Toshiba Rebuilding
10 Initiative?
11 **A** [BYRNE] I have no idea how much they paid for that logo.
12 **Q** "Regaining trust, refocusing the business, rising
13 above." And they have a logo of sort of a cracked
14 pyramid here that kind of has a rather alarming look,
15 like a nuclear power plant that's suffered a meltdown.
16 They gave this presentation, Mr. Byrne, and satisfied
17 you that, despite all of the rough edges with
18 Westinghouse/Toshiba in the past, it was a new day, and
19 you're on friendly and confident terms moving forward;
20 is that right?
21 **A** [BYRNE] I don't think that's an accurate representation
22 of our feelings after that meeting.
23 **Q** Well, you just got done telling me that you now have
24 high confidence that Westinghouse and their parent,
25 Toshiba, are going to deliver on these promises.

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They've assured you that their reputation's on the line, that they're going to build this plant and take whatever losses are associated with the contract they've signed. But it's the same Westinghouse/Toshiba that's been promising this kind of stuff all along, isn't it? They haven't changed.

A [BYRNE] The Toshiba Corporation is significantly changed. As I'm going to guess you're probably aware, if you've followed the Toshiba situation, I think a majority if not all of their Board members have changed, and most of their leadership team has changed.

Q So it's a new team and, therefore, all of the disputes that you had with Westinghouse/Toshiba in the past, where they dug their heels in, they fought you tooth and nail about all manner of things you allude to in your testimony, you don't expect any of those disputes in the future; it's going to be smooth sailing from here on out, because Toshiba has a new Board.

A [BYRNE] No, I think, as Mr. Marsh testified, we are concerned about the financials of Toshiba and Westinghouse, that we have restructured the contract to eliminate some of those disputes that you talked about, or, if a dispute cannot be resolved, to streamline the process.

Q Okay. And if that doesn't bear out and Westinghouse

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1 walks from this project, defaults on their obligation,
2 Toshiba defaults on its obligation, what then, Mr.
3 Byrne? How do you respond under those conditions?
4 **A** [BYRNE] Well, you know, in that hypothetical situation,
5 we would have to make some difficult decisions as to
6 whether or not we complete the plant on our own, or we
7 were to bring in somebody else as an EPC contractor.
8 That's the reason why we're escrowing the information
9 that we would need to complete the plant on our own.
10 Not that we're foretelling that that situation might
11 happen; we just want to be prepared in the event that it
12 does. But, you know, it would take bankruptcy of both
13 corporations. If they just defaulted without
14 bankruptcy, obviously we'd have cause to sue them.
15 **Q** Well, you've had cause to sue all these years so far
16 with the Westinghouse consortium, and you said you
17 didn't want to do it.
18 **A** [BYRNE] I didn't say I didn't want to do it; I said it
19 would be difficult, protracted, and may have complicated
20 it. I think when you're talking about somebody who
21 might default on an obligation and walk away from a
22 project, that's a little different story.
23 **Q** Well, understood, but, I mean, litigation is what you've
24 been avoiding all along, that's led you to the point of
25 renegotiating this contract. You touted avoiding

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1 litigation as a major benefit of the contract amendment,
2 did you not?
3 **A** [BYRNE] I did.
4 **Q** And, now, you say that, if push comes to shove and
5 Westinghouse/Toshiba walk from the deal, litigation
6 would be your recourse?
7 **A** [BYRNE] I didn't say it's our only recourse; I said it
8 would be a recourse. So, we may —
9 **Q** So you — I'm sorry.
10 **A** [BYRNE] That's okay.
11 **Q** Okay. So you go to court against these guys, you sue
12 them. And in the meantime, what plans, if any, do you
13 have to complete the project yourself?
14 **A** [BYRNE] As I said, we're escrowing the information that
15 we would need to do the completion ourselves — designs,
16 codes, standards, source codes for computer programs,
17 those kind of things. And then we would have to decide
18 whether we finish it on our own, using ourselves as
19 construction manager, or what would be probably more
20 likely today is, since Fluor has the experience already
21 on the site, that we would look to retain someone like
22 Fluor. Whether that's under an EPC agreement, or not,
23 would remain to be seen, but we would finish it with
24 somebody else.
25 **Q** If you finish it with somebody else, who would pay the

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1 additional costs of completing the project, having
2 failed to enforce the fixed-price contract with
3 Westinghouse/Toshiba?
4 **A** [BYRNE] Failed to enforce? What does that mean?
5 **Q** They walk away from the deal; your fixed-price option
6 proves to be illusory, because they're not finished on
7 the project; you've got to finish it yourself or hire
8 somebody else to finish it yourself. Who is going to
9 pay any additional costs that are not now fixed, because
10 Westinghouse has defaulted? Who's going to pay?
11 **A** [BYRNE] Well, you're asking a hypothetical situation.
12 **Q** Indeed.
13 **A** [BYRNE] And if that situation were to transpire, we
14 would have to evaluate what, if any, increase in costs
15 would be, and we'd have to come back and make a
16 presentation.
17 **Q** You would ask this Commission to make ratepayers pay
18 those costs, wouldn't you?
19 **A** [BYRNE] I said we would have evaluations to do, we would
20 have decisions to make. We would have to evaluate what
21 the costs were going to be, and if there were increased
22 costs, we'd have to come back before the Commission in
23 another case.
24 **Q** All right. Well, ORS tells us that the only basis for
25 them agreeing to this settlement is that SCANA and SCE&G

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1 have guaranteed the fixed-price option. That's their
2 word, "guaranteed." It doesn't appear in the agreement.
3 There's no word "guarantee" in the agreement, but they
4 take it as a guarantee. And I'm asking you, Mr. Byrne,
5 would SCANA/SCE&G guarantee that they would not make
6 ratepayers pay any additional costs if, in the hopefully
7 unlikely event, but in the event that
8 Westinghouse/Toshiba defaults and doesn't complete the
9 project?
10 **A** [BYRNE] I think I answered the question earlier. If
11 there was to be a default by Toshiba/Westinghouse, we
12 would have some evaluations to do, we'd have decisions
13 to make as to how we'd complete the project. We're
14 going to be in a position to do that for ourselves. And
15 after that evaluation is over with, if there were any
16 increase in costs, we'd have to come back to the
17 Commission.
18 **Q** So you will not assure ratepayers and this Commission
19 that SCANA/SCE&G would guarantee that no additional
20 costs would be borne by ratepayers in the event of a
21 Toshiba/Westinghouse default?
22 **A** [BYRNE] I'm not going to make guarantees on a situation
23 that may or may not happen.
24 **Q** Now, Ms. Wright asked you a bit about Chicago Bridge &
25 Iron, CB&I. It's true, is it not, that relationships

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1 between CB&I and Westinghouse had deteriorated to the
2 point where it was jeopardizing the completion of the
3 project?
4 **A** [BYRNE] I would say that it was jeopardizing timely
5 completion of the project.
6 **Q** Okay. Time is money, and you want to get done; you want
7 to get done on time. It was jeopardizing timely
8 completion of the project.
9 **A** [BYRNE] Right.
10 **Q** And as a result of the negotiations and the amended
11 contract, CB&I – Chicago Bridge & Iron – was released
12 from its obligations as a member of the consortium,
13 obligations to SCANA and SCE&G, correct?
14 **A** [BYRNE] They were released – we released them of the
15 parental guarantee obligation.
16 **Q** Of the parental –
17 **A** [BYRNE] Guarantee obligation.
18 **Q** What does that mean?
19 **A** [BYRNE] Chicago Bridge & Iron is the parent company for
20 Stone & Webster. As a requirement for them to get out
21 of the deal and for us to do the renegotiation of the
22 EPC contract, the thing that CB&I wanted was a release
23 of the parental guarantee. So that means that the
24 parent company, CB&I, was guaranteeing Stone &, Webster,
25 much like Toshiba is guaranteeing Westinghouse.

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1 **Q** All right. So, is Stone & Webster still contractually
2 bound, in any form?
3 **A** [BYRNE] Stone & Webster is still contractually bound to
4 the contract. They're still signatories of the
5 contract, but they're just wholly-owned now by
6 Westinghouse.
7 **Q** So, Chicago Bridge & Iron, as we've been told and as
8 you've told us, was largely responsible for much of the
9 productivity shortfalls, quality shortfalls, that got us
10 where we are today in terms of additional costs and
11 delaying the project; isn't that the case?
12 **A** [BYRNE] CB&I was, yes.
13 **Q** All right. And that was the submodule fabrication — and
14 we won't revisit the entire gory story, but suffice it
15 to say there were serious schedule, productivity, and
16 quality problems in producing those submodules by CB&I,
17 correct?
18 **A** [BYRNE] There were.
19 **Q** And CB&I, therefore, incurred liability to SCANA/SCE&G
20 for those contractual failures to meet schedule, to meet
21 productivity requirements, and to produce product that
22 met quality standards; isn't that the case?
23 **A** [BYRNE] Certainly, that was a contentious point between
24 us.
25 **Q** You claimed they were liable for those costs, didn't

you?

A [BYRNE] I don't know that I claimed they were liable for those costs, as you are referring to them. You started off talking about the facilities, and I'm assuming that was the CB&I Lake Charles facility. They were bearing the cost for the upgrades at that facility, the increased staffing at the facility, and when they made the decision to diversify the supply chain and move it out, that was their responsibility all along. The on-site efficiency issues that we had with the contractor that we say they should be responsible for, they certainly disagreed with that point.

Q Well, let's take the two things separately, then. So the off-site fabrication, they failed to meet contractual obligations to you in a number of respects — quality, schedule, productivity — isn't that correct?

A [BYRNE] They failed to meet our expectations. Now, whether that was a failure to meet a contractual obligation, that probably would have been seen by a court.

Q Seen by a —

A [BYRNE] Court.

Q Did you assert to them that they had liability, financial liability, to you for any of those failures? Did you assert any claim?

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1 **A** [BYRNE] We did not sue them. We had not taken them to
2 court yet.
3 **Q** Oh, understood. And you are averse to litigation, I get
4 that. But my question to you, did anybody from
5 SCANA/SCE&G ever say to anybody from CB&I, "You have
6 dropped the ball"; in effect, "You've failed to meet
7 your contractual obligations. You owe us money"?
8 **A** [BYRNE] We did on the on-site stuff. You know,
9 particularly in the cases where they would do things
10 that we thought were outside of the contract or were
11 caused by their delays, we did contest those.
12 **Q** How about delays in completing submodules and getting
13 them to the site?
14 **A** [BYRNE] We certainly took issue with that, but, again,
15 that was in the fixed and firm portion of that contract,
16 so it was their cost all along for the fixed/firm
17 portion of the contract, so they were not giving me
18 invoices for increases in costs. Where there were
19 delays caused by that, we did challenge those, and did
20 start to withhold payments for those kinds of things.
21 **Q** Okay. So I'm clear now. So when you respond to Ms.
22 Wright and you said they reported eating $1.2 billion,
23 that was in the fixed-cost category of costs that they
24 incurred to try to dig themselves out of the hole and
25 get these submodules better and on time.

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1 **A** [BYRNE] They're the ones that took the write-off.
2 They're the ones that put that number out in the public
3 eye. I don't know exactly where they would account for
4 all of those numbers, but, certainly, if I were to guess
5 where those numbers would be, that would be my guess.
6 **Q** Okay. That was your understanding, is that that
7 reflected their, essentially, incurring additional costs
8 that they bore, in order to try to do better on
9 producing the submodules off-site, right?
10 **A** [BYRNE] I'm sure that was a big portion of it, yes.
11 **Q** All right. But once the submodules got to the site,
12 sometimes very late, and sometimes in raggedy condition
13 — I don't say "raggedy" lightly; I mean sometimes in
14 condition that fell short of NRC or design acceptance
15 criteria. Correct?
16 **A** [BYRNE] That's correct.
17 **Q** — then you had to do rework on-site.
18 **A** [BYRNE] Correct.
19 **Q** And that rework was work that should've been done right
20 in the first place, but CB&I wanted you to pay for it,
21 right?
22 **A** [BYRNE] Certainly, they would have liked us to pay for
23 it, and we did contest some of those issues where they
24 tried to charge us for rework on items that should've
25 been — should have come to us correctly in the first

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1 place, that had to be redone at the site.
2 **Q** Right, yeah. Or in a timely fashion, in the first
3 place.
4 **A** [BYRNE] Well, the fixing of those issues, they actually
5 tried to charge us for the labor, the on-site labor, to
6 fix those when it should have come to us in an
7 appropriate condition in the first place.
8 **Q** I gotcha. All right. And so what's the estimated total
9 quantum of cost associated with that aspect of CB&I's
10 deficiencies; that is, the extra work you had to do on-
11 site because of deficient work by CB&I?
12 **A** [BYRNE] I'm not sure what the total is. Mr. Kochems may
13 have a better answer for what those totals are. We did
14 contest those. We also contested things that we had to
15 do — for example, storage. Our position was that, you
16 know, if they want to buy tents and put up extra storage
17 areas, then that should be their issue, because we
18 wouldn't — absent the delays, we should not have been
19 responsible for those costs. We took them to task on
20 those. We started to withhold money for inefficiencies.
21 **Q** Right.
22 **A** [BYRNE] As I said earlier, that was our interpretation
23 of what we are allowed to do under the contract. The
24 contractor certainly disagreed with that position. I
25 have no idea how that might've turned out in court, but

1 they certainly disagreed with those positions.
2 **Q** But that was the company's contention, SCE&G/SCANA's;
3 that is, absent the delay caused by somebody else — CB&I
4 or the Westinghouse consortium — absent the delay, those
5 additional costs should not be borne by the company or
6 its ratepayers, correct?
7 **A** [BYRNE] That was our position.
8 **Q** All right. But you settled. You cut a deal with
9 Westinghouse and CB&I, and you let CB&I off the hook.
10 And how big a check did they write you as they walked
11 out the door, to settle all of those claims for delay
12 costs imposed on your company? How big a settlement did
13 CB&I write a check for, Mr. Byrne?
14 **A** [BYRNE] They didn't write us a check for any settlement.
15 **Q** Zero. You got no money from them. You didn't settle
16 for a penny on the dollar, as Ms. Wright charitably
17 offered; you settled for zero on the dollar. You gave
18 up all of our claims, didn't you?
19 **A** [BYRNE] Yeah, I don't think that that's accurate. So
20 what we did was we took this opportunity to renegotiate
21 the EPC contract. There were things in that contract
22 that we would see as having value. CB&I and
23 Westinghouse had to come to commercial terms between
24 those two companies. I'm not privy to what those
25 commercial terms were, but for them to leave, they had

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1 to leave and release their claims against us. Now, we
2 oftentimes talk about the claims we had against them,
3 but they certainly would counterclaim that they were
4 entitled to this money; they would claim that these were
5 driven by regulatory changes. So they would say that
6 they were entitled to a lot of this money, so they had
7 to give up on those. And, as pointed out earlier, CB&I
8 were the ones that valued theirs at $1.2 billion when
9 they left.
10 **Q** So, but you said, essentially, CB&I now is Westinghouse.
11 And it's a new day with Westinghouse —
12 **A** [BYRNE] Well, to be clear, CB&I still exists as a
13 company.
14 **Q** Right. But they're now what?
15 **A** [BYRNE] You said CB&I is Westinghouse.
16 **Q** Yeah. How does that work? Maybe I just got muddled in
17 all of the corporate transactions here. But CB&I is no
18 longer a party to this contract, right?
19 **A** [BYRNE] That's correct.
20 **Q** But Westinghouse let CB&I out of the contract. Is that
21 what happened?
22 **A** [BYRNE] Yeah, and they —
23 **Q** Released them.
24 **A** [BYRNE] — had a separate consortium agreement between
25 the two companies that, presumably, they let them out

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1 of.
2 **Q** All right. So the deal was between Westinghouse and
3 CB&I to let CB&I out, and you were happy they were gone,
4 for the reasons we've been discussing. How big a check
5 did Westinghouse write you for the claims that you had
6 against CB&I for the delay costs of not producing these
7 submodules on time?
8 **A** [BYRNE] There wasn't a check. It was a renegotiation of
9 the terms of the EPC contract.
10 **Q** And what's the value that Westinghouse acknowledged they
11 were recognizing in those negotiations for CB&I's
12 liability to us, to SCANA and its ratepayers? How much
13 did you get out of Westinghouse, even if they didn't
14 write the check?
15 **A** [BYRNE] I don't know that they recognized anything.
16 **Q** Zero.
17 **A** [BYRNE] I don't know that they recognized anything.
18 What we got —
19 **Q** Well, see —
20 **A** [BYRNE] What we got out of this was a renegotiated EPC
21 contract, with much more favorable terms and a fixed-
22 price option going forward.
23 **Q** In exchange for which you completely and wholly released
24 CB&I from any liability for its deficient performance
25 under these contracts, correct?

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1 **A** [BYRNE] That was a part of the negotiated deal that
2 allowed us to renegotiate this contract, was to release
3 CB&I from their parent responsibility — from the
4 parental guarantee.
5 **Q** All right. Now, you've explained why you think the
6 fixed-price contract is a good deal. Do you acknowledge
7 the concern that has been expressed by ORS's nuclear
8 expert that, historically, such fixed-price contracts
9 are more adversarial and that, instead of producing a
10 more amicable, cooperative relationship with
11 Westinghouse, you're likely to be in a more adversarial
12 relationship going forward? Do you understand their
13 concerns to that effect?
14 **A** [BYRNE] I'm not sure that that was the exact
15 characterization, but I heard something along those
16 lines from the Office of Regulatory Staff.
17 **Q** Okay, well, let's just take it along those lines. You
18 say it's a new day. Westinghouse's parent, Toshiba, got
19 a new Board, they're making nice to you, they want to
20 look really good in the international AP1000 business,
21 such as it's likely to be, and, therefore, they are
22 going to eat up to $980 million in losses on this thing
23 and not fight you over things like they have been in the
24 past. That's your contention. But if, indeed, the
25 fixed-price contract makes your relationship more

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1 adversarial and not less adversarial, might things just
2 go downhill even faster than they have in the past?
3 Have you thought about that, Mr. Byrne?
4 **A** [BYRNE] Yeah, I don't believe they would go downhill
5 even faster. Again, the renegotiated EPC contract has
6 terms that are intended to specifically avoid those
7 kinds of contentions going forward. We did have a
8 significantly contentious environment. There were some
9 of the commercial disputes we'd been in with
10 Westinghouse for years; there didn't seem to be any
11 rapid resolution to those. So the contract with its new
12 provisions should streamline that process going forward.
13 So, understanding that fixed-price EPC contracts
14 have had some issues in the past, I think coming in at
15 this point, this far along in the construction process,
16 the renegotiation to a fixed-price was the right thing
17 to do for us at this point in time.
18 **Q** All right. And one of those things that you expect in
19 this Kumbaya era that's to come, is the functioning of a
20 Dispute Resolution Board, as opposed to resorting to
21 litigation, right?
22 **A** [BYRNE] Yeah, I don't — I'm not sure I can agree with
23 the Kumbaya era of cooperation, but we certainly do have
24 a Dispute Resolution Board in place now.
25 **Q** Well, in point of fact, the Dispute Resolution Board has

a dispute in front of it that remains unresolved between you and Westinghouse, doesn't it?

A [BYRNE] The Dispute Resolution Board has its first dispute before it, that's correct.

Q You can't even agree on the first issue after you signed this Kumbaya, lovey-dovey contract with Westinghouse. You've got a dispute already with the Dispute Resolution Board. And what's that?

A [BYRNE] We have one dispute over the construction milestone payment schedule.

Q Well, that sounds like a pretty big dispute you've got with them, isn't it?

A [BYRNE] Well, it's a — it's a dispute that does not involve the overall cost. It's the timing of payments.

Q Time is money, Mr. Byrne. We've been told, now. It's when you write the checks to these guys. And you can't even agree on that, can you?

A [BYRNE] We have a dispute over the payment schedule.

Q And how long has that dispute been festering between you and Westinghouse?

A [BYRNE] We started the discussions in January.

Q January 2016?

A [BYRNE] Yes.

Q And has it been resolved now? Now we're in October. I thought this Dispute Resolution Board was supposed to be

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quick, efficient, and informal. Here it is, October. Still pending?

A [BYRNE] It should be resolved by the end of November.

CHAIRMAN WHITFIELD: Mr. Guild.

MR. GUILD: Yes, sir.

CHAIRMAN WHITFIELD: We're going to have to take a break to go into our Commission Meeting shortly. We will let you resume after our Commission Meeting.

MR. GUILD: Thank you, Mr. Chairman.

CHAIRMAN WHITFIELD: We're in recess for a few minutes, and then we'll start our Commission Meeting in about 10 minutes.

[WHEREUPON, the witnesses stood aside.]

[WHEREUPON, a recess was taken from 1:50 to 2:30 p.m.]

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THEREUPON came,

S T E P H E N A . B Y R N E ,

J I M M Y A D D I S O N ,

resuming the stand as witnesses on behalf of the Petitioner, South Carolina Electric & Gas Company, who, having been previously duly affirmed, were examined and testified further as follows:

CHAIRMAN WHITFIELD: We'll resume this hearing, and we still have Mr. Byrne and Mr. Addison on the stand.

Mr. Guild, back to you.

MR. GUILD: Thank you, Mr. Chairman.

FURTHER CROSS EXAMINATION

BY MR. GUILD:

Q Gentlemen, let's pick up where we left off. We were talking about the newly created Dispute Resolution Board, and their litigation of your first dispute, which, as I understand, has to do with the resolution of payments — let me get the terminology correctly here — construction milestone payment schedule. Is that correct, Mr. Byrne?

A [BYRNE] That's correct.

Q And what is the dispute that's led you and Westinghouse to your first resort to this new DRB?

A [BYRNE] We had agreed on the — well, first of all, the

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1 construction milestone payment schedule is an attempt to
2 get rid of the strictly time-based payments that we had
3 been making to Westinghouse. So, absent that, we wanted
4 to pay them based on making real progress, and we came
5 up with construction milestones and we said we would pay
6 them just on achieving construction milestones.
7 They had agreed to that. We said that we would try
8 to negotiate what those milestones would look like, how
9 the payments would be made, and, should we not be able
10 to resolve them, we'd send it to the Dispute Resolution
11 Board, always understanding it was going to be a
12 difficult task.
13 We have agreed on the milestones; we just did not
14 agree on the value of the milestones for payment, so
15 that's what we took to the Dispute Resolution Board.
16 **Q** And what's the variance between your position and
17 theirs, in that regard?
18 **A** [BYRNE] I think the — when you say "variance," I think
19 there's a point in 2017 where we are probably $400
20 million apart.
21 **Q** That's a lot of variance, Mr. Byrne.
22 **A** [BYRNE] That's why we're at the Dispute Resolution
23 Board.
24 **Q** Well, if you can't agree on something as broad as a $400
25 million dispute and you had to go right to this Dispute

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1 Resolution Board about something of that magnitude,
2 doesn't that bode pretty doggone poorly of your ability
3 to work cooperatively in the future with Westinghouse to
4 enforce this contract?
5 **A** [BYRNE] No, I don't think so. I think that going
6 through the process itself might be enough to scare
7 people off and force them to reconcile. This is the
8 first one, and it's the only one; we don't have anything
9 else pending before the Dispute Resolution Board. We
10 inked this amendment last October, and so we've been
11 operating under it since it was — since the deal closed
12 for them to acquire Stone & Webster, which was in
13 January. So we've been going for about 10 months now,
14 and this is the first one; it's the only one we have.
15 **Q** And, in the meantime, SCE&G is making your monthly
16 payments under the prior payment schedule.
17 **A** [BYRNE] We had an agreement as to how to pay in the
18 interim.
19 **Q** And those are monthly payments regardless of actual work
20 performed or progress, correct?
21 **A** [BYRNE] They were an agreed-upon, negotiated amount.
22 **Q** Right, understood. But they're irrespective of meeting
23 the schedule milestones that are the whole basis for
24 having renegotiated the payment schedule.
25 **A** [BYRNE] Yeah, they were premised on the fact that

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1 Westinghouse was going to have to significantly increase
2 their expenditures for resources, and Fluor is
3 significantly increasing their hiring. They've probably
4 hired 100 people a month onto the project — net of 100
5 people a month increase on the project, since they got
6 to the site. So, you know, they'll hire 1200 people
7 before the end of the year, so, really, the payments
8 that we're making were anticipating that they were going
9 to have to ramp up in their activities.
10 **Q** Yeah, I'm still not following you, though. What I'm
11 really looking for is, you came up with a new system
12 that was going to be resolving these problems you'd had
13 with paying them for work that hadn't been done
14 adequately, paying them simply on a calendar basis or a
15 schedule basis. You want to pay them based on
16 milestones, and that's the point of this renegotiated
17 position. You've agreed in principle, but you have a
18 $400 million difference in actually applying the
19 principle, and you had to take it to the Dispute
20 Resolution Board. That's the story, isn't it?
21 **A** [BYRNE] That's what happened.
22 **Q** Great. So, in the meantime —
23 **A** [BYRNE] To be clear, the $400 million dispute is not a
24 difference in how much we pay them; it's a cash flow
25 issue. So we just don't want to pay them as quickly as

they would like to be receiving it.

A [ADDISON] In the future, not today.

A [BYRNE] Right, in the future.

Q Right, and time is money, but it could be that much of a dispute in the future, $400 million. You said that, right?

A [BYRNE] Correct.

Q Okay. So, in the meantime, you are making monthly payments, irrespective of whether or not Westinghouse is meeting these milestones, because you're in dispute about this, correct?

A [BYRNE] We are in dispute about it, and we did agree on a monthly payment.

Q Right. And so how much did you pay them this month under the pending dispute, without having to resolve the milestone payment schedule?

A [BYRNE] Exact numbers, I'm not sure. We probably paid them $65 million.

Q Sixty-five [$65] million, this month. And how much would you have paid them under the proposed milestone schedule payment structure that you have advocated?

A [BYRNE] I'm not sure; I haven't done that calculation.

Q Would it be less?

A [BYRNE] Under the milestone schedule, or under the old one?

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1 **Q** Under the proposed new resolved schedule where you're
2 paying for what you get, would you have paid less than
3 the $65 million you paid this month?
4 **A** [BYRNE] I'm not sure. I would guess it would probably
5 be less.
6 **Q** So in the meantime, Westinghouse is getting the value of
7 your money, because you're paying them more than you
8 would've paid them had they actually agreed to the
9 payment schedule that you anticipated working out with
10 them, right?
11 **A** [BYRNE] Okay.
12 **Q** All right. Now, this system is going to work, you tell
13 us, and it's going to be much better than litigation or
14 fussing and feuding with these guys, and you've
15 appointed this Dispute Resolution Board, and it's got
16 three guys on it. One guy's name is John E. Bulman,
17 B-u-l-m-a-n. Who is John Bulman?
18 **A** [BYRNE] He, like the other two, are attorneys.
19 **Q** Uh-oh. Okay.
20 **A** [BYRNE] Was there a question there?
21 **Q** No, just a reaction of shock and dismay.
22 [Laughter]
23 Okay he's a lawyer. Uh-oh. Is he a nuclear
24 engineer?
25 **A** [BYRNE] No, he's an —

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1 **Q** Is he —
2 **A** [BYRNE] — attorney.
3 **Q** I'm sorry.
4 **A** [BYRNE] He's an attorney.
5 **Q** He's just a lawyer, okay. And where is he from and who
6 picked him?
7 **A** [BYRNE] The two parties were jointly selected. Our
8 legal department assisted in the selection of those.
9 **Q** Uh-oh.
10 **A** [BYRNE] I don't recall where he's from.
11 **Q** Lawyers picking lawyers. Okay, so you have three people
12 on the board, and so did you pick one, they picked one,
13 and you agreed on the third, or how did that work?
14 **A** [BYRNE] Yeah, actually we agreed on all three.
15 **Q** You did. All right, sir. One is John Bulman, and he's
16 a lawyer; that's all you know about him?
17 **A** [BYRNE] Correct.
18 **Q** The second is John W. Hinchey, H-i-n-c-h-e-y, and is he
19 a nuclear engineer?
20 **A** [BYRNE] No, they're all three attorneys.
21 **Q** Uh-oh, a lawyer.
22 **A** [BYRNE] None of them are nuclear —
23 **Q** And what can you tell us —
24 **A** [BYRNE] — engineers. They are all attorneys.
25 **Q** Okay. What can you tell me by Mr. Hinchey? What are

his qualifications?

A [BYRNE] Only that they are attorneys – all three of them are attorneys; all three of them have experience in construction litigation.

Q Okay. And the third person is A.H. 'Nick' Gaede, Jr., G-a-e-d-e.

Q [BYRNE] Gaede, yes.

Q Gaede, excuse me. Mr. Gaede. And he's a lawyer, as well?

A [BYRNE] That's correct.

Q Not a nuclear engineer?

A [BYRNE] That's correct.

Q All right. And are these guys being paid for their time?

A [BYRNE] Yes, they are.

Q How much are they billing you and us for their time?

A [BYRNE] I'm not sure what the billings are. We've split the cost of any DRB, between ourselves and Westinghouse.

Q So they've been working on this case for 10 months now?

A [BYRNE] No.

Q I'm sorry?

Q [BYRNE] No.

Q How long?

A [BYRNE] We filed with the DRB, I think it was August 1st.

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1 **Q** All right.
2 **A** [BYRNE] And so we had the first DRB session the end of
3 August to first of September — I'm sorry, it was in
4 September to the first of October.
5 **Q** All right. You signed a contract in October. Couldn't
6 work it out with Westinghouse between October and
7 August. August, you finally said, "We've got to go to
8 the DRB with this particular dispute," correct?
9 **A** [BYRNE] Right. We filed with the Dispute Resolution
10 Board in August, and the dispute was heard by the
11 Dispute Resolution Board end of September, first of
12 October.
13 **Q** And when you say "heard" they had a trial type
14 proceeding?
15 **A** [BYRNE] Yes.
16 **Q** All right. How long did that take?
17 **A** It took three days.
18 **Q** Were you a participant?
19 **A** [BYRNE] I did.
20 **Q** All right. Heard testimony?
21 **A** [BYRNE] Correct.
22 **Q** Got lots of paperwork? Exhibits?
23 **A** [BYRNE] Not as much as in these proceedings, but, yes.
24 **Q** Okay. And under oath? Testimony under oath?
25 **A** [BYRNE] It was under oath.

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1 **Q** And was the matter transcribed?
2 **A** [BYRNE] There was a court recorder.
3 **Q** Okay, good. And so they heard three days of litigation
4 about this, these three lawyers. And what are they
5 doing about it now?
6 **A** [BYRNE] It's sort of a similar process where they get
7 proposed orders and they've told us they'll render their
8 decision by the end of November.
9 **Q** Okay. So you submitted proposed orders and the
10 Westinghouse folks have done likewise?
11 **A** [BYRNE] Correct.
12 **Q** And it's now pending their decision?
13 **A** [BYRNE] Correct.
14 **Q** End of November, you say?
15 **A** [BYRNE] Right. I think that's the timeframe, end of
16 November.
17 **Q** And are they obligated to make a decision in a fixed
18 period of time?
19 **A** [BYRNE] They are. And they have to render a decision by
20 the end of November.
21 **Q** Now, as part of this contract amendment, you have
22 resolved a series of disputes, and to resolve those
23 disputes you negotiated a payment of $137 million,
24 correct?
25 **A** [BYRNE] That's correct.

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1 **Q** And that $137 million is a negotiated value that
2 reflects the back-and-forth bargain, and includes a
3 variety of judgments on the part of management, their
4 side or your side, without individual dollar values
5 attached to some items involved in that dispute. Isn't
6 that fair?
7 **A** [BYRNE] That's fair.
8 **Q** And you're asking this Commission to approve a $137
9 million increase in the cost of this project, based on a
10 negotiated settlement value to that effect?
11 **A** [BYRNE] That's correct.
12 **Q** Okay. Let's talk about a subset or two of those values.
13 There was a value of $9.7 million associated with poor
14 labor productivity, delay in module fabrication. Do you
15 recall that item?
16 **A** [BYRNE] I do.
17 **Q** And you resolved that item. How much did you claim that
18 Westinghouse owed you for their poor productivity and
19 delay in module fabrication?
20 **A** [BYRNE] I think the 9.7 is what we were claiming was the
21 dispute.
22 **Q** I see. And you just essentially eliminated that claim
23 as part of this resolution?
24 **A** [BYRNE] We've eliminated all the claims that were
25 existing at the point in time, save for the ones that

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1 were on one of the appendices to the — or, one of the
2 exhibits to the amendment.
3 **Q** All right. Then there's a $45.9 million claim that was
4 resolved with regard to what you characterize as
5 regulatory revisions and changes of law, correct?
6 **A** [BYRNE] Correct.
7 **Q** All right. Do you agree with ORS's characterization
8 that many of these consortium claims — that's
9 Westinghouse's — in this area were not justified and
10 represented overreach on the part of the consortium?
11 **A** [BYRNE] Well, SCE&G's position, going in, was that the
12 entirety was an overreach and we should not be held
13 responsible for any of them. The argument — and I think
14 that's what the ORS is referring to when they talk about
15 the overreach by the contractor. Certainly, they had a
16 significant number of claims, largely revolving around
17 redesigns. A lot of those redesigns were prompted by
18 the Nuclear Regulatory Commission or what were changes
19 in interpretations by the Nuclear Regulatory Commission.
20 So we don't dispute the fact that Westinghouse spent the
21 money; we just dispute the fact that we shouldn't be
22 held responsible for it.
23 The sticking point in any pending litigation
24 would've been, would Westinghouse have been allowed to
25 recover those costs under provisions of the EPC contract

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1 that allow them to get them for changes in
2 interpretations of law, and one of the things we did in
3 the EPC renegotiation was we appended the language for
4 "change in law" to make it much more specific —
5 **Q** Right.
6 **A** [BYRNE] — to exclude, specifically exclude, items like
7 this.
8 **Q** Right, and that's a provision on change of law that you
9 didn't include in the original contract, and
10 Westinghouse took advantage of that lack of clarity in
11 the original contract by arguing that a variety of
12 things that they had to incur costs for represented
13 changes in law, correct?
14 **A** [BYRNE] Westinghouse did that, yes.
15 **Q** Mr. Jones, the ORS nuclear expert, says this at page 15,
16 line 12, of his testimony: Quote, "Based on a very
17 aggressive interpretation by WEC," Westinghouse, "of the
18 change-of-law provisions of the EPC contract, in many
19 cases the consortium maintained that meeting the
20 requirements as specifically stated in the Final Safety
21 Analysis Report represented a change in law or that the
22 NRC practice of rigorous and literal interpretation of
23 codes and standards represented a change of law.
24 Neither of these cases can be logically considered a
25 change of law and should not be accepted as such.

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1 Therefore, ORS cannot support accepting all these claims
2 by the consortium for disputes associated with
3 regulatory revisions and changes in law, and crediting
4 their full value." I want to know what you agree or
5 disagree with. First of all, will you agree that
6 Westinghouse's position is based on a very aggressive
7 interpretation of the change-in-law provisions in the
8 original EPC contract?
9 **A** [BYRNE] Certainly.
10 **Q** That, in many cases, the consortium maintained meeting
11 requirements specifically stated in that NRC document,
12 the Final Safety Analysis Report, represented a change
13 in law?
14 **A** [BYRNE] I'm not sure I would necessarily agree with that
15 characterization. There certainly were things that
16 Westinghouse was supposed to deliver. Their methodology
17 for that delivery was different than what the NRC had in
18 mind. There were times when Westinghouse would say they
19 had come to an agreement with the Nuclear Regulatory
20 Commission on an approach in the licensing phase, and
21 when we got into construction the NRC changed their
22 opinion, forcing them into a redesign.
23 **Q** So what's the Final Safety Analysis Report, for the
24 benefit of the Commission, Mr. Byrne?
25 **A** [BYRNE] It's a document generated on the plants,

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1 specifically, for our location specifically, which
2 defines how the plant is built, how the plant is to be
3 operated; it defines the characteristics of the plant,
4 defines the characteristics of the property it's built
5 on. It's kind of an all-inclusive description of the
6 plant and its design.
7 **Q** And who authors that document?
8 **A** [BYRNE] That's a Westinghouse document.
9 **Q** And it's a Westinghouse document that you participated
10 in and submitted to the NRC and is approved by the NRC?
11 **A** [BYRNE] That's correct.
12 **Q** And it represents the design basis for the AP1000 units
13 at Summer, Units 2 and 3, correct?
14 **A** [BYRNE] It does.
15 **Q** So you've got to comply with the FSAR. You've got to
16 build a plant that's built the way you said you were
17 going to build it in the FSAR, correct?
18 **A** [BYRNE] You have to comply with the FSAR, right.
19 **Q** That's not a change in law; that's basically meeting the
20 requirements you've committed to.
21 **A** [BYRNE] Well, but the change that Westinghouse — that
22 was certainly our position. The change that
23 Westinghouse was putting forth was that there were
24 interpretational changes that the Nuclear Regulatory
25 Commission had, specifically relative to some of the

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1 codes and standards that were used. Now, you know, I
2 don't know how an adjudicatory body would've viewed
3 that, but we resolved that dispute with this amendment.
4 **Q** And, further, the ORS's characterization is that all of
5 these positions by — overly aggressive by Westinghouse
6 were that the NRC practice of rigorous and literal
7 interpretation of codes and standards represented a
8 change in law. You agree that was their contention?
9 **A** [BYRNE] They did. That was their contention.
10 **Q** And do you also agree that SCE&G's position was that
11 neither of those cases could logically be considered a
12 change in law, and shouldn't be accepted as such?
13 **A** [BYRNE] Yeah, that was our negotiating position with
14 them on these changes. Which is — it's not unusual that
15 we would take different sides of the room on contentious
16 points.
17 **Q** Yeah, but this is your contract partner. These are the
18 guys that you are trusting to build your nuclear plant
19 at a fixed price, without further disputes, because the
20 disputes are in the past. That's the position they were
21 taking, correct?
22 **A** [BYRNE] You know, I never said we'll never have another
23 dispute. We will have disputes with this contractor.
24 The whole point of the EPC contract and the fixed-price
25 option were to limit their ability to recover anything

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1 in any such dispute.
2 **Q** But isn't that position just so extreme and aggressive
3 on Westinghouse's part that they are signaling to you
4 that they are not a trustworthy contract partner?
5 **A** [BYRNE] No, I believe that they earnestly believed that
6 they were due changes based on the interpretations by
7 the Nuclear Regulatory Commission and the changes they
8 were forced to make to the design.
9 **Q** Despite the fact that ORS's nuclear expert says that
10 these positions are extreme and cannot be supported.
11 **MR. ZEIGLER**: Mr. Chairman, I believe pitting
12 two witnesses against each other is not permitted,
13 as an evidentiary matter. Mr. Guild is welcome to
14 ask Mr. Byrne any question he wants, but to pit two
15 witnesses against each other is not acceptable in
16 questioning —
17 **MR. GUILD**: Says Counsel. I've never seen any
18 law to that effect, that I'm aware of.
19 **BY MR. GUILD:**
20 **Q** But notwithstanding that, it's my position, and I'm
21 asking you do you dispute the notion that that position
22 by Westinghouse is extreme and irrational and aggressive
23 on a change of law?
24 **A** [BYRNE] I certainly think it's aggressive. I don't know
25 that I would characterize it as either extreme — they're

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1 entitled to render their opinion as to what they're
2 allowed to recover costwise. Where language is
3 ironclad, we dispute that and they recognize it. Where
4 the language allows them some opportunity to dispute it,
5 they are likely to dispute it. Another reason why we
6 tried to change the language in the EPC amendment.
7 **Q** Well, why didn't you anticipate such ambiguities in the
8 change-of-law provision in the original EPC contract?
9 If you had a trustworthy contractual partner, why would
10 you expect they would take this absurd position that
11 building a plant to the FSAR — the Final Safety Analysis
12 Report — represented a change in law? Why didn't you
13 tighten up the change-in-law provision when you
14 originally negotiated the EPC contract, Mr. Byrne?
15 **A** [BYRNE] Well, I do believe that Westinghouse is a
16 trustworthy partner. They earnestly went about the
17 design. This is — one, it's a new design; and, two,
18 it's a new process. So the design, under Part 52 of the
19 Code of Federal Regulations, is a little different than
20 the previous construction experience that anybody has
21 had. So I don't know that we could have forecast, nor
22 could Westinghouse have forecast, the amount of disputes
23 they would run into with the Nuclear Regulatory
24 Commission relative to design.
25 **Q** Okay. There's a value subsumed in that settlement

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1 negotiation of $47.5 million for resolving a dispute
2 with regard to target versus firm-price charges. Are
3 you aware of that item?
4 **A** [BYRNE] I am.
5 **Q** And this has to do, in part, with charging you for
6 additional work on-site to correct defects in the
7 modules fabricated off-site, by the consortium, that
8 didn't meet standards, correct?
9 **A** [BYRNE] Correct.
10 **Q** And you're paying them another $47½ million to absorb
11 the cost of fixing their quality problems; isn't that
12 right?
13 **A** [BYRNE] They attempted to bill us for that, and we did
14 not want to pay them for that, so we did dispute those
15 charges.
16 **Q** Yes, but you're going to pay them — you want the
17 Commission to approve $47½ million to pass on to
18 ratepayers for your surrendering on that claim, correct?
19 **A** We're not asking for this claim, specifically, to be
20 paid. This was a global settlement of 65-plus disputes
21 that were on the table at the time it was reneg- — and
22 some of which had existed for many, many years.
23 **Q** And that's one of them?
24 **A** [BYRNE] That's one of them.
25 **Q** The $47½ million.

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1 **A** [BYRNE] That's correct.
2 **Q** How about the $27½ million for Westinghouse agreeing to
3 provide you as-built drawings of the plant they're
4 actually building, so you'll know what's been built out
5 there and can run it properly? How about that one?
6 **A** [BYRNE] How about it?
7 **Q** There's $27½ million you're going to pay Westinghouse to
8 give you drawings of the plant they're building for you;
9 isn't that right?
10 **A** [BYRNE] Yeah, it was a dispute.
11 **Q** They took the position that they had no contractual
12 obligation to provide you as-built drawings so you could
13 actually maintain a nuclear power plant, and you
14 accepted that by paying them $27½ million.
15 **A** [BYRNE] We didn't pay them the $27½ million for this.
16 This is not a reconciliation. This is just an example
17 of the things that there was value gained from the
18 settlement. The FSAR — I'm sorry, the as-built
19 drawings, they did intend to give us as-built drawings.
20 The as-built drawings were, in our estimation,
21 inadequate. When we went back to them, they said,
22 "Well, if you want them up to your standards, it's going
23 to cost you more." That was the dispute.
24 **Q** And that's all part of the $137 million that you're
25 asking the Commission to approve?

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1 **A** [BYRNE] It is an example of the things that were settled
2 — some of the things that were settled — for $137
3 million.
4 **Q** Well, isn't it true that as-built drawings are required
5 by the Nuclear Regulatory Commission and by your Final
6 Safety Analysis Report, in order to be able to safely
7 maintain and operate this nuclear power plant?
8 **A** [BYRNE] I don't believe that they're required by the
9 FSAR, but we would certainly require that as-built
10 drawings be supplied, and they were required under our
11 contract. So they certainly should've been supplied.
12 The difference or the dispute came in with the level of
13 detail in those drawings and how those drawings were
14 presented to us.
15 **Q** Well, what level of detail —
16 **A** [BYRNE] It's not a case of they said, "We're not going
17 to give you drawings."
18 **Q** Well, what level of detail did Westinghouse propose to
19 give you, that was worth $27½ million, that you wouldn't
20 have gotten otherwise?
21 **A** [BYRNE] It would have required them — they wanted to
22 give us drawings that were showing updates to it, which
23 would be changes that were pending. We said
24 everything's got to be up to snuff at the date that we
25 get the drawings. There was a difference of opinion.

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1 For them to go back and redo, basically, all the
2 drawings was going to cost them this much money.
3 **Q** All right. Let me just see if I can get this in my
4 head. You know, you run a pipe, and the pipe goes from
5 A to B. Then you put a drawing together saying the pipe
6 starts at A and ends at B; that's how it's actually been
7 built. That is the as-built drawing of that pipe,
8 correct?
9 **A** [BYRNE] Yeah, let me — let me see if I can help you.
10 They — Westinghouse would, at times, change the design
11 over the original design. We have numerous license
12 amendment requests to that effect.
13 **Q** Right.
14 **A** [BYRNE] In that, they would change something, and they
15 would give us the original drawing and they would show a
16 change drawing, and there would be some documentation
17 attached to say "See the change." Much like when you
18 buy something that you have to construct at home, and it
19 comes from IKEA, and you open it up and there's an
20 addendum at the front, they made the decision that,
21 instead of changing the whole assembly booklet, they're
22 just going to throw an addendum in there. Our position
23 was, no, no addendums; change the whole booklet.
24 **Q** Okay. So, my example: Drawing, pipe, A to B. Instead
25 of A to B, it's B plus one foot, A plus one foot. They

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1 write a little note saying, "We moved it one foot," but
2 they don't give you a new drawing saying the pipe has
3 been moved over a foot, right?
4 **A** [BYRNE] Correct.
5 **Q** And they thought — Westinghouse thought — that met NRC
6 and FSAR design standards, to simply add a note that
7 they moved the pipe?
8 **A** [BYRNE] Yeah, again, the FSAR doesn't specify the detail
9 of as-built drawings, and the Nuclear Regulatory
10 Commission would be fine with that methodology. There's
11 nothing in the regulation that would prevent them from
12 doing that.
13 **Q** Then why are you paying $27½ million for something you
14 don't need?
15 **A** [BYRNE] I'm not saying we didn't decide we needed it.
16 You said that the regulation would drive into that, the
17 NRC would drive into that. The NRC would not drive into
18 that. This is a standard expectation that we had. Now,
19 I think it was a reasonable expectation on our part, but
20 there is a dispute.
21 **Q** You dispute what is Mr. Jones' position that those as-
22 built drawings, actually reflecting the as-built
23 condition of the nuclear plant, are required by NRC
24 regulations. You dispute that?
25 **A** [BYRNE] The drawings are required. The way that

Westinghouse was proposing giving them to us would have been approved by the Nuclear Regulatory Commission.

Q So you're paying $27½ million for something you don't need.

A [BYRNE] Not saying that we don't need that. Our position is that, when we get these drawings for this plant, when we get them turned over to us, we want them in a specific state of affairs. Westinghouse is proposing giving them to us in something less than that — allowed by the regulation, but we didn't think that was sufficient. There was a dispute.

Q All right. You're going to pay $66 million, or save $66 million in claims by this resolution, to extend warranties to the GSCD for another two years, right?

A [BYRNE] Correct.

Q Now, let me get this right. You've got warranties on various — are these pieces of equipment?

A [BYRNE] Pieces of equipment.

Q Okay. Warranties on pieces of equipment. And the warranties would have expired because the plant is not built on the original committed completion date, correct?

A [BYRNE] Yeah, provided the parts and the pieces were there, they would've expired from the original manufacturer's warranty.

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1 **Q** Right, okay. So you need extended warranties to
2 actually cover the quality of these parts and components
3 to the point when they actually go in service. That's
4 why you're extending the warranties, right?
5 **A** [BYRNE] Correct.
6 **Q** All right. And that has a value to you, you say, of $66
7 million. But the need to extend the warranties is
8 solely associated with Westinghouse's delay in getting
9 the plant done, and you're giving them $66 million for
10 something that they should be responsible for: a delay
11 cost.
12 **A** [BYRNE] Again, their interpretation of the rules and
13 regulations would have said that the dispute was largely
14 caused — the delays were largely caused by regulatory-
15 driven changes, so there was a dispute in who was the
16 cause of the delay. So, some of these warranties, we
17 could have probably legitimately argued that they could
18 have been extended, but many of them would not have been
19 extended. This takes all of that discussion, dispute,
20 argument off the table, and extends them to two years
21 beyond the substantial completion date, whenever that
22 is.
23 **Q** And you want this Commission to approve passing those
24 costs on to ratepayers in this case?
25 **A** [BYRNE] Yeah, I think the renegotiation of warranties is

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a good idea.

Q Well, I don't say it's not a good idea; I just don't think that anybody but your stockholders ought to pay for it, and that's what we're asking the Commission to require.

A [BYRNE] Is there a question there?

Q And you don't think that's a fair thing, to ask ratepayers to bear the cost of you failing to enforce a bargain?

A [BYRNE] I don't — what failure to enforce a bargain?

Q A bargain to produce a plant that meets requirements, that basically provides as-built drawings of how it's built, for example; that has warranties that actually extend to when the plant has to go in service. Those aren't reasonable expectations that ratepayers ought not to have to pay for because you were so slack that you didn't enforce the contract on Westinghouse, to those effects?

A [BYRNE] We are attempting to enforce the contract on Westinghouse to these effects. That's why they're in dispute.

Q And that's why you want us to pay another $137 million, because you surrendered these claims.

A [BYRNE] We didn't surrender the claims. We settled the claims.

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1 **Q** I'm looking at a $39.4 million disputed invoice
2 settlement — an example included by Mr. Kochems,
3 apparently — that they agreed to identify and label
4 subcomponents of the nuclear power plant, so that you
5 could actually maintain and operate them once the plant
6 was turned over. Is that one of the disputed items you
7 resolved?
8 **A** [BYRNE] We did resolve a dispute relative to labeling
9 the plant equipment.
10 **Q** Westinghouse wasn't even going to label the equipment,
11 and you're paying them money to label the equipment that
12 they built for you?
13 **A** [BYRNE] Westinghouse was going to label the equipment.
14 They were not labeling them, in our mind, to the
15 standards they should have been following. They
16 differed. They said, "All the contract says is we'll
17 give them to you labeled." So we wanted what we would
18 consider industry-standard labeling, and they disagreed.
19 That was a dispute.
20 **Q** See if you agree with this statement: "This level of
21 identification," that is, labeling, "is an industry
22 practice that has been in effect for at least 20 years
23 and has been applied on every plant," that is, nuclear
24 power plant, "with which I am familiar." Not me, Bob
25 Guild, but Mr. Jones from ORS. Do you agree that that

1 degree of labeling, level of identification, that it's
2 an industry practice and that it's been in place for at
3 least 20 years in the nuclear industry?
4 **A** [BYRNE] Our whole argument was that it was an industry
5 practice. The degree of labeling that we desired was an
6 industry practice.
7 **Q** But you've —
8 **A** [BYRNE] Contractually, however —
9 **Q** — surrendered that —
10 **A** [BYRNE] Contractually, however, Westinghouse could've
11 made the point, "Look, the contract says 'labeling' and
12 we have labeled it for you," so —
13 **Q** The contract you drafted —
14 **A** [BYRNE] — their —
15 **Q** The contract you drafted and told this Commission was
16 adequate to protect ratepayers had such slack language
17 in it that you're surrendering a claim worth that amount
18 of money for something that's an absolutely outrageous
19 contention by Westinghouse, that they don't have to
20 label their components and portions of a plant they
21 built for you?
22 **A** [BYRNE] Well, you know, I don't know how many plants Mr.
23 Jones has been in. I've been in quite a few, myself, in
24 a number of different countries. I have seen a broad
25 spectrum of plant labeling. But this did not — the

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1 labeling that they were proposing did not meet our
2 standards.
3 **Q** Okay. How about the dispute with regard to doors to
4 meet the 2009 NRC Aircraft Impact Assessment, the doors
5 on your shield building? Are you familiar with that
6 dispute?
7 **A** [BYRNE] Yes. There was an area of the shield building
8 that was to be protected by a portion of the turbine
9 building. And that, in a re-review, was not viewed as
10 sufficient, so the design had to be changed to
11 accommodate that.
12 **Q** All right. And were those costs that you proposed and
13 the Commission approved in Order 2012-844 for those
14 doors?
15 **A** [BYRNE] Were they in which —
16 **Q** My notes show Order 2012-844.
17 **A** [BYRNE] Were they in 2012? I don't believe they were.
18 This is something that come up after that.
19 **Q** Have they been approved by the Commission, the door, the
20 cost of the door?
21 **A** [BYRNE] I don't believe we've ever asked the Commission
22 to approve the cost of the specific doors.
23 **Q** All right. So was it your contention that meeting the
24 2009 aircraft rule, the doors, was an NRC requirement
25 for which Westinghouse should been held responsible?

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1 **A** [BYRNE] Again, that's the reason for the dispute.
2 **Q** All I'm trying to get right now, first, Mr. Byrne, is,
3 was that your contention that they should have borne
4 responsibility for the cost of those doors?
5 **A** [BYRNE] Yes.
6 **Q** And they said, "No, it's a change." Right?
7 **A** [BYRNE] Correct.
8 **Q** Even though it's a 2009 NRC aircraft rule, right?
9 **A** [BYRNE] Correct.
10 **Q** Relating to the terrorist attack in 2001. I mean, we
11 knew that hardening shield buildings was coming down the
12 road, when they designed this nuclear plant, didn't
13 they?
14 **A** [BYRNE] They did. And, again, this isn't specifically
15 relative to the shield building design; it was from an
16 assumption they made on the turbine building side that,
17 in a re-review by the Nuclear Regulatory Commission,
18 they said, "Look, we think this is going to have to be
19 strengthened." So, you know, in fairness to
20 Westinghouse, this is something where the NRC came back
21 and said, "We think we have a different position."
22 Again, we disputed it, and that was the reason why it
23 was in one of those 65 items that was in dispute that
24 we've settled with this agreement.
25 **Q** Okay. Now, the contract that you — the amendment that

you entered into with Westinghouse in October of 2015, when was it effective, Mr. Byrne?

A [BYRNE] It became effective the first of the year. It became effective when the deal for them to acquire Stone & Webster closed.

Q And it's a deal that was approved by the SCANA Board of Directors; is that correct?

A [BYRNE] It was.

Q And approved by the Santee Cooper Public Service Authority Board?

A [BYRNE] It was.

Q Any of the other parties — let's see, approved by Westinghouse, signed by them?

A [BYRNE] Approved by Westinghouse and approved by CB&I.

Q And Toshiba, the guarantee that you referred to earlier?

A [BYRNE] Correct.

Q All right. And that completes all of the necessary approvals, and then it went into force and effect; is that right?

A [BYRNE] The approvals were gained prior to the force-and-effect date, because the deal had to close. So it was end of October when we signed the contracts and the amendments. All the parties signed those. But it had to wait until the deal closed, which I think was right at the end of December, so —

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1 **Q** I'm sorry, repeat one more time the deal you're
2 referring to?
3 **A** [BYRNE] The deal is that Westinghouse is acquiring Stone
4 & Webster.
5 **Q** Okay.
6 **A** [BYRNE] So they can announce that we're going to do it,
7 but there are still regulatory hurdles that they had to
8 jump through.
9 **Q** So they did that, and as of that acquisition that
10 resolved the subsidiary consortium relationship, the
11 deal became effective, correct?
12 **A** [BYRNE] Right.
13 **Q** And this agreement was not contingent, was it, upon
14 approval by the Public Service Commission. It is in
15 effect now, correct?
16 **A** [BYRNE] It is in effect.
17 **Q** All right. So, whether this Commission approves the
18 contract or not, you've got an executed, enforceable
19 contract with these other parties. Correct?
20 **A** [BYRNE] Yes. The fixed-price option, though, was
21 contingent on Commission approval.
22 **Q** But not the contract itself, the amendment.
23 **A** [BYRNE] Not the amendment itself.
24 **Q** So you don't need Public Service Commission approval in
25 order to have negotiated away the disputes that you

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negotiated away, or to commit to paying the $505 million if you did exercise the fixed-price option. Those are contractual terms to which you are already bound, independent of whatever this Commission does. Correct?

A [BYRNE] No. The $505 million attached to the fixed-price option was contingent on Commission approval.

Q No, I'm not saying that now. I'm saying the promise in the October amendment to pay the $505 million, that's independent of what this Commission does or doesn't do.

A [BYRNE] No, that's not correct.

Q It's in your agreement. You said you're going to pay it if you exercise the option.

A [BYRNE] If we exercise the option, and the option is dependent on Commission approval. So if we don't get Commission approval, the option is not effective, and we wouldn't pay the $500 million —

Q But the contract is still in effect, the amendment, from October 2015. Still in effect.

A [BYRNE] The fixed-price option would not be, though.

Q My point is, there's two separate deals. One deal is the October 2015 amendment, and that is fully executed and enforceable against all parties, including you, okay?

A [BYRNE] Correct.

Q Independent of what this Commission does, right?

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1 **A** [BYRNE] That's correct.
2 **Q** And one term of that is your ability to exercise the
3 fixed-price option at a cost of $505 million. That's an
4 element of the October amendment, is it not?
5 **A** [BYRNE] It is.
6 **Q** Whether you —
7 **A** [BYRNE] Contingent on Commission approval.
8 **Q** — exercise it or not — whether you exercise it or not.
9 That's your view, correct?
10 **A** [BYRNE] Right.
11 **Q** But the amendment of 2015 does not require Commission
12 approval.
13 **A** [BYRNE] That's correct.
14 **Q** Okay. And that includes the $137 million dispute
15 resolution claim and the other costs, independent of the
16 fixed-price option, correct?
17 **A** [BYRNE] Right, those are going to be the future costs
18 that we're asking this Commission for approval for
19 today.
20 **Q** Right. But you've committed to paying them, whether the
21 Commission approves it or not.
22 **A** [BYRNE] We did.
23 **Q** So the Commission could be free to deny those elements
24 of cost inclusion in your proposed changes to your
25 capital-cost schedule and you would still be obligated

to pay it; it's just that your stockholders will pay them, and not ratepayers, correct?

A [BYRNE] I think the Commission can approve anything — approve or disapprove anything that we bring before them.

Q Well, I mean, that's a generic statement that I'll fully agree with, but my question is more precise; that is, if the Commission denies payments independent of the fixed-price option, you are still, as a company, obligated to pay those to Westinghouse — the $137 million, for example — correct?

A [BYRNE] When they would be earned by the contractor, we would be obligated. Their estimates to us were that, had we not entered into this agreement, that those costs would've been much higher, so we were likely to receive bills in the future that were much higher than that anyway, which we then would have to bring back to the Commission.

Q Right, but that's not my question.

A [BYRNE] Okay.

Q My question is, even if the Commission does not approve the October contract amendments, SCANA will be obligated to comply with its terms and make the payments that are called for in that contract; it's just they won't be passed on to ratepayers?

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1 **A** [BYRNE] We would be obligated to make those payments.
2 **Q** Okay.
3 **A** [ADDISON] Mr. Chairman, if I could add to that, the
4 future costs of higher risk of the bonds and the equity
5 required to be issued to finance the remaining $3
6 billion will be borne by the customers. It would be
7 substantial, if that were the outcome.
8 **MR. GUILD**: That's all I have, Mr. Chairman.
9 **CHAIRMAN WHITFIELD**: Thank you, Mr. Guild.
10 We're going to take Commissioner questions at
11 this time. Commissioners? Commissioner Hamilton.
12 **COMMISSIONER HAMILTON**: Thank you, Mr.
13 Chairman.
14 **EXAMINATION**
15 **BY COMMISSIONER HAMILTON:**
16 **Q** Mr. Byrne, going back for some time, how much has the
17 Fukushima Japanese accident, nuclear accident, changed
18 the regulatory effects of what's happening, and how much
19 of the costs that we've been discussing for the last
20 couple of days —
21 **A** [BYRNE] Are associated with that Fukushima accident in
22 Japan?
23 **Q** Yes, sir.
24 **A** [BYRNE] The Fukushima accident in Japan has had a
25 significant impact on the operating fleet, the current

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1 operating fleet, but it has had far less impact on the
2 new nuclear construction. The reason is because the
3 Japanese accident at Fukushima was largely because they
4 lost all off-site power, and their diesels were flooded
5 so they lost all on-site AC power. The passive design
6 plants — and we are building a passive design — are
7 built to mitigate the consequences of that kind of an
8 accident without the need for off-site power. So our
9 costs are relatively small. We've had some costs with
10 regard to spent-fuel-pool-level monitoring, there have
11 been some administrative costs. There were some
12 Fukushima issues put in our license when we got it, but,
13 again, the cost of that has been relatively minor.
14 **Q** It's not any major factor in construction?
15 **A** [BYRNE] Nothing major.
16 **Q** Have you been able to see, since you've been under the
17 new contract, any improvement in the productivity and
18 efficiency of employees on Unit 3 versus Unit 2?
19 **A** [BYRNE] We have seen increases in productivity on Unit 3
20 over Unit 2. It's hard to say whether those are a
21 function of the contract or a function of Fluor, but had
22 we not entered into the contract, we would not have
23 gotten Fluor. So from that respect, you can say that
24 it's a direct relationship with the contract.
25 The Westinghouse team, as well, has been changed

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1 somewhat on the site. Our Westinghouse team lead has
2 been there for probably 18 months now, and that person
3 seems to be driving towards meeting goals a lot better
4 than his predecessors were. And so, you know, just this
5 year, you've seen a number of things in the photographs
6 where we've clicked off a number of big picture
7 milestones. Setting the reactor vessel, we think, was a
8 fairly large one. The condenser sections that we set
9 have been big ones. You know, starting back about last
10 July, about the time we were here, I think just after
11 that, we set the largest of the modules, CA01, and since
12 then we've set CA03, we've set CA05, we set the ring
13 section for Unit 2, the turbine building is nearing
14 completion. So we've clicked off a lot of milestones
15 since the Westinghouse person has been on, and quite a
16 few since Fluor has been on the project. So what we're
17 seeing is, they are hitting milestones. One of the
18 things we're not necessarily seeing yet is the
19 productivity improvements we need to see on Unit 2.
20 Unit 3 is improving because, obviously, they learned
21 lessons on Unit 2.
22 **Q** Right.
23 **A** [BYRNE] In some cases, the same people that did the job
24 on Unit 2 are now rolling over to Unit 3. We do — I do
25 want to give Fluor some time. They are going to

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1 improve, but that's one of the reasons why we think
2 there will be more resources required, more people that
3 will have to be working the project. And so, that's one
4 of the reasons why we think there will be higher costs
5 in the labor workforce, going forward, and those costs,
6 under the previous contract, were all in target, which
7 we would pay for hour-for-hour for any hours that they
8 worked. So fixing that, we think, was going to be
9 positive for the project, going forward. So if their
10 productivity doesn't improve significantly, it's going
11 to have to have more people.
12 **Q** All right. Let me ask you to help me understand — on
13 page 37 of your direct testimony, you stated that,
14 "Going forward, all payments will be tied to
15 Westinghouse accomplishing specific construction
16 milestones or other measures of actual progress." What
17 do you mean by "other measures of actual progress"?
18 **A** [BYRNE] Okay. So, under the old format, we would pay
19 them for milestones, but we would also pay them what
20 were called progress payments, which was a bit of a
21 misnomer, because they didn't indicate progress.
22 **Q** Yeah.
23 **A** [BYRNE] They really were just timing payments tied to
24 the calendar. We didn't like those kinds of progress
25 payments. I know they're in a lot of contracts, but

when a project is getting delayed like this, you want to have to change something. So we wanted them to be accountable just for making construction milestones, but in evaluating the construction milestones, one of the things we thought would be important is, there are some things that aren't necessarily strictly construction based that are just as important to us. For example, we have to do tests and analysis — they call them ITACs. Having those ITACs completed in a timely fashion is just as important to me as having a pump installed in a timely fashion, so we carved off some of that for ITAC completion. Percent complete: You heard a discussion about what percent complete they are. We would like to make sure that they are also incented to getting the plant complete — not just meeting milestones, but the percent complete of the plant coming along as we would expect it. So we carved off some of the money, some of the payments, to be tied to percent complete. If they perform, they'll get all the money at the time that they need it and they want it. It's only if they don't perform that then they'll be starved for cash.

Q Of the improvement that you have noted to me, what is your confidence today on the completion dates?

A [BYRNE] Yeah, I feel confident on the completion dates. We asked them, at the time we renegotiated this, when

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they would estimate what their new guaranteed substantial completion dates could be, and they said it was going to be August 31, so they moved them back — I think it was about two and a half months — from the previous ones for each unit. So, we said, "Okay, you need to stick to those dates." They're having Fluor come in. Fluor wants to do a reevaluation of the labor hours, the things it will take to complete the plant, but their whole goal in that reevaluation is to keep the end dates the same, and look at the resources, other things that they can do, in order to complete the plants on those end dates.

So one of the things Fluor said when they came in is that we need a lot more people, so they started hiring actively. They've run into some bumps in the road, they've had some successes, but they're actually hitting about 100 people a month. So, they also want to add a full back shift. Previously, we had probably 2-300 people working the back shift. Fluor says we're going to have to get this done — in order to meet those dates, we're going to have to put on a full back shift, so they want 1000 people on back shift. So we're going to split up the crews, so a lot of the new people we hire will be going towards the back shift. It will help the traffic conditions in the area, too, but it will

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also increase the amount of work we get done, the milestones they can get done.

They're also bringing in non-English-speaking workforce, so they've had to change training materials, signs, to Spanish. They have to have bilingual supervision. And then they can isolate, you know, the Spanish-speaking workforce to one area of the plant. So they've had some successes at that. They're trying a couple of other things, as well.

Q Okay. Are the engineering design changes being sent to the vendors effectively and in a timely manner?

A [BYRNE] Yeah, one of the changes we made since this amendment was made is that we now have a much larger contingent of field engineers from Westinghouse, and their goal is that they resolve the issues in a timely manner on-site without having to go off-site. So whereas in the past Westinghouse always wanted everything in their control in their Cranberry offices, they finally kicked loose of that and we're now resolving some things on-site.

So our engineering staff at the site is actually increasing somewhat, but they're able to get things resolved, and that's why we're able to hit some of the milestones that I talked about earlier.

Q Thank you, Mr. Byrne, very much.

Mr. Addison.

A [ADDISON] Yes, sir.

Q On page 11 of your prefiled direct testimony, at line 17, you state that even small disallowances of costs can drive investors away and make it impossible for a utility to complete a construction project due to lack of or inability to obtain financing at reasonable terms. Do you have any examples of this happening?

A [ADDISON] Actually, that's the last item I responded to, there, to Mr. Guild's last question. He went through several components of our explanation of the $137 million, suggesting that the Commission could disallow those — which they could. My response is, that would cost the customers in the long run many multiples of that $137 million because of the higher perceived risk of those investors. Whether it's through buying our bonds and higher interest rates, or buying the stock and higher expectations, it will cost more in the long run.

Q I understand that. Have you seen any electrical generation of any type that had to be discontinued or walked away from because of lack of financing?

A [ADDISON] I don't remember one, specifically, of that case. I remember some that have halted because of regulatory concerns — for example, in Florida — and therefore the deal would fall apart and it could not

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have been financed had the utility tried to go forward. So, usually when that compact breaks down, the attempt to finance never happens, because the person in charge of that, the company, would say it's just not doable.

COMMISSIONER HAMILTON: Okay. Thank you, very much. Thank you both, gentlemen.

CHAIRMAN WHITFIELD: Thank you, Commissioner Hamilton.

Commissioner Randall.

VICE CHAIRMAN RANDALL: Thank you, Mr. Chairman.

EXAMINATION

BY VICE CHAIRMAN RANDALL:

Q Mr. Addison, I don't have any question for you. Feel free to jump in if you want to.

Mr. Byrne, you've already talked a little bit about this, but I wanted to — I read somewhere that — I think it said delays in the project and unavailability of a simulator on which candidates can take exams has resulted in the need for nearly all licensed operator training to occur in a two-and-a-half-year window. And you said you've already done some simulator training, so I'm assuming you have a simulator?

A [BYRNE] Yeah, we've had a simulator for a couple of years now. The issue is that the simulator has to be

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1 certified by the Nuclear Regulatory Commission.
2 **Q** Okay.
3 **A** [BYRNE] So if you don't have a certified simulator, they
4 can't certify those licenses. So we went down a path
5 with the Nuclear Regulatory Commission to get what's
6 called a Commission-approved simulator. It's something
7 that we didn't foresee up front, but it exists in the
8 regulation. We had some back-and-forths with the
9 commission, and they relatively recently approved our
10 commission-approved simulator, so we now have an
11 approved simulator that's legitimate to give license
12 exams.
13 In fact, two weeks ago, we gave license exams to, I
14 think it was 15 new candidates. And I think five
15 candidates from a previous license class were only able
16 to take the written exam, and they couldn't take the
17 simulator exam because the simulator wasn't certified.
18 So, we now have that simulator issue resolved.
19 **Q** Okay. Good. So everything is certified now, on the
20 simulator. What's the pay range for an instructor, in
21 the new nuclear development operations training program?
22 **A** [BYRNE] The instructors are something that's in pretty
23 high demand. It's almost like free agency in baseball;
24 it can drive costs up to sometimes crazy levels. And
25 these folks know they can go somewhere else and get more

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1 money, so you have to be really nice to them. But the
2 pay for a fully qualified instructor on the nuclear side
3 is probably approaching $100,000 a year. Now, there are
4 gradings to that, and you have to work your way to get
5 there, but I'd say they top out at about that range.
6 **Q** Is the simulator software, is that the only training
7 software needed before it can be — all your training can
8 be conducted properly?
9 **A** [BYRNE] Yeah, we do training on the simulator. The
10 individuals who get licenses have to pass as an
11 individual on the simulator and as a crew on the
12 simulator. So they have to do different roles. We also
13 give job performance measures, which means I'll hand you
14 a task and I'll say, "Go and do this." Some of those
15 can be done on the simulator, but some of them are done
16 in-plant. And then we have a written exam. So, to get
17 the license, you have to pass the written exam, you have
18 to pass the job performance measures, and you have to
19 pass the simulator exam as an individual and as a crew.
20 So certifying the simulator was just a big piece of
21 that. The written exam, obviously, we don't need
22 software for that. The job performance measures, some
23 of them will need a simulator; some of them don't need
24 the simulator.
25 **Q** When you have to pass the exam as an individual and as a

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1 crew, what happens if you have one person in the crew
2 that bombs? Does that affect the whole crew?
3 **A** [BYRNE] It can affect the whole crew. You don't
4 necessarily have to fail the whole crew, but you can.
5 That's up to the examiner that will be doing that. But,
6 then, they would have to retake the exam as a crew
7 again.
8 **Q** Gotcha. With operator training issues, do you have
9 contingency plans in case anything else comes up,
10 because I know — such as with not having the certified
11 simulator to start with? Any other contingency plans
12 for making sure operator training goes as scheduled?
13 **A** [BYRNE] Yeah, our — you are limited in a new
14 construction. Obviously, the operators are only going
15 to be licensed on the units that they are trained on.
16 So I can't take an operator that's even licensed on V.C.
17 Summer Unit 1 and claim that that operator would be
18 licensed to operate Units 2 and 3. They have to go
19 through the whole process over again. I couldn't even
20 take an operator that was licensed at the Vogtle Plant
21 and have them operate my plant. Even though they could
22 do it, they're not allowed to do it under the law, so
23 you have to retrain them. So our options are very
24 limited, particularly when there's only two of us who
25 are building these things. Now, we will coordinate and

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1 cooperate with the Vogtle unit. We've developed exams
2 together. So there's a lot of cooperation there between
3 Vogtle and ourselves.
4 But the only real contingency we have is to hire
5 enough that I account for failures or people that would
6 drop out on the way from the time they start the
7 training program to the time they get their license.
8 We'll have some people drop out — personal reasons,
9 family reasons, change of careers, they're not
10 performing, or they don't pass the exams. Now, we test
11 them along the way. I don't want to have somebody who
12 goes up for the final NRC exam without having to pass
13 audit exams. So you'll lose people along the way, so I
14 have to hire to account for the fact that I'm going to
15 lose, you know, 20 percent or 25 percent of those folks
16 along the way. That's the only real contingency we have
17 for licensed operator training.
18 **Q** Well, in the country, around the country, we've got some
19 recent closings and probably some forthcoming closings
20 of nuclear plants. Will that have any bearing on the
21 availability of operators and simulators if we need
22 them?
23 **A** [BYRNE] It will probably help us, but we have to be
24 careful. One of the things we've found is, we — there
25 was a plant in California that closed, and we hired

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three training instructors from that plant. And, you know, they feel like, at that point, they don't have many choices, so they come and work for us, but as soon as a job opening is back on the West Coast, they're back there. So we lost all three of those guys to the West Coast within a year of them starting with us. So, yeah, there will be opportunities. You don't want to over-commit yourself to a certain number of people from a certain plant or a certain region of the country. Generally, I've found that people from the West Coast like to stay on the West Coast. If you bring them East, they're going to look for opportunities to go West.

Q That sort of — my next question was about problems finding talent to fill the spots, inspector positions especially. So that's the problem, in some instances?

A [BYRNE] Yeah, we have been successful at growing our own. We've taken a lot of folks who were Unit 1 operators or did other things on Unit 1 — Unit 1 training instructors — and we got them certified on the AP1000, and they're now qualified to teach AP1000 courses. So those instructors are home-grown. A lot less likely to leave than somebody that comes in from some other region of the country and decides they don't like it here and they want to go back home or they want to go somewhere else. So that has been a big help

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to us.

Some of the local colleges and universities are turning out very qualified engineers, operators. Midlands Tech has done a great job in supplying us with folks out of a two-year program that teaches them to be operators. They've also done a very good job with training welders that CB&I and, now, Fluor will be using. So the technical college system has really risen to the challenge.

Most of our engineers now are coming probably from Clemson or from South Carolina. Again, a lot more likely to stay with you than somebody from Purdue or MIT or Caltech. And then, Francis Marion has a good program in health physics, so we get four-year-degreed health physicists from Francis Marion. South Carolina State, we've had a number of graduates from their nuclear engineering program. So we've had great success with local colleges and universities.

Q Good, good. Let's see. I had a question about as-built drawings, but I think you and Mr. Guild batted that around pretty good and, I think, answered my question there. Just one more question. On page 31 of your direct testimony, you talk about cost categories: direct craft labor, indirect craft labor, and field non-manual labor. Just for all of us, just identify a few of the

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1 specific work activities on a typical workday under each
2 of those categories.
3 **A** [BYRNE] Yeah, so direct craft will be somebody who's
4 actually a welder, a pipefitter, rod buster, you know,
5 ironworker type folks. They're actually doing direct
6 work that the contractor will be able to get credit for
7 with regard to completion of that activity.
8 Indirect craft are people who would support the
9 craft. So if I build scaffold, for example, it doesn't
10 — I don't get much credit towards installing a valve,
11 but if I have to have a scaffold built to install the
12 valve, then the scaffold has to be there. We have a lot
13 of folks — when you're on a large construction site,
14 water becomes a problem, either the lack of water or
15 there's too much water. There's never the right amount.
16 So you're either spraying water to keep the dust down on
17 the dirt roads, or you've got these Badger trucks that
18 suck water out of low areas after it rains, and those
19 kind of things. So those kind of folks would be the
20 indirect.
21 The field non-manual, those are folks who are in
22 support of the work activities but aren't performing any
23 work. So those would be people that might do QA/QC;
24 field engineers would be a good example; designers.
25 They're not actually doing any physical labor, but they

are supporting the completion of the project overall.

VICE CHAIRMAN RANDALL: I'm glad you clarified that. I thought you said they weren't doing any work, the licensed field engineers.

[Laughter]

Thank you, Mr. Chairman. That's all I've got.

CHAIRMAN WHITFIELD: Thank you, Commissioner Randall.

We're going to take a few questions — it looks like Commissioner Howard has a couple of questions. We're going to take questions from Commissioner Howard, and then take a brief break.

Commissioner Howard?

COMMISSIONER HOWARD: Thank you, Mr. Chairman.

EXAMINATION

BY COMMISSIONER HOWARD:

Q Mr. Byrne, I think you might've touched on this briefly with Mr. Guild, but you talked about mechanical and submodule production. Please update us on the commercial issues relating to the mechanical modules produced by CB&I at the Lake Charles facility. Where is the module? Is it on-site, or have you disassembled it to be repaired?

A [BYRNE] There are a variety of different types of modules. So from CB&I, from their Lake Charles facility

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and others, we get either structural modules, which are large modules that we generally have to put together at the site, and they are, as they sound, structural in the plant. Generally, we fill the walls of those with concrete, eventually, and they will support other structures.

Mechanical modules, generally, will be modules that might include pumps and valves on a skid, let's say. Some of these skids might be as long as this room, from here to your chairs, but they're skid-mounted equipment. So those will be done, some of them, at Lake Charles, but others at other facilities that CB&I owned. I think a number of them were in Texas, and other places.

We did get some of those in that didn't meet our quality standards. We did have to do some rework of those. In the rework arena, it could be anything from a couple of welds needing to be touched up to, you know, this is deficient and we might as well start from the rails. So we're doing that largely on-site now. We do have inspectors in some of the facilities to let us know what's going on in the facilities. And then we've, again, diversified the supply chain. So things that were largely going to be done at CB&I's Beaumont facility will be done at other places. We've got a number of vendors now that are making mechanical modules

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for us, too. We've got floor modules. The floors in these plants become very important. Some of them have to be removable so you can get equipment in and out. So a lot of those floor modules are being fabricated by others.

So the diversification of that supply chain is largely complete. The commercial disputes have been resolved.

Now if we bring a mechanical module in from somewhere off-site and I have to fix it on-site, I don't have to worry about the accounting for that, because it's all included in our fixed-price contract, provided we get this fixed-price contract approved. Heretofore, we had to segregate that work location and any hours that were billed to that mechanical module that should've come to us in tip-top shape to start with, we would have to account for that and say, "You're not — you know, you can't invoice me for any of those charges; they're to the module manufacturer." So the fixed-price option makes that thing a lot easier. But those disputes have been resolved with this.

We've diversified the supply chain. We still have some modules that are coming out of the Lake Charles facility, and we are anticipating and waiting with bated breath, and we think by the end of the year we'll be

done with Lake Charles. So [indicating] we are hopeful.

Q Let's talk about LARs. I counted — and this is just my simple arithmetic, but I counted 17 LARs that hadn't been resolved yet, and hadn't been approved by NRC. Some of them, the past LARs have taken anywhere from four months in some cases, to two years. So 17 LARs out there that could have a variable approval rate of four months to God knows what, how do you feel about that? Are you comfortable with this many LARs out there?

A [BYRNE] Yes, I think we've identified probably 150 LARs that we will need by the end of the project. So whatever number you are looking at, it's going to grow. When we — we load those into our schedule now, so we know when we're going to need the output of that LAR. I know when I need the NRC to approve it. When we give those LARs to the Nuclear Regulatory Commission, we let them know what our approval need date is and, in general, they're hitting those approval dates. If there's something I need in advance of what the NRC can give me under their normal process, I have the flexibility to submit a preliminary approval request, or PAR — I think we've done about 14 or 15 of those, so far — where, if the NRC does a review up-front and has no objection to it, they'll issue me that no-objection letter and I can proceed, at risk. Now the risk is that

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they do their full review and they say, "Uh, no, we found a problem and you can't do this, and then I have to take it back out again, but we haven't found any of those yet.

So the LAR process, as you point out, can take some time. It's serious; the NRC takes a lot of time to review. We take a lot of time to repair them. We need input from Westinghouse or other vendors, significantly. But we've got every one of those loaded into our schedule. All of them now meet our construction need dates. If we run into one where we need something ahead of that, we can request a PAR.

Q And they work with you pretty well on your need dates?

A [BYRNE] They do.

Q Mr. Addison.

A [ADDISON] Yes, sir.

Q You mentioned that you have raised approximately 50 percent of the capital requirements of the total units when they're complete.

A [ADDISON] Yes, sir.

Q Is that right?

A [ADDISON] Right.

Q What percentage of borrowing is debt versus — what percentage — not borrowing. What percentage is debt versus equity?

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1 **A** [ADDISON] Our strategy from the beginning, and it
2 remains, is 50-50.
3 **Q** So you do that — you match that with your capital
4 structure.
5 **A** [ADDISON] That's right. So it's not — you don't see,
6 for example, $500 million of bonds and $500 million in
7 stock issued, because we're putting equity back from
8 SCE&G's retained earnings in it, and then we're putting
9 in equity from SCANA, from the holding company, that
10 it's accumulated, down there as well. So it'll be the
11 aggregate bonds issued, retained earnings, and
12 additional stock issued.
13 **Q** Curiosity, what percentage of that figure is retained
14 earnings?
15 **A** [ADDISON] I don't know off the cuff, but less than we
16 had originally planned, because we sold two of our
17 nonregulated businesses last year for about $435 million
18 after-tax gain, and we put all of that in. So that
19 would have offset having to issue additional shares and
20 would have resulted in retained earnings from the gain
21 on these companies. So a lot more than we originally
22 planned.
23 We pay out 55-60 cents of net income in dividends,
24 so we retain the inverse of that. So I just don't know
25 a precise answer, but probably roughly half and half,

retained earnings and new shares.

Q Does Wall Street have an opinion, one way or the other, on the use of retained earnings as a percentage basis?

A [ADDISON] Well, the utility sector, and our company included, is — you know, now the yield on utility stocks is in the 3½ percent, or so, range. So to the extent that you can reinvest those earnings and return a better investment than they can realize on a dividend, they would prefer that. For example, we pay out less in dividends than our peers do, because we've got a very large construction program in relation to the size of our company. So they would prefer that, as long as it is a prudent investment — reinvestment.

COMMISSIONER HOWARD: Okay. Thank you, Mr. Chairman.

CHAIRMAN WHITFIELD: Thank you, Commissioner Howard.

We're going to take just a brief break, and return back in about 10 minutes.

[WHEREUPON, a recess was taken from 3:40 to 4:00 p.m.]

CHAIRMAN WHITFIELD: Please be seated. We'll resume this hearing.

Mr. Byrne and Mr. Addison are still on the stand, and we'll resume Commissioner questions.

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1 Commissioner Elam.
2 **EXAMINATION**
3 **BY COMMISSIONER ELAM:**
4 **Q** Good afternoon.
5 **A** [BYRNE] Good afternoon.
6 **Q** Let's talk a little bit about the functional area
7 assessments that are being done to improve project
8 efficiency and schedule performance. Can you tell me
9 what the current status of the reviews are, and the
10 status of any new implementations?
11 **A** [BYRNE] Yes. So the functional area review team
12 started, actually, before Fluor even came on-site, so
13 they started back in the November-December timeframe;
14 they're continuing today. They include members from
15 Fluor and Westinghouse, from SCE&G, and from Southern
16 Company, and they took a look at discrete areas where
17 they thought that they had opportunities for significant
18 improvement.
19 Work planning was one example, part of that. They
20 took a look at the work packages that they would give
21 the craft, and they said, "This is too difficult; we
22 need to streamline these." So they've implemented the
23 plans to streamline those.
24 The methodology for how they hold people
25 accountable and what meetings they have on the site on a

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1 daily basis, we're largely finished with those. There
2 are others that are still ongoing. We do get — I don't
3 have the current status of every one of them, but we do
4 get some update of those on a monthly basis. Most of
5 the ones that were low-hanging fruit have been
6 completed; the other ones, they're going to continue
7 with them. They'll just go until they run out of steam
8 with them, until they've made all the improvements they
9 think they can make.
10 **Q** Okay. So there's no general idea about how long it will
11 take them to do everything?
12 **A** [BYRNE] They'll run as long as they can run and as long
13 as they're seeing improvements on it. Procurement is
14 one that is still going. The procurement area is one
15 that Fluor saw a lot of areas that they can improve, and
16 so they've implemented a lot of plans in procurement,
17 but there's more coming.
18 Hiring practices is another one. You know, they
19 recognized the need to hire more craft, and they knew
20 they would have to do some things that were, perhaps,
21 innovative in order to get more craft on the site. They
22 are continuing with those plans and actually coming up
23 with more all the time. So I don't want them to stop on
24 any of those.
25 But it was a collaborative effort to involve

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1 Westinghouse, Fluor, ourselves, and Southern Company.
2 **Q** Okay. And I asked Mr. Marsh about this, and it sort of
3 dovetails with what we're discussing. These reviews, do
4 they believe they can really have fully three shifts
5 working fully staffed?
6 **A** [BYRNE] Yeah, they're going to go two shifts.
7 **Q** Oh, okay.
8 **A** [BYRNE] It's going to be days and nights, or days and
9 back shift. So they're not working eight-hour shifts;
10 they're working 10- or 12-hour shifts.
11 **Q** Okay.
12 **A** [BYRNE] So they're going to staff two shifts, but, yeah,
13 they believe that they can get 1000 people on night
14 shift. And they're probably at 600 now, with a goal by
15 the end of the year to add at least another 350 to night
16 shift — and that's just craft.
17 **Q** Okay. And there's sufficient supervisors for that many,
18 for the night shift?
19 **A** [BYRNE] Yes.
20 **Q** You talked about Southern Company. Has Southern gone to
21 a fixed-price on its project at Vogtle?
22 **A** [BYRNE] Our understanding of the Southern contract is
23 that it was fixed-price from the start.
24 **Q** Okay.
25 **A** [BYRNE] So they maintained the fixed-price contract, did

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1 renegotiate some terms and conditions — I don't know
2 what those are, necessarily — when they did the same
3 thing and let CB&I out of their parental obligation. So
4 our deal is actually contingent on theirs, and theirs on
5 ours. So all the — both projects, the Vogtle project
6 and the Summer project, had to agree to this amendment
7 for it to work for either company.
8 **Q** Okay. Is the fixed-price something you considered at
9 the outset?
10 **A** [BYRNE] We had considered the fixed-price at the outset
11 — and when I say "considered it," we asked them what the
12 fixed-price would be, and off the top of my head, I
13 don't remember what that was, because it was probably
14 2007. But they gave us — they kind of threw out a very,
15 very large number that had a lot of risk premium in it,
16 and we decided that was probably not a good idea, at
17 least not at that point in time. As the projects go on,
18 the risk profile should decrease, so this, we felt, was
19 a better time to ask them for — with the diminished risk
20 profile — for a fixed-price option.
21 **Q** On page 24 of your testimony, you talked about a shared
22 repository of spare parts for SCE&G and Southern. You
23 see that?
24 **A** [BYRNE] Yes.
25 **Q** Is this a new site you're going to create somewhere, and

where would that be?

A [BYRNE] It could be a new site, or it could be the two existing sites, but we wouldn't necessarily buy a spare motor for Pompay; we would just know that it's in the Southern Company's warehouse. So we're looking to share things that — we would have to do an assessment to say, "What's the likelihood that they're going to need one and we're going to need one," and if the likelihood is pretty high, then we're probably going to get two of those. But if the likelihood is that, at any one point in time, we only need one of these, we'll have that one, but some of them may be at the Southern Company warehouse and some of them may be in our warehouse. So we haven't yet made a decision about whether or not we're going to stock a new warehouse.

Q Okay. It's not that terribly far part, anyway.

A [BYRNE] No. No.

Q Will the labor rate be the same on all shifts?

A [BYRNE] There will be a — they'll have to pay a premium to get people to work the back shift. I don't know exactly what that's going to be, but they'll pay a premium to get people to work the back shift.

Q Can you guess whether it's more than time and a half, or —

A [BYRNE] Oh, no, we're talking about — it's not going to

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be time and a half; it'll be something along the lines of 50 cents an hour. It's not a time-and-a-half kind of thing.

Q Okay. In all of the settlement discussions, is there — has there been any value placed to sort of the hard lessons learned and how that will help Westinghouse in the future, kind of being on the cutting edge of building the new AP1000? Are you going to get any royalties for the hard lessons learned?

A [BYRNE] No, we have not negotiated any royalties.

Q Okay.

A [BYRNE] We have, in the past, with Westinghouse — just an interesting aside — negotiated royalties for things that they have developed for us. Those royalties tend to be nonexistent, going forward, because they change the process a little bit and it becomes something different, or other people opt not to do it that way, they do it some different way. So the royalty issue is probably not something we pay a lot of attention to. But other people will benefit from the lessons learned, and I do anticipate there will be other people in the Southeast building AP1000s.

COMMISSIONER ELAM: I believe that's all I have. Thank you.

CHAIRMAN WHITFIELD: Thank you, Commissioner

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Elam.

Commissioner Hall.

COMMISSIONER HALL: Thank you, Mr. Chairman.

EXAMINATION

BY COMMISSIONER HALL:

Q Good afternoon, gentlemen.

A [Panel] Good afternoon.

Q Mr. Byrne, I just wanted to ask you just a few questions about the labor — some more questions, follow-up to Mr. Guild's questions. Is the local workforce sufficient to support increased staffing at both the sites at the same time? We just talked about sharing equipment. I guess you also are kind of sharing the same labor pool, so is that going to be a problem?

A [BYRNE] We are. Now, the Vogtle site is a represented workforce, so they're union. We're non-represented, so there are some barriers that are set up there to people going back and forth.

Q Okay.

A [BYRNE] We will compete, after a fashion, for some of the same resources, because we are geographically so close. We don't think, and Fluor doesn't think that, going forward, they'll be able to maintain the South Carolina component of the workforce; they're going to have to expand the boundaries a little bit further, so

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we do anticipate we'll be getting people from other places. They look very closely at other major construction projects that are ongoing in your vicinity, to know where the challenges are coming from, so when a pipeline is announced, for example, they get concerned about pipelines because pipelines tend to use a lot of welders, so some of the same resources that we use. So they're very concerned about the one that Dominion is building because, geographically, that's close enough to us that it could have an impact. But, so far, they've been pretty successful at bringing folks in. Not to say that they haven't struggled with getting specific resources, but, again, that's one of the reasons why where they didn't enjoy success in getting, let's say, rod busters, that's why they went to this non-English-speaking workforce strategy, to get rod busters who were native Spanish speakers that come in, and we can now train them in their language; we have the supervision that speaks their language.

Q Okay. And are they — is that English as a second language? Or they don't speak English at all?

A [BYRNE] It's a combination. For some, it's a second language, and some of them don't necessarily speak English at all.

Q Okay. And where were they found?

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1 **A** [BYRNE] They come from the Southeast. Not necessarily
2 in this area, but they're from around the Southeast. I
3 think we got some of them out of, like, Louisiana and
4 places like that.
5 **Q** Okay. And I think you said that you're at about 4000
6 staff right now —
7 **A** [BYRNE] That's correct.
8 **Q** — with the people on the night shift. Is that going to
9 be the max, the peak, or —
10 **A** [BYRNE] No, I think we're looking at a peak number
11 that's probably going to be close to 5000 total on the
12 site.
13 **Q** Okay. And who's responsible — what party's responsible
14 for overtime pay? I'm sure at some points, you'll be on
15 overtime.
16 **A** [BYRNE] Well, again, under the old contract, we would've
17 been responsible. Under the new contract, that's a
18 fixed price, so Westinghouse is responsible.
19 **Q** Okay. Does Fluor use some kind of earned-value method
20 of project management so that critical resources are
21 being applied to the right activities, as opposed to
22 lower priority work?
23 **A** [BYRNE] They do. They are implementing their earned-
24 value model now. It's one of the things that we're
25 looking to get from them at some point in the near

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1 future. They do — this is between them and
2 Westinghouse. They obviously want to get paid for
3 higher value for certain jobs than they think was in the
4 project before. So that's where I was saying I
5 anticipate the number of work hours on the site to
6 complete will go up.
7 **Q** Okay. Now, ORS Witness Powell discussed the uncertainty
8 that remains in the schedule, pending Fluor's
9 finalization of their fully resource-loaded version.
10 When do you anticipate receiving the fully resource-
11 loaded construction schedule so that ORS will have it?
12 **A** [BYRNE] We anticipate that that will be going from Fluor
13 to Westinghouse shortly, and that we should see it by
14 the end of the year.
15 **Q** Okay. Do you foresee another request for revised
16 schedule and cost estimates after you've reviewed that?
17 **A** [BYRNE] Well, we don't anticipate that at this point in
18 time. Our conversations with both Fluor and with
19 Westinghouse have been that their goal is to hold the
20 dates, and adjust the resources to match the dates.
21 **Q** Okay, that makes sense. Oh, okay. You talked about the
22 delays which caused the storage-problem issues. Do you
23 think those issues will cause delays? Or is there any
24 way to mitigate that risk?
25 **A** [BYRNE] Yeah, I think the delays have largely already

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1 happened. And so, where I would — previously, under the
2 original schedule, I might receive a reactor vessel or a
3 steam generator just before it was time to go into the
4 construction site, into its final resting location.
5 We're now getting those components months or years ahead
6 of time, but I'd rather have them on my site than
7 sitting somewhere else, particularly if it's overseas.
8 And so we have said we want them all here. To
9 accommodate that, since I don't have that much storage
10 and lay-down area, we have had to accommodate with
11 building lay-down areas for some components, or storage
12 areas covered by tents for others. And in some cases,
13 you have to put air conditioning, you know, temperature
14 and humidity control on some of those tents. So they're
15 fairly elaborate, so that got into the millions of
16 dollars' worth of costs.
17 **Q** Okay. But so you don't anticipate any additional delays
18 because of that?
19 **A** [BYRNE] No, those are actually caused by the delays, so
20 it's a function of the delay that we now have storage
21 issues at the site.
22 **Q** Oh, okay.
23 **A** [BYRNE] But I think that, largely, we've got the storage
24 issues worked out. We've opened up a lot more areas to
25 them where they can use for lay-down, and they've made

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1 good, effective use of the tents.
2 **Q** Okay. All right. Thank you.
3 And, Mr. Addison, I just have a couple of questions
4 for you about the report, the Base Load Review Act
5 report. Can you elaborate on the benefits that the
6 study concluded that the ratepayer will eventually
7 realize?
8 **A** [ADDISON] Sure. The report just reiterated what we had
9 suggested from the beginning — which, I mean, is simple
10 math — that if you pay the interest while the
11 construction is going on, you're not going to pay the
12 compounding effect of it over the life of the plant.
13 It's back to the analogy we used this morning. It's the
14 same discussion that the Legislature considered when
15 they passed the law, and it's the same discussion we had
16 in this room in 2008, and it's the same thing the CPAs
17 verified earlier this year.
18 **Q** Okay. How will it affect ratepayer benefits if the
19 Commission approves the current request for updates and
20 revisions?
21 **A** [ADDISON] How would it affect the rate request?
22 **Q** The ratepayer benefits, I mean —
23 **A** [ADDISON] Sure.
24 **Q** Yeah.
25 **A** [ADDISON] Sure. So I think one of the largest benefits

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1 is the perceived risk by investors. Again, we've got
2 about $3 billion left to raise from investors. And,
3 number one, they believe the fixed-price option is a
4 much better way to go. They've done their own high-
5 level analysis, like Mr. Lynch's, and have concluded
6 that's a better option. And if that were not approved,
7 then we're in a dilemma; we've got to choose which way
8 to go, as a company, then, because we still have the
9 choice to do one or the other. I'd think that would
10 significantly raise the risk perception in their minds
11 and, therefore, they're going to expect a higher return
12 on the debt if they buy our bonds or on any stock that
13 they buy to fund the remainder of the construction.
14 **COMMISSIONER HALL**: Okay. I think that's all
15 for me.
16 Thank you, Mr. Chairman.
17 **CHAIRMAN WHITFIELD**: Thank you, Commissioner
18 Hall.
19 Commissioner Fleming.
20 **COMMISSIONER FLEMING**: Yes.
21 **EXAMINATION**
22 **BY COMMISSIONER FLEMING:**
23 **Q** Well, good afternoon.
24 **A** [PANEL] Good afternoon.
25 **Q** You all have been here all day before us, and you're

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still smiling a little bit.

[Laughter]

I guess we're glad you're here today, so... I wanted — you talked a lot about man-hours and increasing the number of people working, but, Mr. Byrne, you talked in your testimony about productivity factors for the project, and how they haven't met expectations. Could you talk a little bit about why the productivity is below expectations? Does that tie into the qualified workers that Mr. Marsh said was one of the major challenges?

A [BYRNE] Yeah, I don't think that — we have had some difficulty with getting qualified workers, and Fluor is trying a lot of things to try to increase their hiring, and have been pretty successful at it. But they still have a long way to go; they still need to hire quite a few more people. But that is not getting at the root cause of the issue on productivity. The productivity issues are generally stemming from the fact that, when a contractor estimates a job, they will say, to pour X number of cubic feet of concrete it should take 10 hours, so that becomes the unit rate for that much concrete. So on our site, it's taking more than 10 hours, and that's because of delays that might be because of restrictions on quality of concrete that

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1 perhaps they don't see on other jobs, and some of it is
2 because of the tight construction tolerances
3 necessitated by the fact that we have a License to
4 Operate now, so the Nuclear Regulatory Commission looks
5 a lot more significantly on our construction site than
6 they ever did on a nuclear construction site previously.
7 Under the old premise, you would change things, you
8 would as-build them later, and then get a Construction
9 License after that fact. So you had a construction
10 permit and you'd get an Operating License after the
11 fact. We already have an Operating License as part of
12 the new process, so the NRC has increased scrutiny to
13 the construction means and methods. So some of that is
14 in play.
15 Where they would pour to an original plan, put in
16 ironwork to an original plan, make modules to an
17 original plan and then the NRC changes an interpretation
18 and they have to redo that, then that increases the
19 number of hours to get that job done. So that impacts
20 their productivity.
21 Where they go into the field and the drawing says
22 to do X, the procedure says to do X, and they find out
23 they can't really do that and they have to change it, on
24 a nuclear construction project you have to change all
25 the paperwork to do it; you can't just go and change it.

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1 And in some cases, we need the license changed in order
2 to facilitate that, and so those take time and that's
3 more hours to accomplish the same task.
4 So, really, it's a function of nuclear construction
5 and the issues that the contractor has had relative to
6 their interpretation of the rules and the different NRC
7 interpretations of the rules and the codes and
8 standards. So the productivity is much slower.
9 We have actually had probably better-than-normal
10 weather for a project of this size and scale. From a
11 safety perspective, they're doing very well on safety.
12 So those things are not impacts.
13 The procurement process is, I believe, having an
14 impact on productivity. If you go to check out a
15 certain number of rebar and it's not there, then that's
16 an issue for that craft, and so they're not getting
17 credit for that. So Fluor's initiative to improve the
18 procurement process, I think, is going to go a long way.
19 So there've been a lot of things — there's not any
20 one thing I can point to to say, "That's responsible for
21 worker inefficiencies"; it's a whole slew of reasons.
22 **Q** And so, you feel like working with Fluor is the answer
23 to improve the productivity?
24 **A** [BYRNE] Yeah, I think Fluor is in a much better position
25 to improve productivity than CB&I or Shaw ever were. I

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1 think that their means and methods, their practices,
2 their evaluation of unit rates and those kind of things
3 are far more sophisticated than we've seen from CB&I or
4 Shaw. So we think they're going to do a much, much
5 better job.
6 **Q** And were the issues with the scrutiny, was this
7 something unknown when you got into the project, or was
8 it just something that the contractors were not kind of
9 up to snuff on?
10 **A** [BYRNE] Well, so, first of all, we really haven't done
11 much nuclear construction in quite a long time in this
12 country, so that has played a part in it. And then the
13 level of scrutiny by the NRC, I think, was unanticipated
14 by all parties, perhaps even the NRC included. So their
15 involvement in this and their zeal to hold them to the
16 license, whereas the contractors are accustomed to doing
17 as-builds, that was a different process. So I think
18 they underestimated that challenge.
19 **Q** It sounds like you're adding yourself, as well, in some
20 ways, to that?
21 **A** [BYRNE] Yeah, I would say that we were surprised by the
22 level of detail that they were being held accountable
23 to, and the inflexibility in the NRC, at least up-front.
24 I think that, even the Nuclear Regulatory Commission has
25 got to realize that we need some flexibility in

construction, and some of the changes — like the PAR process that we proposed and they've accepted — were intended to allow us to keep work on track where you run into some of those regulatory roadblocks.

Q So, do you think any future productivity gains will make up for the additional cost incurred, due to the lower-than-expected productivity levels?

A [BYRNE] That really gets to the evaluation Dr. Lynch did for us. We don't believe they can improve to the point where they will bring it in under the fixed-price option. So our belief is that, based on the productivity factors and labor rates, that it's going to cost them more money than the $505.5 million to exercise the fixed-price option.

Q So you don't think they will make it up, then.

A [BYRNE] I don't think they'll make up the cost. I think that, in order to meet the schedule, they're going to have to spend more money. So, you know, the increased back shift, the more people to do the unit-rate evaluations, that's going to result in them spending more money. And so one of the goals out of our renegotiation of the EPC and the agreement that we signed in October was to create enough incentive for them to spend that money, because if they had already given up on the old liquidated damages, there really

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1 wasn't any incentive for them to do that. So we've now
2 increased liquidated damages and we've increased the
3 bonus for them to qualify for the production tax
4 credits, and the difference between those, the incentive
5 and the bonus, what they have on the line is about $1
6 billion. So we think that's enough for them to make
7 decisions to spend money and add resources and get the
8 job done.
9 **Q** And do you think you've reached that threshold where the
10 vendors are now sending the quality product, like the
11 shields, et cetera, that you've had trouble in the past,
12 that you're not going to have that as a roadblock?
13 **A** [BYRNE] Yeah, I think the quality we're seeing from the
14 vendors that we now have on the project, that are now
15 supplying these submodules, both structural and
16 mechanical, has increased significantly. I'm pretty
17 confident in those. We're still reliant on the Lake
18 Charles facility for a few things. We're working as
19 hard as we can to get out of that facility, and that'll
20 be a good day when we're finished with Lake Charles. I
21 still don't have complete confidence in Lake Charles.
22 **Q** So that could still be a problem with productivity.
23 **A** [BYRNE] Everything we see today tells me I'll have the
24 parts when I need them, but we're paying a lot of
25 attention — as is Westinghouse — to Lake Charles.

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1 **Q** Okay. And, then, you talked about the construction
2 milestones in your testimony?
3 **A** [BYRNE] Yes.
4 **Q** About it creating a strong incentive for completing
5 major scopes of work and improving schedule performance?
6 **A** [BYRNE] Right. So the premise is that they don't get
7 paid unless they hit the milestone. So they can do all
8 the preliminary work and ancillary work that they want
9 to, but if they don't get the milestone done, they don't
10 get paid for it. So they have every incentive to hit
11 the milestone so they get paid.
12 **Q** So, what assurances do you have that would preclude
13 construction shortcuts to maintain schedule and
14 additional costs that would end up with requiring
15 rework?
16 **A** [BYRNE] Yeah, so, from a —
17 **Q** So, I mean, how can you — if they're so busy working to
18 meet the schedule, how can you make sure the quality, I
19 guess, is adequate?
20 **A** [BYRNE] Any major construction project is going to have
21 some degree of rework, so that's not to be unexpected.
22 They do work with their own quality assurance and
23 quality control, and field engineering. We layer on top
24 of that another layer of quality control, so we have
25 people out in the field inspecting, and then the Nuclear

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1 Regulatory Commission also adds inspectors, both
2 permanent resident inspectors and then visiting
3 inspectors when they do certain tasks. So these folks
4 are scrutinized by, really, quite a few people. So
5 we're going to make sure that the work is done right and
6 the documentation is done appropriately.
7 **Q** Okay. And do you expect any more additional work to be
8 required as a result of Fukushima?
9 **A** [BYRNE] No, I think the Fukushima work for us is behind
10 us. Now, some of it, we haven't actually implemented in
11 the field, but it's been designed in already. So there
12 shouldn't be any additional work scope because of
13 Fukushima for us.
14 **Q** Okay. So that will not be a problem?
15 **A** [BYRNE] Right. For example, the increase in spent-fuel-
16 pool-level instrumentation that I talked about, we
17 haven't — we haven't completed the spent fuel pool yet,
18 so that level instrumentation's not in. So, we're going
19 to do that, but the price of that has already been built
20 in.
21 **Q** And you know what you have to do for it.
22 **A** [BYRNE] Correct.
23 **Q** Okay, great. And, Mr. Addison, I wanted to just ask you
24 a couple of questions. Ms. Arnold, from the AARP on the
25 first day, in the public hearing, made the statement

that most companies such as yourself have a much lower ROE, in the 9.5 to 9.7. And I know that you've already agreed to a reduction as a result of the settlement agreement. But how would you respond to her?

A [ADDISON] Well, I would say, first of all, she's correct; most do. Except most aren't like us. Most aren't doing what we're doing. In fact, the only other one in the US that's doing what we're doing is Georgia Power, and theirs is 10.95, where we've just agreed to lower, originally, from 11 to 10½, to 10¼.

Q Uh-huh.

A [ADDISON] I think last week I saw a case resolved in Florida with FP&L at 10.55. So I think she was accurate in what she looked at in the total population, but that includes a lot of the country where there is no growth, and where there's outmigration of population; there is not the need for added facilities, et cetera. Different economies, and mainly not building a project of this size.

Q Okay. So it's not really apples to apples?

A [ADDISON] Absolutely.

Q You have to look at a lot of different factors other than just —

A [ADDISON] Absolutely. I mean, I'll give you an example within our SCANA family. Just a few weeks ago, I was

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1 testifying before the North Carolina Commission in
2 support of a settlement there with an ROE of below 10
3 percent. That's a different risk business than is
4 SCE&G's with the nuclear build. That's — an apple-to-
5 apple's very critical in this respect. Else, an
6 investor will just put their money somewhere else. The
7 largest — and this is in my testimony — the largest bond
8 deal we've done in the history of our company, we did
9 back earlier this year, $500 million at once. Sounds
10 like a big number to me. There were $17 billion in
11 bonds sold that month in the US. So the largest deal
12 we've ever done in the history of our company was less
13 than ½ percent of the volume that month, so investors
14 have a lot of options. They don't have to come to us.
15 I think we can do it. The question is, at what
16 price. So, that return factors in.
17 **Q** Okay. We also heard a lot about people saying they'd
18 like to see the stockholders have some skin in the game,
19 as well, and I did ask Mr. Marsh about this. And what
20 would you say to that? I mean, it seems like it would
21 give customers a little — just from what you're hearing
22 — give customers a little bit of assurance if they felt
23 stockholders had something in it.
24 **A** [ADDISON] I think it's probably the biggest
25 misperception about the BLRA. I had this conversation

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with Ms. Greenlaw in this room in 2008, and then Ms. Wright and I had it earlier today. The public just does not understand that the stockholders are putting up 50 cents of every dollar for every construction invoice that comes in there today. And they will until these plants come on. And only then will the consumer start paying for some of that plant. In the meantime — I know you all understand this; I don't intend this to you. But to the public, they just don't get that they're not paying the construction bills.

So that stockholder's paying half of every dollar — the 50-50 discussion that Commissioner Howard and I had earlier — for every invoice today.

Q So they actually are taking a risk, and they are — they do have skin in the game, so to speak.

A [ADDISON] They absolutely do. And I assure you, they have a great deal of risk pending the outcome of this decision before the Commission.

Q Okay. And I wanted to ask one other thing, and — Alice Napoleon testified about for energy efficiency, which I think Mr. Kissam agreed, as well, that SCE&G is doing — he was very proud of the work you are doing. She seemed to indicate that there were opportunities to do more, which could help alleviate some of the money that the customer's paying on their bill. Does this, in any way,

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have a negative impact on the bottom line, if SCE&G put forth a strong energy efficiency program, if, indeed, there are opportunities for a stronger program there?

A [ADDISON] I agree, obviously, with Mr. Kissam that we do have a strong program, or else I would've voiced my opinion internally before, and we would have had a change to that. I think we do have a strong program. His point was, let's do things that work in South Carolina, and with the housing, et cetera, here, and the *per capita* income here, you have to have different solutions in different parts of the country to be effective.

I think we've got a great structure in place now with demand-side management in South Carolina, that this Commission has endorsed, and we're operating under that. And it does compensate us when we make those investments, so that is not a limiting factor to how actively we pursue those. We really want to do things that make sense and really lower the demand on SCE&G's system that are effective there, and not just a shotgun approach that may not be effective.

Q So you feel like you are doing as much as you can do in terms of energy efficiency?

A [ADDISON] I think we're doing as much as we should do that is effective. Now, we could do more, but I don't

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1 think it would result in an effective use of the
2 dollars. And I think, to some extent, you end up with —
3 you have to be careful or you end up with a
4 socialization effect, and we end up having more costs
5 that all the customers are paying for and only a few are
6 benefiting from, or may not be benefiting at all, but
7 the costs get spread among the entire customer base.
8 **Q** So that's the way you would respond to what she had to
9 say?
10 **A** [ADDISON] It is.
11 **COMMISSIONER FLEMING**: Okay. Thank you.
12 **CHAIRMAN WHITFIELD**: Commissioner Hall.
13 **COMMISSIONER HALL**: Thank you.
14 **EXAMINATION**
15 **BY COMMISSIONER HALL:**
16 **Q** I'm sorry, I just meant to ask this earlier. Where does
17 the DRB meet?
18 **A** [BYRNE] The DRB can meet wherever they'd like to meet.
19 The only time we have met, so far, has been in Atlanta.
20 **Q** In Atlanta?
21 **A** [BYRNE] Yes.
22 **Q** Okay. And I got the John Bulman. The other guy's name
23 was Hinchey; is that right?
24 **A** [BYRNE] Hinchey, and then Gaede.
25 **Q** And how do you spell that?

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1 **A** [BYRNE] I'm not sure.
2 **Q** Okay. All right, I'll figure it out.
3 **A** [BYRNE] We can get it to you.
4 **COMMISSIONER HALL**: Okay, yeah, that's fine.
5 Thank you. I just want to Google them.
6 **CHAIRMAN WHITFIELD**: Thank you, Commissioner
7 Hall.
8 Anybody else?
9 [No response]
10 If not, I've got just a few questions for each
11 of you, and we'll wrap up.
12 **EXAMINATION**
13 **BY CHAIRMAN WHITFIELD**:
14 **Q** Mr. Addison, a couple for you, first. You made a good
15 illustration, talking about the company's largest bond
16 in your history was $500 million, and I think in that
17 month you said $17 billion was raised. So you make a
18 good illustration of the options available to investors
19 out there. And you had an exchange with Commissioner
20 Howard about the capital structure and, of course, all
21 over the place in your testimony you talk about how much
22 capital is yet to be raised — 50 percent, approximately,
23 of this project. And I know last time, a little over a
24 year ago when we had this case, there was a lot of
25 concern from Wall Street, and I'm sure they're watching

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this very closely, as well. I know, last time, you talked about recent communications that you had had with them. Could you share maybe any recent communication — I mean very recent, right prior to this hearing — that you have had with Wall Street and the financial community on the amount of capital to be raised in this impending proceeding?

A [ADDISON] Yeah, I'd say the majority of the discussion in the last 90 days has been around the whole settlement process. So there was a lot of discussion from the time we made the filing — initially, it was, "Why would you not take the fixed-price option?" So we kept having to say, "Let us run our evaluation, and we'll be back and we'll make our decision public as soon as we do." Most recently, the whole discussion has been around, "Are you going to reach a settlement?" And then once we did and we filed that settlement, "How do you expect the Commission to react to this settlement?" And, of course, all we can say is we'll present our case, we'll present the evidence, and we'll hope for your support of that, like we've seen in the past.

But that's where the majority of the discussion has been most recently, is the continued support of the settlement, the consistent support of the BLRA law.

Q So they questioned you initially, as you said, "Why

1 would you not take the settlement?" Of course, the
2 reaction has been, since you've announced the settlement
3 to them, the reaction has just been totally supportive?
4 Or —
5 **A** [ADDISON] It has been. It has been. They realize — for
6 example, they see us give on some things, like agreeing
7 not to be back here for two and a half, plus, years, if
8 there were any of those exceptions to come up; they see
9 us lower the return on equity. But they see that
10 overall package as a reasonable thing, and they see some
11 level of certainty in that, understanding you still have
12 to endorse it. But it's one of those things where they
13 felt the overall value of it made sense, much like Mr.
14 Byrne described a lot today with the overall negotiation
15 of the amendment to the contract.
16 **Q** So, given that reaction and depending on what we do, you
17 feel that you're able to raise — that's a lot of capital
18 that you still have to raise. And what's your level of
19 confidence about that?
20 **A** [ADDISON] I'm very confident that we can accomplish
21 that, barring some macro event. I always get concerned
22 about another 2008 occurring and the whole financial
23 market's upset, that kind of thing. But we have
24 protections in place to help us get through some short-
25 term matters like that. We have, across all the SCANA

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1 entities, a $2 billion credit line to help us get
2 through, you know, several months of construction, if we
3 hit a really rough spot in the financial markets. So
4 barring having to wait out some macro issues that have
5 nothing to do with us, I feel good about it.
6 **Q** Thank you, Mr. Addison. I want to back up the clock
7 just a little bit on you, but it's in your testimony
8 this time. In your direct testimony on page 19, you
9 state — and if you want to get there, that's fine. Page
10 19.
11 **A** [ADDISON] Okay [indicating].
12 **Q** You state, quote, "In spite of increased costs we are
13 considering today, we still believe that the decision to
14 forgo price certainty in 2008 was the correct decision."
15 Why do you believe that still now, now that you are
16 exercising the fixed-price option?
17 **A** [ADDISON] Yeah, and I might have Steve comment on this,
18 as well, but he commented on this a couple of
19 Commissioner questions ago, but I think it has to do
20 with where we are in the construction cycle now and the
21 risk premium that's left between now and the completion
22 of the project, and, in my opinion, Westinghouse's
23 ability to potentially sell more of these units. I
24 mean, they have some other projects in the pipeline now
25 that are significant, and I think that increases the

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1 likelihood of their going through the finish line on
2 these plans with us under this fixed-price arrangement
3 with us.
4 **A** [BYRNE] Yeah, I — let me just add to that that, as was
5 pointed out earlier, Southern Company had a fixed-price
6 contract from the start. They still had some of the
7 same issues and some of the same disputes. So, learning
8 from that, we, in this agreement, changed some of the
9 language to get more rapid dispute resolution through
10 the DRB, and — let's see — the other provisions of the
11 contract, the change-in-law language, for example, the
12 update to DCD Rev 19, for example, those are the things
13 that were causing disputes, even on the fixed-price
14 contract that Southern had. So learning from that, we
15 thought this was the right time to see if we could
16 execute a fixed-price contract.
17 **Q** I've got a few questions for you now, Mr. Byrne, now
18 that you've jumped in. I asked Mr. Marsh — and he
19 quickly corrected me. I mistakenly referred to a bonus
20 as being a bonus that wasn't in the contract, and I was
21 referring to a capacity megawatt bonus, which is out of
22 there now. But he quickly corrected me and reminded me
23 that the completion incentive is $165 million for both
24 units. And, of course, that is for them being finished
25 in time to receive the federal production tax credit,

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and that would be $165 million for both units. When you count that amount and you factor in the liquidated damages cap and everything else, I think you just said in one of your answers to Commissioner Fleming just a few minutes ago that you've got almost a $1 billion swing there. So when you count the liquidated damages cap over here and the incentives over here, there's quite a wide swing. It's almost kind of an all-or-nothing thing. And to borrow, I guess, some of Mr. Kissam's words, he talked about the transmission project — and I certainly know you can't compare a generation project to transmission, but he made the comment, "How do you eat an elephant? One piece at a time," I think was the analogy he used. Is there — in these bonuses and incentives, is there any type of segmentation, if you will? And I realize the payment schedule that you're paying them as the work is completed — and I do think that's an improvement. Is there any kind of incentive with those bonuses as you go, in segments like you're doing the transmission project? Or can that — or are we going to look up one day and, all of a sudden, we're at the buzzer in 2019 and you realize you're either going to get all or nothing — it's going to be kind of an all-or-nothing thing? Is there anything — and I guess I'm referring to a lot of the craft workers

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and craft labor. Sometimes they can't see maybe — not saying they can't see, but they might not look at something three years down the road; they might be looking at next week or next month. And how do you keep that constant incentive, if you will, on the front of everybody's mind, on a daily, weekly, and monthly basis?

A [BYRNE] Yeah, so the best incentive for the contractor, since they are concerned about cash flow, is to hit milestones. And they'll be presented with a number of milestones every month. So they don't get paid if they don't hit the milestones, so that should be incentive enough for them to complete those. The —

Q But other than the cash flow that you're describing.

A [BYRNE] Yeah, and so the liquidated damages and the bonus provisions were put in, specifically, to do some of the things that you're talking about. If I go back to the last Commission Order, it admonished us to ensure that we do all things that were reasonably achievable to qualify for the federal production tax credits. So one of the things we think is reasonably achievable is we could incent the contractor to hit those production tax credit dates. So that's why we tied the $165 million to hitting those production tax credit dates, and that's our portion — I think it is.

A [ADDISON] Yeah.

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1 **A** [BYRNE] — $300 million, I think, is the total when you
2 put in 45 percent share. So they've got $300 million at
3 risk if they don't hit the production tax credit dates,
4 so that's an incentive.
5 For the liquidated damages portion of it, it's
6 graduated, such that it's a certain amount of money per
7 day, for every day in the first, let's say, month, which
8 will be a relatively modest value. As you get out
9 further, the amount of dollars per day increases, and
10 increases dramatically. So there is an incentive for
11 them to stop that bleeding, if you will, stop the amount
12 of money they would have to reimburse us for liquidated
13 damages, if they get it done even late but not too late.
14 So it really picks up by the time they get to the end of
15 that two-year window.
16 **Q** And back to Fluor and the direct craft labor and
17 indirect craft labor, you were talking about the non-
18 English-speaking craft you're bringing on, I think
19 mostly in the rod busters or rebar craft. Is it going
20 to be in other crafts, too, or other indirect crafts, or
21 only in the rebar and rod busters, in that area, or —
22 **A** [BYRNE] What Fluor wanted to do is they wanted to limit
23 it to a specific area, to get maximum control, and they
24 wanted to see how this went, and if it was a positive
25 experiment they would expand it. Last conversation I

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had with the leadership at Fluor said this is going very well and that they would look to probably expand this. So, now, I don't know whether that means just more rod busters in other areas, or expanding to different craft levels, but certainly they've had great success with the rod busters they've had so far.

Q Yeah, I would say certainly in one area like that, but when you start going across all crafts, I guess you're talking about interpreters and other things —

A [BYRNE] And signage and training, yes.

Q And training. And back to the craft and the hours, when this shift that you're speaking of goes on at night and you're essentially, you know, other than a shift change, you're almost going 24 hours a day, do you think that, after a short period of that, that you will be able to — and I realize Fluor has the new schedule that they have to present to you, and you've discussed that enough, so I'm not going there. But do you feel like, after this night shift is going, say, three to six months down the road, that you'll be able to have a little bit of a handle if any ground is being gained that was lost? Or what are your — how do you feel like that might be reassessed?

A [BYRNE] Yeah, I think what they're going to do is try to keep the numbers on dayshift that we currently have, and

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while it may not be the same people, the numbers that we're bringing on will be dedicated towards the night shift. So I don't anticipate that the adding of the night shift will have any detriment to the dayshift performance. So I would anticipate that, in three to six months, as you suggest, when we've got that night shift fully staffed, that I won't see any decrease in the day shift, because they're going to have roughly the same number of people on days as I have now. The increase is going to come on night shift.

So I would look to see that I'm keeping the efficiencies, keeping the progress on days, and adding to it by the night shift.

Q And I guess, lastly, I'd like to ask you about a little bit of personnel — two people, in particular, who have been before us, before, who were part of this new nuclear development team, and I haven't seen them in testimony or anything. I think Mr. Alan Torres was head of construction, and you had Ms. Carlette Walker, who was involved in the new nuclear finance. Did they retire? Are they still with the company?

A [BYRNE] Ms. Walker retired. Mr. Torres is still there, still in the same role, still at the construction site every day.

Q Okay.

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1 **A** [BYRNE] I'll keep him as long as I can.
2 [Laughter]
3 **CHAIRMAN WHITFIELD**: Thank you, that's all I
4 have.
5 Commissioner Howard.
6 **COMMISSIONER HOWARD**: This irritates
7 Commissioner Hall when I do this, so that's why I
8 do it.
9 [Laughter]
10 **EXAMINATION**
11 **BY COMMISSIONER HOWARD:**
12 **Q** Just one quick question: We've heard, and I want to know
13 if you've heard of other states that are watching you,
14 when you complete your plant, that they will be
15 interested in joining building nuclear plants
16 themselves. I don't want to know the states, just the
17 numbers if you have a number.
18 **A** [BYRNE] Well, most of that information, I would consider
19 anecdotal. But we have been aware of other states that
20 are applying for licenses now, that anticipate getting
21 those licenses in the short term – I'm saying within the
22 next year – that are going to bank those licenses, and
23 then when we're finished, they're going to construct.
24 So they are looking at how we do and how Southern
25 Company does, and after a fashion, how the plants in

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1 China do. And after we're finished with the
2 construction, they will construct. So there are
3 licenses pending right now with the Nuclear Regulatory
4 Commission for AP1000s.
5 I think there's at least three of those. I
6 anticipate each of those three utilities will get those
7 licenses and bank them for a period of time, and then
8 construct later. There are two utilities that have
9 received licenses since we got ours. They're not AP1000
10 designs, but some of the construction under Part 52 that
11 we are learning lessons on will be just as applicable to
12 their design as it is to ours. They are going to do
13 similar things; they're going to wait until our
14 construction is complete. There are two of those
15 utilities, at least. And there's another one I'm aware
16 of that still has a license application pending. I'm
17 just not sure about what their timeframe for
18 construction is.
19 **COMMISSIONER HOWARD**: Thank you, Mr. Chairman.
20 Thank you, Commissioner Hall.
21 [Laughter]
22 **CHAIRMAN WHITFIELD**: Thank you, Commissioner
23 Howard. I'm having a hard time figuring out what
24 about that question irks Commissioner Hall, but I
25 guess I'll learn that later.

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Mr. Zeigler.

MR. ZEIGLER: No redirect, Mr. Chairman. We'd ask the witnesses to be excused, if you would.

CHAIRMAN WHITFIELD: Yes, sir, Mr. Zeigler. The witnesses may step down.

[WHEREUPON, the witnesses stood aside.]

And I understand that the parties have agreed to take at least one witness, or maybe two, out of order. And at this time, Mr. Ellerbe, I will call on you to present your witness.

MR. ELLERBE: I would call Mike Couick. Mr. Chairman, should he sit here at the table in the front?

CHAIRMAN WHITFIELD: He can sit wherever he wants to sit.

[Laughter]

MR. ELLERBE: And he doesn't have a name tag, but maybe y'all know who he is.

[Witness affirmed]

THEREUPON came,

M I C H A E L N . C O U I C K ,

called as a witness on behalf of Intervenors Central Electric Power Cooperative and The Electric Cooperatives of South Carolina, who, having been first duly affirmed, was examined and testified as follows:

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C E R T I F I C A T E

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

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

IN WITNESS WHEREOF, I have hereunto set my hand and seal, on this the 21st day of October, 2016.

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