

1

1 STATE OF SOUTH CAROLINA
 2 COURT OF COMMON PLEAS
 3 COUNTY OF HAMPTON
 4 RICHARD LIGHTSEY, LeBRIAN CLECKLEY, PHILLIP COOPER,
 5 et al, on behalf of themselves and all others
 6 similarly situated,
 7 Plaintiffs,
 8 vs. CASE NO. 2017-CP-25-00335
 9 SOUTH CAROLINA ELECTRIC & GAS COMPANY, a Wholly
 10 Owned Subsidiary of SCANA, SCANA CORPORATION and
 11 the STATE OF SOUTH CAROLINA,
 12 Defendants.
 13 SOUTH CAROLINA OFFICE OF REGULATORY STAFF,
 14 Intervenor.

15 DEPOSITION OF: STEPHEN A. BYRNE
 16 DATE: October 23, 2018
 17 TIME: 9:03 a.m.

18 LOCATION: Haynsworth Sinkler Boyd, PA
 19 134 Meeting Street, 3rd Floor
 20 Charleston, SC

21 TAKEN BY: Counsel for the Defendants

22 REPORTED BY: PATRICIA L. THOMPSON,
 23 Registered Professional Reporter

2

1 APPEARANCES OF COUNSEL:
 2 (VIA CONFERENCE CALL)
 3 ATTORNEYS FOR THE PLAINTIFFS
 4 RICHARD LIGHTSEY, LeBRIAN CLECKLEY,
 5 PHILLIP COOPER, et al, on behalf of
 6 themselves and all others similarly
 7 situated:
 8 BELL LEGAL GROUP, LLC
 9 BY: J. EDWARD BELL
 10 219 Ridge Street
 11 Georgetown, SC 29440
 12 (843) 546-2408
 13 ebell@edbelllaw.com
 14 ATTORNEYS FOR THE DEFENDANT
 15 SOUTH CAROLINA ELECTRIC & GAS COMPANY,
 16 a Wholly Owned Subsidiary of SCANA,
 17 SCANA CORPORATION and the
 18 STATE OF SOUTH CAROLINA:
 19 KING & SPALDING
 20 BY: DAVID L. BALSER
 21 1180 Peachtree Street, N.E.
 22 Atlanta, GA 30309-3521
 23 (404) 572-2782
 24 dbalsers@kslaw.com
 25 and
 KING & SPALDING
 BY: JULIA C. BARRETT
 500 W. 2nd Street, Suite 1800
 Austin, TX 78701
 (512) 457-2053
 jbarrett@kslaw.com
 and
 SCANA
 BY: BRYONY B. HODGES
 220 Operation Way
 MC C222
 Cayce, SC 29033
 (803) 217-7315
 bryony.hodges@scana.com
 and
 LAW OFFICE OF LEAH B. MOODY, LLC
 BY: LEAH B. MOODY
 235 East Main Street, Suite 115
 Rock Hill, SC 29730
 (803) 327-4192

3

1 APPEARANCES (Continued):

2 ATTORNEYS FOR CENTRAL ELECTRIC:

3 ROBINSON GRAY STEPP & LAFFITTE, LLCA
 4 BY: KEVIN K. BELL
 5 1310 Gadsden Street
 6 Columbia, SC 29211
 7 (803) 929-1400
 8 kbell@robinsongray.com

9 ATTORNEYS FOR THE SOUTH CAROLINA
10 OFFICE OF REGULATORY STAFF:

11 WYCHE, PA
 12 BY: JAMES E. COX, JR.
 13 44 E. Camperdown Way
 14 Greenville, SC 29601
 15 (864) 242-8212
 16 jcox@wyche.com

17 ATTORNEYS FOR DOMINION ENERGY:

18 NEXSEN PRUET, LLC
 19 BY: ALEXANDRA AUSTIN
 20 205 King Street, Suite 400
 21 Charleston, SC 29402
 22 (843) 579-7827
 23 aaustin@nexsenpruet.com

24 ATTORNEYS FOR THE DEPONENT

25 STEPHEN BYRNE:
 WYATT & BLAKE, LLP
 BY: JAMES F. WYATT, III
 435 East Morehead Street
 Charlotte, NC 28202-2609
 (704) 331-0767
 jwyatt@wyattlaw.net
 and
 WILMER CUTLER PICKERING HALE
 & DORR, LLP
 BY: MATTHEW T. MARTENS
 1875 Pennsylvania Avenue, NW
 Washington, DC 20006
 (202) 663-6921
 matthew.martens@wilmerhale.com

4

1 APPEARANCES (Continued):

2 SOUTH CAROLINA PUBLIC SERVICE
 3 AUTHORITY PERTAINING TO
 4 DOCKET 370:

5 NELSON MULLINS RILEY & SCARBOROUGH
 6 BY: CARMEN HARPER THOMAS
 7 1320 Main Street, 17th Floor
 8 Columbia, SC 29201
 9 (803) 799-2000
 10 carmen.thomas@nelsonmullins.com

11 ALSO PRESENT:

12 Douglas Browne, Videotape Specialist

13 (INDEX AT REAR OF TRANSCRIPT)

5

1 THE VIDEOTAPE SPECIALIST: Good
2 morning. We are now on the record. Today's date
3 is October 23rd, 2018. The time is approximately
4 9:03 a.m.
5 This is the video deposition of Steve
6 Byrne taken by counsel for the defendant. The
7 location today is 134 Meeting Street in Charleston,
8 South Carolina.
9 My name is Douglas Browne, legal
10 videographer representing Courtroom Sciences. I'm
11 familiar with the provisions of Rule 38 pertaining
12 to videotape depositions.
13 This deposition is taken in the matter
14 of Richard Lightsey, et al, versus SCE&G, et al,
15 Case No. 2017-CP-25-00335.
16 Counsel present, please introduce
17 yourself for the record.
18 MR. BALSER: This is David Balsler, King
19 & Spalding, and I'm representing SCANA and SCE&G in
20 the Lightsey cases. And just as a point of
21 clarification, this deposition is being taken both
22 in the Lightsey case and in connection with PSC
23 Consolidated Docket Nos. 270 305 and 207.
24 MS. BARRETT: I'm Julia Barrett with
25 King & Spalding representing SCE&G and SCANA.

6

1 MS. HODGES: I'm Bryony Hodges,
2 in-house counsel for SCANA.
3 MS. MOODY: Leah Moody, SCANA, SCE&G.
4 MS. AUSTIN: Alexandra Austin, Nexsen
5 Pruet, representing Dominion Energy in the PSC
6 cases.
7 MR. BELL: Kevin Bell on behalf of
8 Central Electric Power.
9 MS. THOMAS: Carmen Thomas on behalf of
10 the South Carolina Public Service Authority. I'm
11 here with Public Service Commission pertaining to
12 Docket 370.
13 MR. COX: Jim Cox from the Wyche law
14 firm appearing on behalf of the South Carolina
15 Office of Regulatory Staff, also in the PSC
16 proceedings and the state court actions.
17 MR. WYATT: James Wyatt, personal
18 counsel for Mr. Byrne.
19 MR. MARTENS: Matthew Martens for
20 Mr. Byrne.
21 THE VIDEOTAPE SPECIALIST: On the
22 phone, please, would you announce yourself.
23 MR. SMITH: Emory Smith for the state
24 of South Carolina in the Lightsey/Cleckley cases
25 and for the state Wilson in the PSC cases. And we

7

1 do not need a copy of the transcript or the video.
2 THE VIDEOTAPE SPECIALIST: Anybody else
3 on the phone?
4 In accordance with Rule 38 the witness
5 has the right to be shown the videotape deposition
6 unless waived by the witness and the parties.
7 Would the court reporter please swear
8 in the witness and we may begin.
9 STEPHEN A. BYRNE
10 being first duly sworn, testified as follows:
11 EXAMINATION
12 BY MR. BALSER:
13 Q. Good morning, Mr. Byrne.
14 A. **Good morning.**
15 Q. I'm David Balsler, King & Spalding. I
16 represent SCANA and SCE&G. We've met before. How
17 are you this morning?
18 A. **I'm good.**
19 Q. Good. I want to start before we get
20 into the substance of the deposition just in the
21 course of the South Carolina rules I want to just
22 make sure that you understand the nature of the
23 proceedings today and what is happening.
24 Sitting next to you is the court
25 reporter who is transcribing everything that will

8

1 be said in the deposition. She will take down
2 literally every word that is spoken. So it will be
3 important for me to allow you to finish your
4 answers before I ask my next question. It will be
5 important for you to let me finish my question
6 before you endeavor to answer.
7 Do you understand that?
8 A. **I do.**
9 Q. At any time during the course of the
10 day if you need to take a break, please let me
11 know. We'll accommodate you.
12 You will have the opportunity to read
13 the transcript that is prepared memorializing the
14 deposition and make any corrections or alterations
15 to the testimony once you see the transcript.
16 Do you have any questions about how
17 we're proceeding here?
18 A. **No, I don't.**
19 Q. Mr. Byrne, I want to start with the
20 history of the project. I want to go back to the
21 beginning of the development of the nuclear plants
22 in Jenkinsville.
23 When did SCE&G first begin considering
24 construction of the two nuclear power units?
25 A. **SCE&G first began consideration of**

9

1 construction of the nuclear units in 2005.
2 Q. Why was the company thinking about
3 nuclear at that time?
4 A. Well, the company's decisions to build
5 new plants of any kind are based on an integrated
6 resource plan. An integrated resource plan is
7 something that is generated by a group internal to
8 the company that is submitted to the Public Service
9 Commission annually.
10 That integrated resource plan is a
11 15-year forward look at things like low growth, and
12 it forecasts the need for when a new power plant
13 would be constructed.
14 So back in that 2004 to 2005 time frame
15 that integrated resource plan was projecting the
16 need for new base load generation in the 2015, '16
17 time frame.
18 Q. Did the company consider other sources
19 of energy besides nuclear?
20 A. Yes; certainly. If I can remember, in
21 2005 sitting through a presentation from Mitsubishi
22 Supercritical Coal Unit. So the fossil hydro group
23 had set that up, so that the company was
24 considering coal.
25 Based on everything that was known at

10

1 that time, environmental regulations and
2 legislation that was pending, coal was not viewed
3 as a positive revival alternative, at least not at
4 that point in time.
5 The company had considered other
6 sources like combined cycle natural gas and had
7 evaluated those; but if you remember, back in that
8 2005 time frame, particularly close to Katrina, the
9 price of natural gas had spiked to an historical
10 high level. So the fuel cost of natural gas was
11 very high.
12 In addition, the last few plants that
13 the company had constructed were combined cycle
14 natural gas. So from a balancing the portfolio
15 perspective, you know, natural gas was not
16 necessarily the next thing the company would have
17 wanted to build.
18 The company also considered renewable
19 options: Wind, solar, biomass. Those things of
20 things. In general those kinds of sources, at
21 least at that point in time, were considered to be
22 things that would be fairly low in capacity factor
23 and not suitable for base load mains.
24 Q. Why did SCE&G ultimately select
25 nuclear?

11

1 A. Well, SCE&G went through a fairly
2 detailed selection process weighing up the
3 different sources.
4 As I pointed out a minute ago, some of
5 the other sources had some negatives. In
6 evaluating for the most part the environmental
7 regulation or legislation that the company has
8 deemed as pending and probably likely, the best
9 hedge against those environmental regulations or
10 legislation was going to be nuclear.
11 From a cost perspective nuclear stacked
12 up favorably with the other options as well, and
13 then the renewable options, while the company was
14 looking at the source -- while the company was
15 looking at options they were not viewed as having
16 high enough capacity factors to be considered base
17 load generation.
18 Q. I want to show, Mr. Byrne, what we are
19 going to mark as Exhibit 9. And for the folks in
20 the room, we're just picking up with the next
21 number that was left where we left off with
22 Mr. Bell's examination of Mr. Byrne. I think he
23 left off at No. 8. So I'm just going to
24 continuously number these.
25 (DFT. EXH. 9, Combined Application For

12

1 Certificate of Environmental Compatibility, Public
2 Convenience and Necessity and For A Base Load
3 Review Order, marked for identification.)
4 BY MR. BALSER:
5 Q. Mr. Byrne, you've been handed Exhibit
6 9. Do you recognize this document?
7 A. I do.
8 Q. What is it?
9 A. It's the application that the company
10 made for a Certificate of Environmental Capability
11 and Public Convenience and Necessity to the Public
12 Service Commission.
13 Q. And turn with me, if you would, to Page
14 2 of Exhibit 9, and I want to focus your attention
15 on Paragraph 4, the bottom of Page 2. There is a
16 reference to the Westinghouse AP1000 reactor.
17 Why did the company select the AP1000
18 design?
19 A. The company selected the AP1000 design
20 after considering a couple of options. The company
21 put out a Request For Proposal or RFP to three
22 companies, Westinghouse, Areva and General
23 Electric. And so the offerings from those
24 companies and the responses to that RFP were
25 evaluated, and the evaluation yielded the AP1000 as

13

1 the best nuclear technology for the company to
2 pursue.

3 Some of the reasons in there was that
4 the AP1000 was a Westinghouse technology, and the
5 company already operated a Westinghouse facility at
6 the V.C. Summer site and had been doing so since
7 1982.

8 There were what were called active and
9 passive designs. Active designs mean that they
10 would need power and pumps and valves and things of
11 that like to mitigate the consequences of an
12 accident. The passive plants did not need AC power
13 to mitigate the consequences of an accident, so the
14 passive plants were viewed more favorably by the
15 company.

16 And then in general nuclear -- the
17 large nuclear reactors --

18 MR. BALSER: Who just joined?
19 MR. THOMPSON: Good morning. Roger
20 Thompson from ORF.
21 BY MR. BALSER:
22 Q. Continue, Mr. Byrne.
23 A. The large light water reactors are
24 generally broken up into one of two different
25 kinds. One is a boiling water reactor and the

14

1 other is a pressurized water reactor, but the
2 biggest difference is that the boiling water
3 reactors, while slightly more efficient, do emit
4 small amounts of radioactivity to the environment
5 on an almost continuous basis.

6 So from -- when all of those things
7 were added up the company's desires were pushed
8 towards the passive design, pressurized water
9 reactor, experience with Westinghouse, and from the
10 cost perspective the Westinghouse reactor stacked
11 up more favorably than the Areva unit and as
12 favorably as the GE.

13 MR. BALSER: Who just joined?
14 MR. BELL: This is Ed Bell.
15 MR. BALSER: Good morning, Ed. Are you
16 going to be able to make this today? This is
17 David. Are you going to be able to make it to the
18 deposition or are you just going to participate my
19 phone?
20 MR. BELL: We're right down the street
21 at the law school. So if y'all need me I can
22 certainly can come down. But we thought it might
23 make the room less crowded. We have four people
24 here.
25 MR. BALSER: Okay. Well, we've begun,

15

1 so welcome.

2 MR. BELL: I'm sorry. I really thought
3 it was 9:30. I apologize.
4 MR. BALSER: Not a problem. Glad to
5 have you.
6 MR. BELL: And we may have to log on
7 another phone line in a minute. So if you hear us
8 log on, don't worry about it.
9 MR. BALSER: Thank you.
10 BY MR. BALSER:
11 Q. Mr. Byrne, were there any licensing
12 issues that factored into the decision to select
13 Westinghouse over other options?
14 A. There were some licensing issues. And,
15 of course, the Nuclear Regulatory Commission had
16 proposed a new regulatory scheme for constructing
17 nuclear power plants going forward. Heretofore all
18 the plants had been constructed under what was
19 called a Title 10 to the Code of Federal
20 Regulations Part 50, and Part 50 -- it was a
21 two-step licensing process where you got a
22 construction permit. When the construction was
23 complete you then applied for an operating license.
24 So there were two opportunities for
25 hearings and intervention, and it was viewed as a

16

1 simpler process if you got the combined
2 construction and operating license. We had both at
3 the same time. That determination would be made up
4 front before construction started, and that was
5 under Title 10 of the Code of Federal Regulations
6 Part 52. And under Part 52 a company that would
7 design reactors would submit for what is called a
8 design certification, and Westinghouse was the
9 farthest along of those companies in that design
10 certification process.

11 So the new nuclear development team
12 that was evaluating these options and evaluating
13 the opportunities viewed that favorably also.
14 Q. Turning your attention back to Exhibit
15 9, if you could turn to Paragraph 6 there is a
16 description of the choice of suppliers. And, of
17 course, we know that SCE&G selected Westinghouse as
18 the contractor to build the units.
19 Why did SCE&G select Westinghouse?
20 A. Well, for the reasons that I mentioned
21 earlier, the Westinghouse technology was a
22 pressurized water reactor. So lower emissions, if
23 you will. It was a passive design, meaning it
24 didn't require AC power to mitigate the
25 consequences of an accident.

17

1 **The company was already familiar with**
2 **the Westinghouse technology and operated a**
3 **Westinghouse plant at the V.C. Summer location. It**
4 **was viewed that the licensing would be further**
5 **along on the AP1000 than it would be with a GE**
6 **offering, what is called the ESBWR, or the Areva**
7 **offering, which was called an EPR. And then from**
8 **the RFP from a cost perspective the Areva reactor**
9 **was more expensive than GE and the Westinghouse**
10 **offerings were pretty close in price but lower than**
11 **the Areva offer.**
12 Q. I want to pick up on that, on your
13 reference to the RFP.
14 SCE&G did consider other contractors
15 besides Westinghouse?
16 **A. That's correct.**
17 Q. And was there a formal process by which
18 proposals were solicited?
19 **A. Yes. The new nuclear development team**
20 **at the time put out a Request For Proposal to**
21 **Areva, General Electric, and Westinghouse.**
22 **Received the inputs back from those three entities**
23 **and then did an evaluation, and it was a**
24 **points-based evaluation that yielded the**
25 **Westinghouse design as the most favorable.**

18

1 Q. I want to hand you what we're going to
2 mark as Exhibit 10.
3 (DFT. EXH. 10, Engineering, Procurement
4 and Construction Agreement, marked for
5 identification.)
6 Q. (Continued) Do you recognize Exhibit
7 10, Mr. Byrne?
8 **A. I do.**
9 Q. What is it?
10 **A. It is the engineering, procurement and**
11 **construction or EPC contract that was signed**
12 **between the owners, SCE&G and Santee Cooper, and**
13 **the Consortium, which consisted at the time of**
14 **Westinghouse and Stone & Webster.**
15 Q. Before getting into the specifics of
16 this contract, do you have an understanding at a
17 more general level what an EPC agreement is?
18 **A. Yeah. An EPC is, as the title would**
19 **imply, that the counter-party to the EPC is**
20 **engineering what is to be delivered and procuring**
21 **what is to be delivered and is constructing what is**
22 **to be delivered.**
23 **So in an ideal world you would sign an**
24 **EPC contract for whatever it is that you're buying,**
25 **and then after an agreed upon period of time the**

19

1 **contractor would hand you the keys and say: Here**
2 **it is. So that's the premise of an EPC contract.**
3 Q. Is that a common form of contracting
4 agreement in the construction industry?
5 **A. Certainly it's common, yes.**
6 Q. In evaluating the project did SCE&G
7 conclude that there were benefits to an EPC
8 contract structure?
9 **A. Yes. The EPC contract structure from**
10 **an E&G perspective would shift some of the risks of**
11 **construction to an entity that is much more adept**
12 **at evaluating those risks. So, you know,**
13 **engineering and construction firms are a lot better**
14 **in evaluating engineering and construction than**
15 **utilities are.**
16 **So SCE&G was not a utility that engaged**
17 **in a lot of its own construction, and in fact the**
18 **previous contracts that the company had to build**
19 **the last number of increments of generation were**
20 **done with an EPC contract under that EPC form.**
21 **Yes.**
22 Q. Are there any drawbacks to the EPC
23 contract structure?
24 **A. Every construction scheme or**
25 **contracting scheme will have advantages and**

20

1 **disadvantages.**
2 **I think the disadvantage to the EPC**
3 **structure is that you're turning over control, if**
4 **you will, to the EPC counter-party. And from a**
5 **cost perspective, if things were to change in your**
6 **favor, meaning that things would drop in cost,**
7 **there isn't that opportunity to take advantage**
8 **necessarily of that cost. So if the commodities**
9 **were to change in price significantly -- if, you**
10 **know, a company was acting as its own general**
11 **contractor, it might decide when to buy**
12 **commodities, whereas if you're locked in on the**
13 **price with a general contractor -- with an EPC**
14 **contractor, that's what that EPC contractor is**
15 **doing, is that they're trying to gauge what the**
16 **market is for those kinds of things. And, you**
17 **know, if they get it right then there is more**
18 **profit for them; if they get it wrong there is less**
19 **profit.**
20 **But again, they're much more adept at**
21 **evaluating those risks than a utility would be.**
22 Q. And what about oversight? What are the
23 differences or are there potential drawbacks in the
24 EPC contract structure to the ability of the owners
25 to oversee what the EPC contractor is doing?

21

1 **A. Yeah. Well, as I said earlier, the**
2 **premise behind an EPC contract is that if you sign**
3 **the contract the contractor delivers the product**
4 **and hands the keys over to you later. That in an**
5 **ideal world is the way it works.**
6 **Your ability to direct the contractor's**
7 **actions would be far lower on an EPC basis than if**
8 **you were acting as your own general contractor or**
9 **had a different contracting structure.**
10 **The EPC format generally means that the**
11 **contractor decides on the means and methods that**
12 **they utilize in order to deliver the product. So**
13 **your ability as owner to impact that is far less.**
14 **Q. Are there any examples that you can**
15 **think of during the development of the units in**
16 **which that particular drawback; that is, the**
17 **structural relationship that inhibited direct**
18 **oversight became an issue?**
19 **A. There certainly were times when as**
20 **owners -- I should point out that in nuclear**
21 **construction things are a little bit different than**
22 **in general construction.**
23 **In nuclear construction once the**
24 **licensee or the owner gets the license, the**
25 **combined operating license, they then become**

22

1 **responsible to the Nuclear Regulatory Commission**
2 **for aspects of the construction in the plant and**
3 **health and safety of the public. 4.**
4 **So in the nuclear world the owners have**
5 **to be more owners than they would be in the**
6 **non-nuclear world. Even the EPC contractors, I**
7 **think, have a fairly good understanding of that and**
8 **the Nuclear Regulatory Commission would expect**
9 **that. So there are some differences. But in**
10 **directing the activities of the contract or once**
11 **they make a decision on something, your ability to**
12 **tell them "no. I want you to change that" becomes**
13 **much more limited and you're likely to get a change**
14 **order for that.**
15 **So, for example, when the contractor is**
16 **selected -- the Lake Charles facility. That was a**
17 **facility that originally that The Shaw Group was**
18 **the owner of Stone & Webster or the parent of Stone**
19 **& Webster. So Shaw selected the facility in Lake**
20 **Charles, Louisiana, which both owners -- I should**
21 **say both owners of the Summer project and owners of**
22 **both projects, meaning the Summer project and the**
23 **sister project in Georgia that the Southern company**
24 **was responsible for construction for -- it had, I**
25 **think, four co-owners -- viewed that as not**

23

1 **necessarily the best way to go but couldn't direct**
2 **that change without then assuming the**
3 **responsibility for a change order to fabricate a**
4 **facility like that or build a facility like that**
5 **somewhere else.**
6 **Q. Why did SCE&G ultimately decide to go**
7 **with the EPC structure for this project?**
8 **A. Again, it was -- nuclear has not been**
9 **something that has been constructed in this country**
10 **in a long time. Probably three decades or so. So**
11 **that nuclear utilities were not accustomed now to**
12 **nuclear construction.**
13 **So it was thought that the designer of**
14 **nuclear plants -- and certainly Westinghouse is a**
15 **company that has designed hundreds of nuclear**
16 **plants and probably responsible for the majority of**
17 **design around the world -- combined with a major**
18 **construction company and an architect and**
19 **engineering firm -- and Stone & Webster had**
20 **experience in nuclear -- would be much better at**
21 **assessing the risks and much, much better at, you**
22 **know, coming up with a schedule and coordinating**
23 **activities to build a nuclear plant.**
24 **Q. How does the EPC allocate**
25 **responsibilities between SCE&G and Santee Cooper as**

24

1 the owners and Westinghouse and Stone & Webster as
2 the contractors?
3 **A. In general the contractor is**
4 **responsible for all of the engineering, the**
5 **procurement and the construction. The owners were**
6 **responsible for supplying the site. The owners**
7 **were responsible for getting the license and**
8 **interfacing with the regulator.**
9 **Q. Did the Public Service Commission of**
10 **South Carolina review the proposed use of this**
11 **contract structure?**
12 **A. Yes. Certainly in the 2008 proceedings**
13 **before the Public Service Commission they reviewed**
14 **the EPC contract. Yes.**
15 **Q. Can you just briefly describe the EPC**
16 **pricing provisions.**
17 **A. The EPC pricing has in it a couple of**
18 **different -- what we would call buckets. In**
19 **general there are fixed and there are variable.**
20 **In the fixed category this contract**
21 **actually had four different fixed categories. So**
22 **one was fixed with no escalation. So whatever the**
23 **component was quoted at, that was going to be the**
24 **price.**
25 **Then there was a fixed with one**

25

1 specific percentage of escalation called Fixed With
2 Escalation A. There was a fixed with a different
3 percentage of escalation or fixed with Escalation
4 Percentage B. So that the price of the component
5 was fixed and the escalation factor was known.
6 Then there was -- for anything not
7 covered by those three previous categories, for
8 other components there was a fixed price but tied
9 to an index escalation factor called Handy-Whitman.
10 So those were the categories under
11 fixed, and the fixed with escalation came to be
12 known as firm. So those four categories were
13 either fixed or firm.
14 There was a bucket called Target, and
15 the target was things that the contractors over a
16 contract that was going to last a very long period
17 of time were loathe to fix up front. So labor, for
18 example, was one of the things that was in the
19 target bucket. There was also a time and materials
20 bucket, which was probably the smallest of those
21 buckets, but the support from -- largely from
22 Westinghouse for things like license and support or
23 engineering support that the utility would require
24 to fulfill those obligations.
25 And then outside of the EPC contract

26

1 there were owners' costs and then there were
2 transmission costs.
3 Q. Roughly what percentage of the total
4 EPC contract price fell into the fixed or firm
5 category?
6 A. When the contract was signed it was in
7 excess of 50%. I think the real number was around
8 57% that was in the fixed or firm category.
9 Q. And did that change over time?
10 A. Yes. The contract had in it a
11 provision to increase that over time. The feeling
12 was that the -- particularly things like supply
13 chain, labor rate. Those kind of things would
14 become more known over time and that the contractor
15 would apply a lower risk factor to those. And so I
16 think it was in 2010 there was a change order
17 issued that increased the fixed and firm percentage
18 to about two-thirds.
19 Q. And then, of course, in the 2015
20 amendment that changed again.
21 A. In the 2015 amendment the contract was
22 taken to a fully fixed price save for about \$34
23 million worth of things that were in the T number.
24 Yes.
25 Q. Why did the company at the outset

27

1 choose this pricing structure; that is, the fixed
2 or firm target price, time and materials buckets?
3 A. These are buckets that, 1, the company
4 is accustomed to from other contracts and are
5 generally accepted in the construction industry.
6 The company did ask the Consortium for
7 a fully fixed price contract back in the 2007, I
8 think it was, time frame, and that was -- the
9 contractor was going to apply a fairly large risk
10 premium to that. So that risk premium was viewed
11 as too high.
12 So a structure where the costs were
13 shared between -- between the contractor, and then
14 there was a variable piece that the owners would be
15 responsible for was viewed as more fair. And the
16 EPC -- I'm sorry. Yeah. The EPC negotiation team
17 was aware of the fact that there had been a fully
18 fixed price option exercised in Europe, in Finland,
19 called Olkiluoto and that that project had been
20 mired in lawsuits. So it was fully fixed by the
21 contractor. Things did not go well under the fully
22 fixed arrangement and that there was not
23 opportunity for the contractor to recover some --
24 what they thought were legitimate costs, and the
25 project had stopped. So it was stopped and

28

1 started, which extends the overall time frame, and
2 the two parties were in litigation.
3 Q. I want to change our focus a little bit
4 here and talk about issues that arose during the
5 construction of the units and mitigation efforts
6 that were taken to try to ameliorate some of the
7 issues that the parties faced in trying to build
8 these units.
9 I want to start by looking back at
10 Exhibit 9, which is the Combined Application, and
11 ask you to turn your attention to Exhibit J of
12 Exhibit 9. And Exhibit J is entitled "Risk Factors
13 Related to Construction and Operation of Facility."
14 These were risk factors that the
15 company set forth in its combined application; is
16 that correct?
17 A. Let me get to J. Okay. Okay. I'm
18 there.
19 Yeah. These are risk factors that the
20 company set out in the application before the
21 Public Service Commission.
22 Q. At a high level can you describe what
23 some of the risks were that SCE&G had identified at
24 the beginning that the project might face.
25 A. Yeah. I would say that at a high level

29

1 the company was trying to identify the fact that
2 nuclear construction hadn't taken place in this
3 country in a very long time, that there would be
4 some first of a kind issues to be dealt with in
5 construction and in procurement and indeed of
6 design, that the licensing process was new, new not
7 only to the utilities and the constructors but to
8 the Nuclear Regulatory Commission itself; that
9 there were a lot of permits that were going to be
10 required to build these units, that the design
11 wasn't complete and that the procurement process,
12 because of the long lapse in nuclear construction
13 had been dormant, and there may be some issues with
14 regard to restarting that nuclear construction
15 infrastructure in this country.

16 It also identified that while the
17 construction methods that were going to be
18 utilized -- advanced construction, modular
19 construction -- while they had some potential
20 benefits, they also had some potential pitfalls and
21 they hadn't been utilized to construct a large
22 commercial reactor. Certainly not in this country.

23 So there were construction risks; there
24 were procurement risks; there were licensing risks.
25 A lot of those stemmed from first of a kind

30

1 activities. Also some issues of labor. When
2 you're building a project that's going to take
3 roughly a decade, it's difficult to judge what
4 labor is going to be, the availability of labor,
5 cost of labor. Those kind of things.

6 Q. Was there also the risk of a nuclear
7 accident somewhere in the world that could impact a
8 license delay?

9 A. Yes. The company did look at that as a
10 risk experience from the Three Mile Island incident
11 in 1979 on the construction of V.C. Summer Unit No.
12 1. That certainly had an impact and a delay.

13 So the company was mindful of the fact
14 that nuclear plants are kind of tied together and
15 that a nuclear accident anywhere in the world would
16 impact our construction project.

17 Q. And that actually happened, didn't it?

18 A. It certainly did in 2011 with
19 Fukushima.

20 Q. And just briefly if you could describe
21 what happened at Fukushima and the impact that it
22 had on the project at Jenkinsville.

23 A. Fukushima was a plant that was
24 operating in Japan, a nuclear plant operating in
25 Japan. Multiple units at that site. There was a

31

1 very large earthquake in Japan. In general the
2 plant rode through the earthquake very well. The
3 earthquake triggered a tsunami, a large wall of
4 water. That large wall of water inundated the
5 plant and cut off its backup AC power. Flooded its
6 diesel generators. So they had no offsite or
7 onsite AC power, and the plant could not withstand
8 that for too long. And they had some fairly
9 catastrophic explosions. They really were hydrogen
10 explosions.

11 But that design -- again, it was a
12 boiling water reactor design, the kind of design
13 that SCE&G opted not to build. So there was a
14 release of radioactivity to the environment.

15 So the impacts for a new nuclear
16 construction industry was that the NRC, Nuclear
17 Regulatory Commission, in the US sent a team to
18 Japan to evaluate the accident. There were some
19 conditions put on the license when it was issued to
20 SCE&G relative to Fukushima-related activities.
21 There were some evaluations and some equipment
22 upgrades that were required.

23 The real impact, I think, though, was
24 in the delay in the license; and while not overly
25 significant, the chairperson of the NRC at the time

32

1 was uncomfortable with granting licenses to the
2 U.S. plants in light of the Fukushima issues even
3 though the staff of the NRC recommended continuing
4 the license process with a passive design. Again,
5 SCE&G chose a passive design over an active design.
6 So the licensing process continued.

7 Q. So how long was the delay in getting
8 the combined operating license from the NRC?

9 A. The delay over what was anticipated
10 when the contract was signed I think was about 11
11 months total.

12 Q. Was that issue; that is, the delay in
13 getting the license -- the combined operating
14 license from the NRC disclosed to the Public
15 Service Commission?

16 A. Yes. Certainly it was disclosed in
17 testimony in front of the Public Service
18 Commission.

19 Q. One of the risk factors that is
20 mentioned in Exhibit J to Exhibit 9 relates to
21 procurement.

22 Did SCE&G encounter any problems with
23 procurement?

24 A. Yes. As I stated earlier, restarting
25 the supply chain in this country was going to be

33

1 difficult. Indeed there were components from all
2 over the world that were utilized in this design.

3 So there were fabricators not only
4 domestically but around the world that were
5 supplying parts and pieces to the AP1000s.

6 There were issues with -- largely with
7 quality, quality control programs at facilities
8 around the world. In general the international
9 suppliers responded to those and made fairly rapid
10 corrections.

11 There were some facilities domestically
12 here, though, unfortunately that did not respond as
13 quickly, and the most problematic of those
14 facilities was the SMS facility I talked about a
15 little while ago. So the Lake Charles, Louisiana
16 facility that Shaw constructed just to build
17 sub-modules for big structural modules for these
18 units was problematic, and that facility was called
19 -- at the time it was called SMS, Shaw Modular
20 Solutions.

21 After CB&I acquired The Shaw Group they
22 changed the name to CB&I Lake Charles, often
23 shortened to CB&I LC.

24 Q. What were the primary issues that the
25 facility at Lake Charles experienced?

34

1 A. I would say that they had a myriad of
2 issues at the Lake Charles facility. Some of them
3 dealt with the work force; some of them dealt with
4 leadership; some of them dealt with quality and
5 completeness.

6 Certainly that facility had to deal
7 with design changes coming from the designer, which
8 was Westinghouse. And the Nuclear Regulatory
9 Commission did some inspections at that facility
10 and found some issues and were fairly critical of
11 the facility.

12 Q. Did SCE&G take any actions to try to
13 resolve the issues that occurred at the Lake
14 Charles facility?

15 A. Yes. As I said earlier, the EPC
16 construction -- that the construct of that type of
17 contract will limit the owners' ability to force
18 changes, but certainly SCE&G or the owners sent to
19 the Consortium what we call project letters that
20 would outline changes that would need to be made.

21 The owners asked for a recovery plan
22 for that facility. The owners also placed a
23 resident inspector at the facility to evaluate
24 quality and give realtime feedback on what was
25 going on there. The owners asked for design

35

1 engineers from Westinghouse to be placed in the
2 facility rather than design issues being handed
3 back and forth between the facility and Lake
4 Charles and where Westinghouse was in Pennsylvania.
5 It was thought that more realtime resolution of
6 engineering issues would be of benefit. And then
7 we did press them to look at other suppliers other
8 than this Lake Charles supplier.

9 So I think within the confines of what
10 SCE&G was allowed to do we did do that. The
11 leadership teams from both SCE&G and Santee Cooper
12 made multiple visits to the Lake Charles facility
13 along with Southern Company in some cases. So it
14 was a show of force to let the Shaw team and the
15 CB&I team know that the owners of both projects
16 were not happy with what was going on at Lake
17 Charles.

18 Q. At some point did SCE&G request that
19 some of the module fabrication occur at V.C. Summer
20 itself to try to alleviate some of the problems at
21 Lake Charles?

22 A. Actually that was a suggestion that
23 came from the constructor, but SCE&G had to allow
24 that. That was going to be a change to the
25 construction plan that was outlined. And so the

36

1 modules were supposed to be fabricated -- I say
2 "modules." They're submodules that are eventually
3 fabricated into big modules. But these submodules
4 are fairly large components. They were intended to
5 be constructed completely at this Lake Charles
6 facility and then trucked to the site.

7 So what the contractor asked for was
8 permission to move some of these modules that were
9 incomplete to the site so the construction could be
10 finished at the site and alleviate some of the
11 congestion at the Lake Charles facility. So as
12 they became backed up at that Lake Charles
13 facility -- you got things in the shop and it's
14 precluding new modules from starting the line, if
15 you will, if you've got things that aren't coming
16 out the line at the other end.

17 So to alleviate some of that congestion
18 we did allow them to move components to the V.C.
19 Summer site where the local work force, which was,
20 I would say, more accustomed to nuclear
21 construction and more accustomed to oversight and
22 did a much better job at documentation and training
23 were finishing up the modules on site.

24 (DFT. EXH. 11, copy of letter, 5/6/14,
25 to P. Asherman and D. Roderick from L. Carter and

K. Marsh, marked for identification.)

BY MR. BALSER:

Q. I'm going to hand you what we're going to mark as Exhibit 11, which is a May 6, 2014 letter from SCANA and Santee Cooper to Philip Asherman and Danny Roderick.

Do you recognize Exhibit 11?

A. I do.

Q. And you had mentioned in your testimony a minute ago that the owners had sent what you call project letters. Is this an example of a project letter?

A. This would be a letter coming from the project. This one was a little different in that it was not signed out by somebody on the project to the consortium's address in Pittsburgh; rather, this one was sent from the two CEOs of the companies and addressed to the CEOs of the two consortium partners. So this one was a little different and tended to get a higher level audience.

Q. Did the owners often send letters like this to the Consortium?

A. I would say that letters that are signed out by the two CEOs, no. Letters to the

Consortium on a variety of topics, the answer to that is yes. Probably a thousand over the course of the project -- consortium letters went to the Consortium from the owners.

Q. Are you familiar with Exhibit 11?

A. I am.

Q. Were you involved in the drafting of Exhibit 11?

A. I did have some input into some of this, as did Santee Coopers and as did the two CEOs.

I would tell you that this letter really -- while addressed to the two CEOs, the intended audience was Toshiba.

Q. So explain what was going on at this time and what the purpose of trying to get Toshiba's attention was.

A. So two things really.

The owners were not satisfied with the pace of improvements at the Lake Charles facility and other things that were going on around -- specifically around modules, but there were a couple of other topics that are mentioned in here.

Toshiba was a company that was the parent of one of the Consortium partners, a very

large corporation with significant capabilities and who had made visits to the Columbia area, met with SCE&G executives and talked about their capabilities in fabrication, manufacture and construction and had said that they were going to ensure that their assistance was given to Westinghouse and The Shaw Group at the time to facilitate the construction at Summer. And to date, however, the owners had seen very little evidence of Toshiba presence, and between SCE&G and Santee Cooper there was a feeling that Toshiba's involvement, greater involvement of Toshiba in this project, would be beneficial.

So this letter, while sent to the people that were contracted to build the plant, the real audience was Toshiba. And this was followed up later that month by a visit to Tokyo by the two companies.

Q. Were the issues with Lake Charles and the delays due to some module delivery disclosed to the Public Service Commission and the Office of Regulatory Staff?

A. Yes; certainly. The Office of Regulatory Staff, as I think you're aware, probably visited the site frequently and had access to the

documents that the NND team had access to.

The testimony before the Public Service Commission included a lot of issues with modules probably starting in about 2010 and the quarterly reports that the company put out in response to the VRA, called VRA quarterly reports, did outline module issues for quite a period of time.

Q. Were the module issues ever resolved?

A. Yes.

Now, when I say "modules" -- you need to be careful because there are different types of modules. The modules in general that we're talking about here are called structural modules, and there really are in each unit about six of those structural modules. So five of the six go inside the containment vessel and the last one goes just outside the containment vessel, but all on what is called the nuclear island of the plant. And these -- when I say "modules," these are -- they range from things about the size of this room to things that would be five- or six-story buildings. I think the largest is about 70 X 50 X 80.

So these are very, very large components. Much, much too large to ship by rail or truck. So they had to come in subcomponents.

41

1 So the Lake Charles facility was largely making
2 subcomponents for these big structural modules.

3 There are mechanical modules.

4 Mechanical modules are generally going to be
5 smaller. They might be a set of rails or angle
6 iron. They can be lifted up as a component, and in
7 that component would be pumps and valves and piping
8 and those kinds of things. And the premise is they
9 would be built in a shop environment and be able to
10 be dropped into the excavation and bolted or welded
11 up.

12 So there are different types of
13 modules. So largely here we're talking about the
14 structural modules.

15 Q. And how were the structural module
16 issues eventually resolved? if they were.

17 A. Yeah. So in a couple of ways. We
18 talked a little bit ago about the structural module
19 being sent to the site. So structural modules were
20 finished at the site largely for the first nuclear
21 unit, Unit 2. So they would be started at the Lake
22 Charles facility but finished at the facility in
23 Jenkinsville.

24 The Lake Charles facility itself did
25 make some improvements and eventually was turning

42

1 out quality modules. Some of the mechanical
2 modules also were being fabricated at the site as
3 opposed to other facilities where they were
4 supposed to be fabricated. But the biggest benefit
5 to the modules came when CB&I allowed the supply
6 chain to be diversified. So they took the modules
7 that were supposed to be built in that Lake Charles
8 facility and moved them to other facilities,
9 largely for the second unit, for Unit 3.

10 So yes; the module issues -- the large
11 structural module issues, I think, were largely
12 behind this by about 2016. And those other
13 facilities, while they had some fits and starts
14 with some of the vendors, in large part those other
15 vendors turned out much higher quality parts that
16 met tolerances on a much lower time frame.

17 Q. I want to direct your attention back to
18 Exhibit 11 and ask you to turn to Page 2. This is
19 the letter to Mr. Asherman and Mr. Roderick, and I
20 want to direct your attention to the third full
21 paragraph on Page 2 which references the evident
22 deterioration of the relationship between senior
23 management at Westinghouse and Shaw and CB&I.

24 Do you see that reference?

25 A. I do.

43

1 Q. What does that refer to?

2 A. So the Consortium that's building these
3 plants consisted of Westinghouse -- Westinghouse,
4 not being a constructor, partnered with a
5 constructor. The constructor up front was The Shaw
6 Group, but by this time frame in 2014 The Shaw
7 Group had been acquired by Chicago Bridge & Iron or
8 CB&I. So the Consortium partners were Westinghouse
9 and CB&I.

10 There were a lot of negotiations around
11 commercial issues on this project. The Consortium
12 had heretofore been willing to meet with the owners
13 frequently to discuss commercial issues. Negotiate
14 commercial issues. At this point in time, however,
15 it became apparent that there were some frictions
16 between the Consortium partners, many of which I
17 think that the owners were not necessarily aware of
18 but became aware that there were some tensions
19 between the owners at the high level. I think at
20 the project site CB&I and Westinghouse got along
21 okay. So the problems at the senior level were not
22 transmitting to the site, but it was precluding us
23 from getting to resolution of big picture issues
24 and negotiating commercial issues and wanted to
25 make sure that Toshiba was aware of that.

44

1 Q. Did the problems within the Consortium;
2 that is, the issues highlighted here in the third
3 paragraph on Page 2 of Exhibit 11, between
4 Westinghouse and Shaw ever get resolved?

5 A. Yes.

6 Q. How so?

7 A. They got resolved by what Westinghouse
8 called a divorce, meaning that they were able to
9 dissolve their consortium agreement or their
10 partnership, and that was in a negotiated agreement
11 that the owners had to allow CB&I to leave the
12 project.

13 In order to do that CB&I held the
14 parental agreement guarantee for their subsidiary,
15 Stone & Webster. So Westinghouse purchased Stone &
16 Webster from CB&I. The owners -- all of the owners
17 on both projects released the parental guarantee
18 from CB&I. So they exited the project, and at that
19 point those issues or those problems went away.

20 Q. Another risk factor that SCE&G had
21 disclosed in Exhibit J to the combined -- the joint
22 application related to construction.

23 Did SCE&G encounter issues with
24 construction at the site?

25 A. Yeah. I think SCE&G encountered

45

1 **difficulties with the Consortium and their**
2 **construction. The Consortium certainly ran into**
3 **delays, and after the delays started to get sorted**
4 **out the Consortium then had some issues with what**
5 **we call productivity. So the productivity factors**
6 **were not what they thought that they should be and**
7 **certainly not what the owners thought that they**
8 **should be and not what was used as the basis for**
9 **their estimates.**
10 Q. And so I've heard the term
11 "productivity factor." I've heard the term
12 "performance factor."
13 In your mind are productivity factors
14 and performance factors the same thing?
15 A. Yes.
16 Q. What is a performance factor?
17 A. Well, a performance factor can be
18 anything that you want it to be. It's just a
19 metric to look at earned value. But the
20 performance factor that was being utilized in the
21 project that the Consortium was not satisfied with
22 was when the Consortium evaluated how many hours it
23 would take to perform a task. If you take exactly
24 that same number of hours your performance factor
25 would be one. If you take fewer hours to do it

46

1 **your performance factor would be below one. If you**
2 **take more hours than were forecast to do that then**
3 **your performance factor would be above one.**
4 **So in this case the performance factor**
5 **was above one, meaning it's was taking more hours**
6 **to perform a task that they had evaluated.**
7 Q. In a project like this what is the
8 purpose for which performance factors are used?
9 A. It's just a measure of how efficient
10 the contractor is being at getting the work done.
11 So it would -- it would lend itself to tell you --
12 one of the things that would have helped to
13 validate how long the project is going to take or
14 how much the project is going to cost.
15 Q. If a contractor, as here, were not
16 achieving the hoped for performance factors; that
17 is, if the construction was not as efficient as
18 they had hoped it would be, does that necessarily
19 mean that the project is not going to be completed
20 on time?
21 A. No. Efficiency can be overcome with
22 numbers.
23 I think in the previous deposition or
24 the first part of this deposition we had discussed
25 an example of a car and gas mileage. If a car is

47

1 **going to make a distance of a hundred miles and it**
2 **gets 20 miles to the gallon, then you know that**
3 **it's going to take five gallons of fuel to get**
4 **there. If something causes that car to be less**
5 **efficient and it's now getting only ten miles a**
6 **gallon, you can still get there. You can still get**
7 **there on time, but it's going to cost you more fuel**
8 **and it's going to cost you more money for that more**
9 **fuel.**
10 **So by applying more resources, more**
11 **people to the projects and employing other**
12 **mitigation methods the contract could still get to**
13 **the dates even though they're being less efficient.**
14 Q. Did SCE&G take any steps to improve
15 productivity or attempt to mitigate the impact of
16 the schedule that was resulting from the lower than
17 targeted performance factors?
18 A. Well, keep in mind that the only person
19 that could really impact the performance factors
20 was going to be the Consortium. So the
21 contractors.
22 There certainly were some design issues
23 that were impacting productivity, and SCE&G did
24 submit a number of license amendments to the
25 Nuclear Regulatory Commission in order to

48

1 **facilitate design changes.**
2 Q. Let's stop right there for a minute.
3 So help us understand how that works in
4 the real world. So when you're talking about
5 design changes affecting productivity at the site,
6 can you break that down and walk us through that.
7 Give us some examples.
8 A. Yeah. So if the design calls for the
9 craft to run pipe and put hangers at every ten feet
10 to support the pipe -- if I physically can't put
11 the hangers every ten feet or if another design
12 change subsequent to the original design has put an
13 impediment in the way and I can't put the hanger
14 there, then I have to move the hanger. Moving the
15 hanger, depending on how important it is, might
16 actually require prior NRC approval.
17 So under the old way of building plants
18 back in the '50s, '60s, '70s, '80s, under Part 50 I
19 didn't have an operating license; I just had a
20 construction license. I could move that hanger and
21 I could as-build the drawings later and say I've
22 moved it and then I apply for the operating license
23 based on the fact that this hanger has moved.
24 Since I already have a construction and
25 operation license I don't have the luxury of being

49

1 able to simple move the hanger. That obviously
2 makes the craft less efficient that we have to make
3 these moves, and if I change the license we can
4 affect that move. So getting more efficient at
5 license changes was one of the things that the
6 utility could do in order to help the craft get to
7 that construction.

8 So yes. The license change process had
9 an impact.

10 Now, the license change process takes
11 time, and in some cases it can take quite a bit of
12 time. So one of the things that the owners did on
13 both projects, both the Summer and the Vogtle
14 project, was partition the NRC for a change to that
15 process. And so in addition to the license
16 amendment request what the utilities came up with
17 what is called a Preliminary Approval Request, and
18 I like to call it "proceed at risk." So that if
19 you made an application to the NRC and they did an
20 up front look and said we don't think this is going
21 to be adverse to safety, they allowed you to
22 continue while the license amendment request
23 paperwork was pending.

24 Now, the caveat there was if they found
25 something in their full review that said you have

50

1 to change this, you would have to go back and take
2 it out again, but it allowed you to continue the
3 construction. So that was one of the things that
4 SCE&G did in order to try to help the construction
5 along, was come up with a more streamlined
6 licensing process.

7 Continuing on the design front, if
8 constructability issues and changes to design were
9 causing a problem, getting engineering resolution
10 to those was a big issue. If sending paperwork
11 from the site to Westinghouse in Cranberry,
12 Pennsylvania to Shaw in Charlotte or CB&I in
13 Charlotte back to the site was taking time, moving
14 field engineers to the site that had responsibility
15 or authority to make design changes was something
16 else that the utilities pushed the designer for,
17 pushed Westinghouse for, which they eventually did
18 come around to supplying far more engineers at the
19 site. That helped with the construction process.

20 So there were a number of things that
21 were done to try to increase the productivity
22 factor. The contractors also tried some
23 mitigations to try to get more work done, even
24 though some of those mitigations might actually
25 decrease the productivity factor, which may sound

51

1 counterintuitive, but if I put on a night shift --
2 so the original premise was we're just going to
3 work on a day shift. If the contract adds a night
4 shift, that's people on nights that you're paying a
5 little bit more for because there is a premium for
6 night shift, they could get more work done, but
7 there is a turnover. So with every turnover comes
8 inefficiency. So they may get more work done, but
9 the PF is actually worse.

10 So it may seem -- it may not seem
11 intuitive, but some of the things that were done
12 were actually going to decrease the PF but increase
13 the amount of work that was going to get done.

14 Q. Did there come a time when the owners
15 decided to withhold payments from Westinghouse?

16 A. Yes.

17 Q. Tell us about that.

18 A. So the owners, I think starting in
19 2014, were withholding payments. There was a
20 couple of different ways. So it really was tiered.
21 The first withholding of payments were for invoices
22 that the owners said were deficient. So no payment
23 was rendered for deficient invoices. That was
24 something that the SCANA legal department came up
25 with. Inasmuch as if you contested an invoice, you

52

1 would be responsible to pay 90% of it. But
2 claiming the invoice is deficient, our legal
3 department felt that there was justification for
4 withholding full payment. So starting in 2014 that
5 was done.

6 In 2015 the owners started to withhold
7 payments based on things like deficiency and sent a
8 letter to the Consortium, a project letter
9 basically outlining the fact that we're not going
10 to pay for things that are the fault of the delay
11 in the modules coming from Lake Charles, and for
12 craft inefficiencies we are going to start
13 deducting for those inefficiencies and we're only
14 going to pay 90% of those.

15 So there were a couple of ways that the
16 invoices were being not paid. One was deficient;
17 the other one was withholding for things that were
18 caused by the delay and then withholding for
19 inefficiencies.

20 Q. We're going to talk in a little while
21 about the October of 2015 amendment, but on the
22 subject of mitigation, after the amendment was
23 there an initiative called Project Bluefin that was
24 implemented?

25 A. Yes.

53

1 Q. What does the term "Project Bluefin"
2 refer to?

3 A. Project Bluefin refers to a
4 collaborative effort between Westinghouse, Fluor,
5 who was going to join the project as the
6 construction manager but hadn't actually started on
7 the site yet, Southern Company and SCANA to review
8 areas where those four companies in their combined
9 wisdom thought could improve deficiencies at the
10 site.

11 So that happened in -- I think the
12 agreement that you're talking about in October was
13 at the end of October. So this activity took place
14 in November and December prior to Fluor actually
15 starting at the site in January of 2016.

16 (DFT. EXH. 12, copy of letter, 9/25/14
17 to J. Lyash from S. Byrne, marked for
18 identification.)

19 BY MR. BALSER:

20 Q. Mr. Byrne, you've been handed what we
21 have marked as Exhibit 12, which is a September
22 25th, 2014 letter from you to Jeff Lyash at CB&I,
23 Stone & Webster. Do you recognize Exhibit 12?

24 A. I do.

25 Q. What is Exhibit 12?

54

1 A. Exhibit 12 was an effort on the part of
2 the owners to let the Consortium, in particular
3 Stone & Webster, know that a number of the issues
4 that they had raised in what they called a New
5 Estimate of Completion, that the owners didn't feel
6 were legitimate charges. So in late 2014 or in
7 2014 the Consortium gave to SCANA and Santee Cooper
8 a new -- what they call Estimate to Complete.

9 So they're saying that they had
10 reevaluated the schedule and costs and that the
11 schedule was going to move out and the costs were
12 going to increase. So this was an effort to let
13 Mr. Lyash, who was the president at the time of
14 CB&I, Stone & Webster -- so their nuclear
15 construction division -- know some of the issues
16 that the owners had with some of the things that
17 went into their delay.

18 Q. Was one of the issues that you were
19 trying to address in this letter the fact that the
20 owners' payment schedule had gotten ahead of the
21 actual progress of construction?

22 A. Yes. The way that payments were made
23 -- one of the payment streams was what was called
24 progress payments, which I always thought was a bit
25 of a misnomer. It didn't actually indicate

55

1 progress. It was really intended to compensate the
2 Consortium partners for things like overhead
3 charges that they would accrue as the project went
4 along.

5 The problem was that under the schedule
6 that was in the original EPC contract for those
7 progress payments, the progress payments would have
8 been completed before the plant was constructed,
9 and that to the owners did not seem like the right
10 thing to do.

11 Q. If you turn to the last page of your
12 letter, Exhibit 12, and look at the final paragraph
13 you say that: We've addressed this problem by
14 rejecting recent requests for payments that were
15 not justified by the Consortium's current project
16 schedule, although we have not approved that
17 schedule. Do you see that?

18 A. I do.

19 Q. What exactly was the problem that you
20 were referring to here that you were trying to
21 address by rejecting recent payment requests?

22 A. Well, the Consortium had given to the
23 owners what they called a new re-baselined project
24 schedule and had intended to bill the owners based
25 on that new project schedule. So really I was just

56

1 putting CB&I on notice that we may have issues with
2 that new project schedule and payments that they
3 would propose under that new project schedule.

4 Q. Did you disclose to the Public Service
5 Commission that there were problems with
6 productivity at the construction site?

7 A. Yes; certainly.

8 Q. Your September 2014 letter that we're
9 looking at here that is Exhibit 12 also mentions a
10 new re-baselined work project schedule.

11 What is a -- what is the new
12 re-baselined work project schedule? What does that
13 mean?

14 A. Where are you reading from?

15 Q. Let me find it. It's in the last
16 paragraph on Page 5 of the letter. It's right
17 after the sentence we were just looking at. It
18 says: Once we accept the new re-baselined work
19 project schedule we will reject payments that are
20 not justified by the re-baselined project schedule.

21 A. Yes. So the Consortium would issue a
22 fairly detailed schedule that would push out the
23 dates. So the issue here of progress payments was
24 that the further they pushed the date out the
25 earlier the progress payments were fully made

57

1 before the -- and completed before the project
2 ended. So that just made that delta or that
3 difference worse. And so while the owners were
4 reviewing information given to them -- I think it
5 was in August of 2014 by the Consortium -- I wanted
6 to make sure that the Consortium understood that
7 just because it's reviewed and it's viewed as
8 reasonable doesn't necessarily mean that payments
9 are forthcoming. 4.

10 So that's really the intent of this
11 paragraph and their new schedule that they had
12 proffered in August, I think it was, of 2014.

13 Q. That was going to be my next question.

14 When did SCE&G receive the new schedule
15 from Westinghouse?

16 A. It was in August of 2014.

17 Q. And what did SCE&G do when it received
18 the revised schedule from the Consortium?

19 A. Two things. First off, formed an NND
20 team, a New Nuclear Development Team, to evaluate
21 the schedule to look at the reasonableness of what
22 the Consortium was proposing and then another NND
23 team or New Nuclear Development Team were looking
24 at cost impacts.

25 So there were two things that came

58

1 along with this August PAC. One was an increase in
2 the dates and the second one was a cost impact.
3 And whatever the Consortium would give you as a
4 cost impact, there were impacts beyond that to the
5 owners because the owners had owners' costs that
6 had to be dealt with, but the Consortium didn't.

7 Q. Approximately how long did it take the
8 SCE&G team to review the schedule?

9 A. Exactly, I don't know. It was a number
10 of months, and that concluded in the first part --
11 in the March of 2015 time frame.

12 Q. And was there some effort to identify
13 and try to quantify risks associated with different
14 components of the schedule?

15 A. Yeah. The NND team or New Nuclear
16 Deployment Team that evaluated the schedule
17 aspects, which included a representative of Santee
18 Cooper, looked at each of the aspects where the
19 Consortium was looking at increasing the duration
20 on activities or utilizing different work methods.

21 I think this may have been the time
22 frame when they first pointed to what they call the
23 best athlete scenario where they wanted to go out
24 and hire more talent that was going to cost them
25 more money and that kind of thing. So I find kind

59

1 of curious. But the NND team did evaluate for
2 reasonableness. There actually were some options
3 at this point in time where the Consortium would
4 say that this is where we think the schedule is,
5 but for a little bit more money perhaps we could
6 shorten that somewhat.

7 So the NND team looked at the
8 reasonableness of the schedule, whether it was
9 realistic that the Consortium could shorten it, and
10 with the schedule and the reasonableness there they
11 looked at what were called risk factors. So they
12 generated a risk register and said: Yes. Here is
13 the schedule, but here are the risks.

14 Q. What is a risk register?

15 A. Well, a risk register just would be the
16 -- engineers like to use charts and graphs and
17 those kind of things. So it was really kind of a
18 chart form that said: Risk mitigation. So we've
19 identified the risks to the schedule. So they
20 looked at different facets of the schedule. Hiring
21 might be a risk. And if a plan called for CB&I to
22 hire 3,000 craft and the team said that's a risk
23 that we need to do, mitigation factors might be
24 some hiring plans that CB&I had around that or
25 changes to the labor rates that CB&I had around

60

1 that.

2 So the risk register was an effort to
3 identify the risks to them achieving the schedule
4 and then what mitigation factor would apply to
5 those.

6 Q. Who was on the NND team reviewing the
7 schedule?

8 A. I'm sure that I'll miss some people,
9 and the team was probably bigger than I saw. But
10 Alan Torres and Kyle Young were certainly on that
11 team. Bernie Hydrick, I believe was a scheduler
12 that was on that team. And those folks would have
13 had other engineers working with them.

14 I believe that Brett Stokes, who was a
15 general manager of engineering, was either on the
16 team or had people on that team.

17 Q. And what was their experience or
18 qualifications to enable them to identify risks
19 associated with the schedule and make
20 determinations about the feasibility of the
21 schedule?

22 A. Well, each of the team members brought
23 with them different skill sets. Alan Torres, for
24 example, has 40-some years of experience. Started
25 off in construction on Unit 1; was a quality

61

1 assurance/quality control specialist both certified
2 in welding and visual inspection and rendering
3 fueling outages. So obviously scheduling and
4 rendering fueling outages. So a lot of experience
5 there. And a certified nuclear operator.

6 Kyle Young had done construction
7 projects outside of nuclear and had worked for some
8 private construction companies and I think maybe
9 even a state construction company in Tennessee.

10 Bernie Hydrick was a scheduling expert
11 and was familiar with running scheduling software,
12 and the engineers that Brad Stokes would have been
13 given would have been engineers following specific
14 issues or problems with the procurement chain. So
15 each of them brought with them different skill
16 sets, but the team is always better than individual
17 components and together they worked through the
18 schedule.

19 Q. What was the NND team's conclusion with
20 respect to the schedule based on this work that was
21 done that you just described?

22 A. The NND team's conclusion was that the
23 owners should probably not rely on the mitigations
24 to get the dates moved earlier, that the -- I think
25 it was June of '19 and June of '20 dates were the

62

1 most realistic dates, and then again outline the
2 various risk factors associated with achieving that
3 schedule and what mitigations were planned.

4 Q. Did the Consortium also provide a new
5 cost estimate for the project at the time that they
6 presented the revised schedule?

7 A. They did.

8 Q. And what -- can you just tell us a
9 little bit about that.

10 A. The Consortium, as they typically did,
11 started off at a very high level and I believe had
12 in excess of a billion dollars worth of charges,
13 some of which were to account for a delay in the
14 module fabrications and then the implications of
15 that on the overall schedule. Some of those were
16 to change up what they call their means and
17 methods. Some of it was to account for increased
18 hiring; some of it was their best athlete where
19 they thought they would have to go out and fire
20 some more big guns in the nuclear field kind of
21 thing. But it was a number of different factors
22 that led to them giving us what the owners thought
23 was a vastly increased cost.

24 MR. BALSER: We've been going for about
25 an hour and 20 minutes. Why don't we take a short

63

1 break.

2 THE VIDEOTAPE SPECIALIST: We'll now go
3 off the record. The time is approximately 10:20
4 a.m.

5 (Short recess taken.)

6 THE VIDEOTAPE SPECIALIST: We are now
7 back on the record. The time is approximately
8 10:29 a.m.

9 MR. BALSER: Before we commence we have
10 Mr. Bell and others on the line representing the
11 plaintiffs in the Lightsey litigation. And Ed, I
12 think you wanted to make a statement on the record.

13 MR. BELL: Thank you, David. It's my
14 understanding that today's deposition was noticed
15 by SCE&G primarily for the purpose of the PSC
16 hearing and that when concluded our failure to
17 participate in asking questions of Mr. Byrne will
18 not preclude us from reconvening the final part of
19 Byrne's deposition in the Lightsey matter.

20 MR. BALSER: SCE&G has no objection to
21 proceeding in that fashion.

22 MR. BELL: The same, sir?

23 MR. COX: Yeah. We have no objection
24 either as we discussed yesterday.

25 MR. BELL: All right. Thank you very

64

1 much.

2 BY MR. BALSER:

3 Q. Mr. Byrne, before we want to move I
4 want to make sure I'm clear in my own mind about
5 some testimony that you just gave about the work
6 that the NND scheduling team did.

7 You had indicated that one of the
8 proposals that Westinghouse made when it provided
9 the new schedule was an option to accelerate the
10 delivery dates. Did I understand that correctly?

11 A. Yes, you did.

12 Q. What was the proposed accelerated
13 timing that Westinghouse was proposing for an
14 additional fee?

15 A. I don't recall the exact timing, but I
16 believe that Westinghouse, as originally proposed,
17 was looking at moving the dates to -- for Unit 2 to
18 perhaps the latter part of 2018, and Unit 3 would
19 follow about a year later. So that was the
20 acceleration or potential acceleration that the
21 Consortium was proposing; and again, that would
22 come with a cost.

23 Q. So let's stop there for a minute. I
24 just want to make sure we're clear about this.

25 So as of August of 2014 when this

65

1 revised schedule and EAC was presented the planned
2 delivery dates were June of 2019 for Unit 2 and
3 June of 2020 for Unit 3?

4 **A. Let me be clear about this.**

5 Q. Okay.

6 **A. Heretofore the guaranteed substantial**
7 **completion dates were -- I believe it was March of**
8 **'17 and May of '18.**

9 **When the Consortium came in in August**
10 **with their new EAC what they had proposed was**
11 **moving it to the first half of 2019 for Unit 2,**
12 **about a year later for Unit 3, with the possible**
13 **acceleration into late 2018. I may have some of**
14 **those dates a little bit off, but I'll cover it by**
15 **saying late 2018 for Unit 2 and Unit 3 about a year**
16 **later.**

17 **So what they offered was an extension**
18 **for the guaranteed substantial completion dates**
19 **over what was currently approved with the**
20 **possibility to pull that back somewhat but still**
21 **beyond the current guaranteed substantial**
22 **completion dates.**

23 Q. And what did the scheduling team
24 conclude with respect to both the new proposed
25 guaranteed substantial completion dates of June of

66

1 2019 and 2020 and the proposed accelerated
2 guaranteed substantial completion date of late 2018
3 for Unit 2?

4 **A. Well, relative to the proposed**
5 **acceleration the New Nuclear Development Team**
6 **thought that to be not realistic.**

7 **With regard to the dates in 2019 and**
8 **20/20, the team had actually said that the June and**
9 **June dates, which I don't believe were the original**
10 **proposal from the Consortium. I think that came in**
11 **successive months, because the Consortium was still**
12 **refining their estimates. But the New Nuclear**
13 **Development Team settled on the June and June**
14 **dates, June of '19 and June of '20 dates.**

15 Q. They thought -- "they" being the team
16 that you described -- the Alan Torres, Kyle Young,
17 Bernie Hydrick, Brad Stokes team concluded that the
18 June of 2019 and June of 2020 guarantee substantial
19 completion dates were realistic and achievable?

20 **A. Correct. With risks that were**
21 **identified in the risk register and the proposed**
22 **mitigations. Yes.**

23 Q. Understood. So let me now hand you
24 what we're going to mark as Exhibit 13.

25 (DFT. EXH. 13, email chain with

67

1 attachments, marked for identification.)

2 Q. (Continued) I want to ask you if you
3 recognize this document. And when I say "this
4 document," I'm referring to the slide deck that
5 accompanies the email that is the first page of
6 Exhibit 13. The slide deck's title is V.C. Summer
7 Target and T&M Estimate Update dated August 29th,
8 2014.

9 **A. Yes.**

10 Q. What is this document? When I say
11 "this document" I'm referring to the slide deck.

12 **A. Right. So this slide deck appears to**
13 **be the presentation that the Consortium presented**
14 **to the owners in late August of 2014, and I believe**
15 **it was Westinghouse that took the lead on the**
16 **presentation materials.**

17 Q. If you could turn to Page 28 of the
18 slide deck that is part of Exhibit 13. The second
19 bullet point states that the current PF equals
20 1.41.

21 What does that mean?

22 **A. Well, we discussed what PF was earlier,**
23 **and based on the original projections from back in**
24 **2008, '08 or '09 time frame, had they hit those**
25 **projections for how many hours it would take to**

68

1 **complete tasks they would have had a PF of one. So**
2 **higher than one indicates poor performance or**
3 **taking longer or more hours. And so this current**
4 **PF on the project from what the Consortium is**
5 **saying is 1.41.**

6 Q. The next bullet says that: ETC PF of
7 1.15 to be realized through gradual improvements
8 over six-month period. Do you see that?

9 **A. I do.**

10 Q. Were you present at this presentation
11 that occurred by the Consortium in August of 2014?

12 **A. I was.**

13 Q. What did you understand this bullet
14 point, this last bullet point on Page 28 to mean;
15 that is, that in order for -- that ETC PF of 1.15
16 to be realized through gradual improvements over a
17 six-month period?

18 **A. So the Consortium was rebaselining**
19 **their scheduling and were now looking based on the**
20 **original projections at not hitting a 1.0**
21 **performance factor, but their goal or their target**
22 **was to hit a 1.15 performance factor.**

23 **Obviously they weren't going to do that**
24 **overnight, so what they had asked for was to**
25 **gradually get to this 1.15 over a period of about**

69

1 six months.

2 Q. Which performance factor number did
3 Westinghouse use in its Estimate of Completion
4 calculation?

5 A. **My understanding is that Westinghouse
6 used the 1.15 in their Estimate of Completion.**

7 Q. And did you understand that they were
8 committing to achieving that level of productivity
9 through various mitigation efforts?

10 A. **Yes; a number of which I believe they
11 outline here in this presentation.**

12 Q. On Page 30 of the slide deck that is
13 part of Exhibit 13 one of the -- the first bullet
14 point on Page 30 says: Estimate includes
15 aggressive actions to mitigate schedule and cost
16 impacts.

17 What did you take that to mean?

18 A. **I took that to mean -- I would say that
19 I believe that to be a negotiating ploy on the part
20 of the Consortium. So they were going to have to
21 take some actions to improve and were letting the
22 owners know that it was going to cost money to make
23 those improvements, and so they're sort of
24 softening up the owners for the big cost that was
25 going to be associated with this.**

70

1 Q. Did SCE&G do anything internally to
2 that or validate Westinghouse's Estimate of
3 Completion provided in August of 2014?

4 A. **Yes. There was a -- the financial
5 group of the company put together a team to
6 evaluate the cost impacts of the Estimate of
7 Completion and consideration of other things like
8 owners' costs.**

9 Q. In March of 2015 SCE&G partitioned the
10 Public Service Commission for updates to the
11 construction and cost schedules for the project;
12 correct?

13 A. **That's correct.**

14 Q. What were the circumstances that would
15 require SCE&G to have to seek approval from the PSC
16 of the new schedule?

17 A. **The SCANA regulatory legal team, both
18 internal and external attorneys, were of the
19 feeling that if the schedule fell outside of the
20 contingency for any of the 146 milestones in the
21 milestone schedule that was given to the Public
22 Service Commission then the company would have to
23 go back and ask for an update based on the schedule
24 and that if the projected costs were going to fall
25 outside of the approved costs then the company**

71

1 **would have to go back to the Public Service
2 Commission to seek approval.**

3 **(DFT. EXH. 14, Petition For Updates and
4 Revisions to the Capital Cost Schedule and the
5 Construction Schedule, marked for identification.)**

6 BY MR. BALSER:

7 Q. Mr. Byrne, you have been handed what we
8 have marked as Exhibit No. 14, which is SCE&G's
9 2015 petition for updates and revisions to the
10 capital cost schedule and construction schedule
11 that was filed with the Public Service Commission.

12 Do you recognize Exhibit 14?

13 A. **I do.**

14 Q. Turn with me, if you would, to Page 8
15 of Exhibit 14. Paragraph 18 SCE&G is requesting
16 adjustments to the milestone construction and
17 scheduling capital cost schedule for the project.
18 Do you see that?

19 A. **I do.**

20 Q. And in Paragraphs 19 and continuing
21 SCE&G informs the Public Service Commission that
22 the Consortium had developed a revised fully
23 integrated construction schedule with new
24 substantial completion dates for Units 2 and 3; is
25 that right?

72

1 A. **Correct.**

2 Q. And was SCE&G asking the commission to
3 approve this annually revised schedule?

4 A. **SCE&G was asking the commission to
5 approve both the new milestone schedule and the new
6 cost schedule.**

7 Q. And if we look at Paragraph 21 on Page
8 8 of Exhibit 14, the new substantial completion
9 dates that SCE&G was asking approval for for Units
10 2 and 3 were June 19th, 2019 and June 16, 2020
11 respectively; is that right?

12 A. **That's correct.**

13 Q. And if you look at Paragraphs 24 and 25
14 of Exhibit 14 beginning on Page 9, SCE&G says that
15 Westinghouse and CB&I are continuing to refine and
16 update the revised fully integrated construction
17 schedule as issues for construction designs are
18 finalized as additional information is received
19 related to the fabrication of modules, shield
20 building panels and equipment, et cetera.

21 Do you see that?

22 A. **I do.**

23 Q. What was your understanding of the
24 status of the construction schedule as of the date
25 of submission of Exhibit 14 to the Public Service

73

1 Commission?

2 **A. The schedule was dynamic and was always**
3 **going to be so. I believe that I said in testimony**
4 **that the schedule can and will change or likely to**
5 **change.**

6 **So the schedule was changing all the**
7 **time, but the Consortium was obligated to certify a**
8 **schedule to the owners in accordance with the EPC**
9 **contract on a monthly basis. So each month there**
10 **would be a new schedule and each month the**
11 **completion dates that they estimated for Unit 2 and**
12 **Unit 3 would change somewhat.**

13 **Q. Now, there was consideration at this**
14 **time of potential schedule mitigation efforts that**
15 **the owners could employ; is that right?**

16 **A. Yes.**

17 **Q. What does it mean to mitigate a**
18 **construction schedule?**

19 **A. Mitigation means you're applying some**
20 **new means and methods in order to compensate for**
21 **the fact that something got delayed and you're**
22 **trying to improve the schedule.**

23 **Mitigation could be that you're using**
24 **form work for concrete where ordinarily a module**
25 **might go in that place. Mitigation could mean**

74

1 **you're putting on a second shift in order to get a**
2 **longer workday out of it. Mitigation could mean**
3 **you're applying more resources so that you can get**
4 **more hours on a certain topic. Mitigation could be**
5 **that we're going to change from welding connections**
6 **to bolted connections to improve and, of course,**
7 **any associated license amendment requests that**
8 **might go along would be in mitigation.**

9 **Mitigation -- a good example of**
10 **mitigation is when CB&I decided to move the module**
11 **fabrication for Unit 3 to a variety of other**
12 **vendors to see improvements in those shops.**
13 **Mitigation was when SCE&G and Santee Cooper allowed**
14 **the Consortium to move modules to the site in order**
15 **to complete them with a more nuclear savvy work**
16 **force. So there are a lot of things that fall into**
17 **mitigation.**

18 **Q. Now, as you indicated a minute ago,**
19 **SCE&G also asked the Public Service Commission in**
20 **this application, this petition that we've marked**
21 **as Exhibit 14, to approve a revised cost schedule**
22 **at that time; is that right?**

23 **A. That's correct.**

24 **Q. And was the request for revised cost**
25 **schedule based on the updated estimated completion**

75

1 figures that you -- the company received from
2 Westinghouse in August 2014?

3 **A. I would say based on it, yes. Reduced**
4 **for the things that we talked about earlier that**
5 **SCE&G was, 1, withholding payments for or, 2,**
6 **reducing payments to 90% for things like**
7 **deficiency.**

8 **It was also netted against the**
9 **liquidated damages that the Consortium was now**
10 **going to be responsible for given these new dates**
11 **were not consistent with the guaranteed substantial**
12 **completion dates.**

13 **So remember, the guaranteed substantial**
14 **completion dates or GSCDs are a contractual term**
15 **which kicks off liquidated damages, and based on**
16 **the Consortium's new estimate that was going to be**
17 **beyond those guaranteed substantial completion**
18 **dates, so that would kick off liquidated damages.**
19 **So the assumption was -- and it was baked into the**
20 **numbers that we used here -- is that the Consortium**
21 **would be responsible for those liquidated damages**
22 **to the owners.**

23 **In addition to that owners' costs were**
24 **evaluated and put into this filing. So those would**
25 **be things outside of the EPC cost. And there were**

76

1 **some change orders that were evaluated and put in**
2 **here. I think one of the things that was asked for**
3 **was mitigation at a facility called Newport News**
4 **Industrial or NNI. NNI was fabricating what is**
5 **called shield building panels. So these are,**
6 **again, modular type construction, and these panels**
7 **would come from the fabricator. Originally planned**
8 **to be done at Lake Charles but now being done in**
9 **Virginia at a facility called NNI.**

10 **And NNI, so that they could improve the**
11 **schedule if they could expand the facility, which**
12 **was beyond -- you know, commercially reasonable.**
13 **So that that would have to be funded. And so**
14 **between Southern Company and SCANA they agreed to**
15 **fund this expansion to NNI. The SCANA portion of**
16 **that was going to be about 12-ish million dollars.**
17 **So that was also in what was asked for.**

18 **So there were some things outside of**
19 **just the considerations for the new estimate to**
20 **complete.**

21 **Q. I want to just digress for a second and**
22 **talk about shield building. We've heard a lot of**
23 **reference to that. Can you just explain what that**
24 **means and why it was required and what the purpose**
25 **of the shield building was.**

1 A. The shield building is required in a
2 nuclear plant to perform a function that really
3 protects the nuclear components within it. And so
4 in this design all of the nuclear components, the
5 nuclear reactors, steam generators -- those kinds
6 of pumps -- went inside of a large steel cylinder
7 that was called a containment vessel.

8 As a part of the passive cooling system
9 outside of that big steel containment vessel was an
10 annular gap of about four feet. And air would be
11 allowed to flow in this gap and to cool the
12 containment vessel and the water from the tank on
13 top would come down over the containment vessel and
14 enhance cooling. This was a passive cooling
15 system. But then the outside of the annular gap
16 was what was called a shield building, and the
17 shield building, in addition to performing the
18 passive cooling function, would also protect
19 everything inside from impacts. You know, missile
20 impacts. And I don't mean a -- when we say
21 "missile" we mean like a Volkswagen or a telephone
22 pole. That kind of thing. But also from aircraft
23 impact.

24 So the biggest implications to the
25 shield building really were airplane impact.

1 Requirements under a new rule that the Nuclear
2 Regulatory Commission issued called the Aircraft
3 Impact Rule. And so this building had to withstand
4 a certain design basis for an airplane traveling at
5 a certain speed, laden with a certain amount of
6 fuel, hitting at a certain angle. That kind of
7 thing.

8 So the shield building was going to be
9 a fairly robust structure, and it was a steel
10 concrete steel composite. So with steel on the
11 outside, steel on the inside, about a three-foot
12 gap and concrete in the middle with lots of
13 supports. This was going to be built in modular
14 fashion so you could stack the shield building
15 components up in a ring, if you will, fill them --
16 weld them together, fill them with concrete; stack
17 the next one on, weld them together, fill them with
18 concrete.

19 So those shield building panels were
20 very important and were on what is called the
21 critical path for the units for a long period of
22 times. So that means they were driving the
23 schedule. So any improvements could be made in the
24 shield building were going to be positive.

25 Q. Okay. So turning back to the petition

1 that was filed in 2015 with the Public Service
2 Commission, did the EAC that SCE&G submitted to the
3 Public Service Commission in Exhibit 14 have as the
4 basis for the updated cost schedule Westinghouse's
5 assumed performance factor of 1.15?

6 A. It did.

7 Q. Did you submit testimony to the Public
8 Service Commission in connection with SCE&G's 2015
9 petition?

10 A. I did.

11 Q. I want to hand you what we'll mark as
12 Exhibit 15, which is your prefile testimony in 2015
13 docket.

14 (DFT. EXH. 15, copy of Direct Testimony
15 of Stephen A. Byrne, marked for identification.)

16 Q. (Continued) Do you recognize Exhibit
17 15?

18 A. I do.

19 Q. Do you recognize that as your direct
20 testimony on behalf of South Carolina Electric &
21 Gas filed in connection with Docket No. 2015-103-E?

22 A. Yes.

23 Q. I want to walk through some of the
24 topics that were covered in that testimony.

25 First I would like to direct your

1 attention to Page 17 of Exhibit 15, and beginning
2 on Page 9 there is a question about consideration
3 of the most important challenges that the project
4 faces going forward. Do you see that?

5 A. On Page 9?

6 Q. I'm sorry. Page 17.

7 A. Line 9. Yes.

8 Q. One of the challenges that you mention
9 in this section of your testimony is the challenges
10 to productivity factors; correct?

11 A. Correct.

12 Q. And if you turn to Page 20, Line 19,
13 there is a discussion there of productivity
14 factors. Do you see that?

15 A. Yes.

16 Q. On Page 21 at Line 11 you state: For
17 various reasons to date, Westinghouse/CB&I has not
18 met the overall PF on which its original cost
19 estimates were based.

20 Do you see that?

21 A. I do.

22 Q. What did you mean by that?

23 A. The original -- had they met the
24 performance factor or PF that their original
25 estimate was based on they would have come up with

81

1 a PF of one.

2 As I think we saw earlier, by their own
3 admission the PF was 1.41 or something along those
4 lines. So it was not as good as 1.0. It was
5 taking more labor hours to perform the tasks. So
6 that's what was intended by this statement. It was
7 pointing out to the commission that the performance
8 factors that the Consortium had assumed in their
9 estimates, they were not meeting.

10 Q. So in your testimony you were making
11 the Public Service Commission aware that the actual
12 productivity on the site was not where it was
13 predicted to be?

14 MR. COX: Object to the form.

15 Q. (Continued) What was the purpose for
16 which you made the statement in your prefile
17 testimony on Page 21 beginning at Line 11 that to
18 date Westinghouse/CB&I had not met the overall
19 performance factors on which its original cost
20 estimates were based?

21 A. It was letting the commission know
22 really two things. 1, that there was a basis for
23 performance factor or hours that was baked into the
24 original assessment or original estimate that the
25 Consortium had given to the owners and that the

82

1 Consortium was not -- was not as efficient as they
2 had planned to be or wanted to be and that they
3 weren't getting the performance factor numbers. So
4 the estimate would be off based on that performance
5 factor.

6 Q. And in the remainder of that paragraph
7 beginning at Line 11 on Page 21 of Exhibit 15 you
8 explain what Westinghouse had told you about why
9 they were confident that the revised performance
10 factors could be achieved. So if you look at your
11 testimony on line -- beginning at the end of Line
12 18.

13 A. Yes. So what I was getting across is
14 really two things. 1 is that the owners were not
15 accepting and were challenging the invoices based
16 on these higher productivity factors and, 2, that
17 the Consortium felt that they could improve on
18 their current performance factors by a variety of
19 things that they had said. And some of their
20 justifications were things like lessons they had
21 learned from China, the fact that the work force
22 was now becoming a lot more comfortable with
23 nuclear construction, the design finalization
24 records that they had gone through. So they had
25 listed some things in the EAC presentation that

83

1 said: Here is why we think we can improve the PF.

2 Q. On Page 22 beginning at Line 7 you
3 testified, quote: But the possibility that
4 Westinghouse/CB&I will fail to meet current
5 productivity assumptions for the project represents
6 an important risk to both the cost forecast and the
7 construction schedule for the project.

8 Do you see that?

9 A. I do.

10 Q. Why did you think it was important to
11 tell the Public Service Commission that?

12 A. Well, I think it's fairly
13 straightforward testimony that if the Consortium
14 doesn't improve and we said that there is risk that
15 they wouldn't do that, that it was either going to
16 take longer, cost more, or both.

17 So it was letting the commission know
18 that even with these higher numbers that we were
19 coming back with for approval and the specific
20 schedule changes to each of the milestones that
21 we're coming back with, there was still some risk
22 that the Consortium might not meet those, and that
23 would have obviously an impact on both schedule and
24 on cost.

25 Q. What was the assumed performance factor

84

1 used in the EAC submitted by SCE&G in 2015 to the
2 Public Service Commission?

3 A. I believe it was the 1.15.

4 Q. Are you aware of whether SCE&G ran an
5 alternative or alternative EACs using any other
6 performance factor?

7 A. Certainly. The New Nuclear Development
8 Team, the financial group of that assessment of the
9 EAC, certainly ran other scenarios, and one of the
10 scenarios they ran was using the performance factor
11 that Westinghouse and CB&I said that they had been
12 achieving on the project so far and had come up
13 with a run of costs based on that high performance
14 factor.

15 Q. Were you involved in that process?

16 A. That team was Financial, so it really
17 reported up through the chief financial officer.
18 So I wasn't involved in the evaluation itself. I
19 did, I believe, sit in on a report out from that
20 team.

21 Q. Do you know why the decision was made
22 by SCE&G to use the 1.15 assumed performance factor
23 instead of the historical 1.40 performance factor
24 as the basis for the EAC submitted for approval to
25 the PSC in 2015?

85

1 **A. Yeah. I think there were a couple of**
2 **reasons for that, but one of the primary reasons**
3 **was that the SCANA legal team, which included**
4 **internal and external lawyers, were of the opinion**
5 **that anything beyond what the construction expert**
6 **-- what the contractor told you they could achieve**
7 **would be speculative and could be considered or**
8 **construed as something that the State Supreme Court**
9 **had said that we were not allowed to use, and that**
10 **was contingency.**

11 **So to avoid the prospect of being**
12 **challenged on contingency, what the contractor said**
13 **that they were utilizing was what we utilized in**
14 **the submission by SCE&G.**

15 **In addition to that I didn't want to --**
16 **the company did not want to allow the contractor**
17 **any leeway and did not want to submit for something**
18 **with a higher PF than what the contractor was**
19 **committing that they could get to. You never want**
20 **to take the pressure off the contractor.**

21 **So to allow them to breathe easier and**
22 **think the pressure is off would not have been**
23 **viewed as a positive thing. So in order to keep**
24 **the pressure on the contractor to achieve what they**
25 **said they could do and avoid utilization were the**

86

1 **real reasons that SCE&G decided to submit on the**
2 **1.15.**

3 THE VIDEOTAPE SPECIALIST: Ten minutes
4 remaining on Tape 1, counsel.

5 MR. BALSER: Thank you.

6 BY MR. BALSER:

7 Q. So if you could go back with me,
8 Mr. Byrne, to Exhibit 13, which is that Power Point
9 presentation that Westinghouse made in August of
10 2014.

11 **A. Uh-huh.**

12 Q. I want to direct your attention to Page
13 28. Again, we looked at this report before. I
14 want to take you back to it.

15 The last bullet point on Exhibit 28
16 says: ETC PF of 1.15 to be realized through
17 gradual improvements over a six-month period.

18 Do you see that?

19 **A. I do.**

20 Q. And the date of this presentation, if
21 you go back to Page 1, is August 29th, 2014; is
22 that right?

23 **A. That's correct.**

24 Q. So by the time that you submitted your
25 testimony that we were just looking at as Exhibit

87

1 15 more than six months from the date that
2 Westinghouse made its presentation in August had
3 occurred; right?

4 **A. That's correct.**

5 Q. By the time that you submitted your
6 testimony in support of the March 2015 petition had
7 the Consortium improved its performance factor to
8 1.15?

9 **A. No.**

10 Q. Why, then, did SCE&G still submit the
11 2015 application for revisions to the cost schedule
12 based on the assumed 1.15 performance factor?

13 **A. Again, it goes back to the same reasons**
14 **that I outlined earlier. It was the position of**
15 **the SCANA legal department that including something**
16 **other than what the Consortium had pledged to**
17 **achieve would be speculative and viewed as**
18 **contingency, and contingency was not viewed as**
19 **favorable since we got the order from the State**
20 **Supreme Court and wanting to hold the contractor's**
21 **feet to the fire in not submitting for something**
22 **higher than they said they could achieve, with the**
23 **assumption they could come back then and say:**
24 **Well, you submitted this. You've got that approved**
25 **and that's what we're going to go with.**

88

1 **So that would have been detrimental to**
2 **the rate payers, I believe.**

3 Q. Was the Public Service Commission made
4 aware that the EAC that was being submitted for
5 approval in 2015 was dependent on achieving certain
6 mitigation efforts?

7 **A. Yes.**

8 Q. And can you describe what some of those
9 plans to mitigate the schedule and increase
10 productivity were at that time.

11 **A. Well, the Consortium had a variety of**
12 **plans, which included additional hiring. The**
13 **Consortium was looking at bringing in more**
14 **subcontractor work force.**

15 **One of the things that the Consortium**
16 **was finding and the owners were validating was that**
17 **the subcontractors aimed at performing a specific**
18 **task were actually more efficient than the general**
19 **work force was that were building the nuclear**
20 **plant.**

21 **So there were a variety of --**
22 **particularly labor-related items or issues that the**
23 **Consortium was looking at to try to improve**
24 **efficiency.**

25 Q. Turn with me, if you would, to Page 34

89

1 of your prefile testimony. We're sort of back to
2 Exhibit 15. Sorry to jump around on you.

3 **A. The page again?**

4 **Q. 34.**

5 **A. 34. With me?**

6 **A. I'm there.**

7 **Q.** Okay. Beginning on Page 34 you provide
8 to the Public Service Commission background for the
9 revised project schedule that's presented in the
10 proceeding and you walk through the history of some
11 of the issues that led to a new schedule being
12 proposed by Westinghouse; right?

13 **A. Right.**

14 **Q.** The first set of issues that you
15 describe in this section of your testimony relates
16 to problems caused by the Lake Charles facility.
17 We've already talked about some of those already.
18 And you testified that SCE&G had been publicizing
19 its concerns related to the Lake Charles facility
20 beginning in 2010 and consistently thereafter.

21 So in your view was this a new issue
22 for the Public Service Commission?

23 **A. No; certainly not. In both testimony**
24 **previously before the Public Service Commission,**
25 **the challenges at Lake Charles had been outlined**

90

1 **and in a number of the daily or quarterly reports**
2 **the issues and challenges at the Lake Charles**
3 **facility had been outlined.**

4 **Q.** Turn with me, if you would, to Page 38
5 of your prefile testimony. And I want to start on
6 Line 3 where you say that the schedules that SCE&G
7 has presented here of the current anticipated
8 schedules for completing the units as envisioned by
9 the BLRA are reasonable and prudent schedules for
10 completing the project, and you go on to say at
11 Line 7: These schedules represent the best current
12 forecasts of the anticipated costs and the
13 anticipated construction schedules to complete the
14 project. Do you see that?

15 **A. I do.**

16 **Q.** What did you base that testimony on;
17 that is, what was the basis of your testimony to
18 the commission that the schedules that were being
19 submitted represented the best current forecast of
20 the anticipated costs and the anticipated
21 construction schedules to complete the project?

22 **A. If you go down to Line 17, that kind of**
23 **outlines the basis for the conclusions, and that**
24 **was that the Consortium, who had been contracted to**
25 **complete these units or to deliver these units,**

91

1 **have done an evaluation based on all of their**
2 **experience and have come up with these new revised**
3 **dates.**

4 **The information that was contained in**
5 **the Estimate to Complete was reviewed by the New**
6 **Nuclear Development Construction Team with**
7 **experience and reviewed both the scope -- so all**
8 **the items required to complete the units was in the**
9 **schedule -- and the sequencing, meaning that they**
10 **were properly sequenced together.**

11 **So that was the basis for determining**
12 **it was the best current information that was**
13 **available on the schedule.**

14 **Q.** And you informed the Public Service
15 Commission in this testimony that the estimates
16 were based on certain assumptions and that were
17 dependent on -- and that these schedules and costs
18 were dependent on mitigation efforts; right? If
19 you look at Page 38, Line 19, for example.

20 **MR. COX:** Object to the form.

21 **A. Right. So what I was letting the**
22 **Public Service Commission know was it was based on**
23 **productivity factors given to us by the**
24 **contractors, Westinghouse and CB&I; that they were**
25 **representing that they could meet those and that**

92

1 **that -- I went on to point out that that was going**
2 **to be a challenge, but, you know, if they were able**
3 **to do that that would be a significant benefit both**
4 **cost and schedule-wise for the owners and for the**
5 **rate payers and for the state. So that it wasn't a**
6 **basis or interest that the company had in relieving**
7 **them of that obligation to try to attain the 1.15**
8 **performance factor.**

9 **Q.** So I want to focus on this language
10 beginning on Line 19 of Page 38. You say that: As
11 to both timing and costs, the schedules are based
12 on productivity factors that Westinghouse/CB&I
13 represents can be met given the current status of
14 the project.

15 What was the basis of your statement
16 that Westinghouse and CB&I represented that they
17 could meet these productivity factors?

18 **A. It was the Consortium in their EAC let**
19 **the owners know that this was the productivity**
20 **factor that they thought that they could get to**
21 **over about a six-month period.**

22 **Q.** And you go on to say: Meeting these
23 productivity factors will pose a challenge to
24 Westinghouse/CB&I.

25 Why did you feel it necessary to tell

93

1 the Public Service Commission that the productivity
2 factors that were the underlying basis for --

3 MR. BALSER: How much time do I have
4 left?

5 THE VIDEOTAPE SPECIALIST: 30 seconds.

6 MR. BALSER: Why don't we go ahead and
7 change tapes.

8 THE VIDEOTAPE SPECIALIST: This
9 concludes Video No. 1 in the video deposition of
10 Steve Byrne. The time is approximately 11:13 a.m.
11 We are now off the record.

12 (Short recess taken.)

13 THE VIDEOTAPE SPECIALIST: We are now
14 back on the record. Today's date is October 23rd,
15 2018. The time is approximately 11:14 a.m. Please
16 continue. No. 2 in the video deposition of Steve
17 Byrne.

18 BY MR. BALSER:

19 Q. Mr. Byrne, we are on Exhibit 15, Page
20 38, Line 21, and I want to focus your attention on
21 the language that says: Meeting these productivity
22 factors will pose a challenge to Westinghouse/CB&I.

23 Do you see that?

24 A. I do.

25 Q. Why did you think it was important to

95

1 A. I do.

2 Q. If SCE&G recognized that the future
3 productivity factors upon which Westinghouse was
4 basing its assumptions would be a significant
5 challenge, why did SCE&G feel comfortable
6 presenting cost estimates and proposed schedules
7 based on those challenging productivity figures?

8 A. Well, 1, the company wanted to
9 challenge the Consortium to achieve what they
10 claimed that they could achieve. Secondly, come
11 back to the SCANA lawyers or SCANA legal team's
12 position that if you use something other than what
13 the experts tell you is the case, that would be
14 speculative and could be viewed as adding
15 contingency to the project.

16 So really for those reasons and the
17 fact that you don't want to take pressure off the
18 Consortium -- those were the reasons for including
19 it, but letting people know that it was going to be
20 a big challenge for them to hit those productivity
21 factors.

22 Q. Was the Office of Regulatory Staff
23 aware of SCE&G's position on this point?

24 A. I believe they were.

25 Q. Why do you believe that?

94

1 tell the Public Service Commission that the
2 productivity factors upon which these new forecasts
3 were based would be a challenge to Westinghouse and
4 CB&I?

5 A. 1, to be open with the Public Service
6 Commission and, 2, that there was skepticism on the
7 project as to whether or not the Consortium could
8 do what they were saying that they could do.

9 Q. You go on to say in the next sentence:
10 But doing so -- that is, assuming they meet the
11 productivity factors -- will benefit the project
12 both in terms of cost and schedule. And what are
13 you trying to convey there?

14 A. That, you know, it's kind of the
15 opposite of them not doing so and costing more and
16 taking longer. If they're able to achieve the 1.15
17 productivity factor that there would be a benefit
18 inasmuch as that adds -- they would be able to
19 bring the project in at the cost that they were
20 contemplating and on the schedule that they were
21 contemplating.

22 Q. On Page 39 on Line 3 you say: However,
23 SCE&G does recognize that Westinghouse/CB&I has set
24 itself a significant challenge as to future
25 productivity. Do you see that?

96

1 A. The Office of Regulatory Staff had
2 access to the new nuclear team and access to all of
3 the information that the new nuclear team had,
4 including information that I would have. So the
5 New Nuclear Deployment Team would have discussed
6 the current PFs and what those productivity factors
7 were.

8 And in testimonies before the Public
9 Service Commission the Office of Regulatory Staff
10 had on numerous occasions voiced their concerns
11 over the schedule of the two facilities and the
12 performance factor of the contractor and the
13 efficiency of the contractor.

14 (DFT. EXH. 16, one-page document,
15 ORS9_SECG01088115, marked for identification.)
16 BY MR. BALSER:

17 Q. Mr. Byrne, you have been handed what we
18 have marked as Exhibit 16. Have you ever seen this
19 document before?

20 A. I'm not sure that I have, no.

21 Q. I'll represent to you that this is a
22 request for information that the Office of
23 Regulatory Staff propounded to SCE&G, and in this
24 document ORS asks -- states as follows: In your
25 response to Question No. 6 of the ORS and indeed

1 request GCJ-2 you state that the productivity
2 factor of 1.15 was chosen by the Consortium as the
3 basis for the EAC, and the previous values that ORS
4 had seen were actual values.

5 Do you see that?

6 **A. Starting --**

7 Q. Starting at the first line of the
8 question.

9 **A. Yes.**

10 Q. ORS goes on to say: However, the point
11 of the question is to explain how SCE&G can accept
12 a productivity factor as the basis of the EAC that
13 reflects a significantly higher level of
14 productivity that has yet to be realized during the
15 previous several months of high levels of
16 construction activity.

17 Do you see that?

18 **A. I do.**

19 Q. And the company provides a response to
20 ORS's question No. 1 on Exhibit No. 16. I would
21 like you to just take a minute to look at the
22 response that SCE&G provided in response to the
23 question propounded by ORS.

24 **A. (Witness complies.) Okay.**

25 Q. Were you involved with responding to

1 this information request?

2 **A. I don't believe so.**

3 Q. You've now had an opportunity to read
4 the company's response to the question propounded
5 by SCE&G.

6 Do you agree with the response? Do you
7 think it's accurate?

8 **A. Yeah. I would say this is accurate and
9 consistent with the discussions that I had with
10 SCANA attorneys at the time.**

11 Q. Did SCE&G continue to make efforts to
12 motivate the Consortium to improve productivity?

13 **A. Yes; certainly. A lot of the things
14 that we have talked about heretofore in this
15 deposition, at least up to the point where the
16 company was able or the owners were able to
17 transition to the fixed price contract, which would
18 have been late 2015 where we have the option for
19 the fixed price contract -- because productivity,
20 as I outlined earlier, you can be less productive,
21 apply more resources, and still meet the dates. So
22 really this became a cost issue. And so once the
23 fixed price option was negotiated it took some of
24 the pressure off the company to push and to put all
25 the incentive to improve productivity onto the**

1 **Consortium or onto Westinghouse where we think it
2 belonged.**

3 **(DFT. EXH. 17, copy of letter, 5/5/15,
4 to J. Hyde from A. Smith, marked for
5 identification.)**

6 BY MR. BALSER:

7 Q. Mr. Byrne, I'm handing you what has
8 been marked as Exhibit 17, which is a letter dated
9 May 5th, 2015 from Skip Smith to JoAnne Hyde.

10 Have you ever seen Exhibit 17 before?

11 **A. I have.**

12 Q. What is it?

13 **A. This is a project letter where the
14 owners are letting the Consortium know that there
15 will be a holdback of payments. So this was, I
16 think, the first time where it was explained to the
17 Consortium what the rationale was for contesting
18 these payments and then only paying 90%.**

19 Q. And what was going on -- what
20 precipitated this letter?

21 **A. Well, the fact that the improvements in
22 the ratios were discussed in this letter, including
23 performance factor, had not been improving and that
24 the owners had limited tools with which to deal
25 with that under the EPC type contract. And so one**

1 **of the things that the owners thought they would
2 try is seeing if they could add some pressure to
3 the Consortium by withholding funds from them.**

4 Q. I want to take you back to your prefile
5 testimony, Exhibit 15, for a minute. If you could
6 turn to Page 39 for Exhibit 15.

7 **A. Okay.**

8 Q. At Line 19 -- Line 18 you're asked
9 could these schedules change, and in Line 19 you
10 say: These schedules can and almost certainly will
11 change.

12 Do you see that?

13 **A. I do.**

14 Q. What did you mean by that?

15 **A. I think as I go on to explain in that
16 answer is that this is a very complex construction
17 schedule. The Consortium has the responsibility to
18 certify their schedule once a month, and what we
19 had seen historically is that was going to change,
20 and with something that is this complicated,
21 particularly when you're looking at mitigation
22 activities and some of the design issues that the
23 Consortium was facing, the project was likely to
24 change in schedule as mitigations come to fruition
25 or as issues with design or procurement are**

1 impacting the schedule.

2 Q. Okay. And if we go on in your prefile
3 testimony to Page 40 -- so we're now on Exhibit 15,
4 Page 40. There is a section called Disputed Costs
5 in which you describe that SCE&G was challenging
6 several categories of the increased costs.

7 A. That's correct.

8 Q. Describe for us what SCE&G was doing to
9 challenge costs as reflected in your testimony.

10 A. Doing a couple of things. First off,
11 where the Consortium was making an attempt to bill
12 the company or invoice the company for things that
13 the owners thought were in the fixed or firm
14 category, those were being rejected.

15 Where the Consortium was invoicing
16 based on productivity factor issues or other things
17 that were contested invoices by the company, the
18 company was only going to pay 90% of those. I
19 don't know if we get into liquidated damages or
20 not.

21 There were also some delays -- or
22 charges that were caused by the delay. I think an
23 example was tents. So the Consortium wanted to
24 bill the owners for storage tents. In the owners'
25 minds the storage tents were only necessitated by

1 the delay and parts still show up, which we think
2 is a good thing, but now instead of going
3 immediately into the excavation they had to be
4 stored or staged somewhere.

5 So there were costs that were
6 inappropriate. There were costs that were trying
7 to be passed on to the owners because of the delay
8 that were being rejected and then there were
9 contested invoices, whether contested based on the
10 fact that the Consortium didn't think -- or the
11 owners didn't think that the charges were
12 legitimate or the performance factor and other
13 ratios were not good that were only going to be
14 paid at 90%.

15 Q. Page 43 of your prefile testimony,
16 Exhibit 15, you explain why these disputed costs
17 are properly included in the cost schedules.

18 At a high level, what is the answer to
19 that question?

20 A. So that the company wouldn't be in
21 breach of the contract. The contract had in it
22 provisions for contesting invoices, and so as to
23 not be in breach the company was going to pay some
24 of those invoices at the 90% level. You know,
25 possibly a stretch to even withhold payments for

1 some of those things, and that was certainly the
2 Consortium's position. But probably more risk in
3 the payments that were completely withheld based on
4 things like deficient invoices or claiming that the
5 delay caused those and the company just wasn't
6 going to pay them.

7 So a couple of different categories
8 there that were disputed, but the basic reason is
9 because the company did not want to be in breach.
10 So they were paying the 90%.

11 Q. What would happen if SCE&G was later
12 successful in challenging some of those costs that
13 it paid?

14 A. Well, if the company was due any kind
15 of a refund, those would be passed back to the
16 consumer or the rate payer.

17 Q. If you could turn back to Page 17 of
18 your prefile testimony, Mr. Byrne.

19 A. 17?

20 Q. Exhibit 15, Page 17. Back to the
21 challenges and risks that the project faces. And
22 one of the issues that you raised in this section
23 of your testimony was the issue of maintaining a
24 working relationship with the Consortium while
25 enforcing the EPC contract.

1 What was the challenge there? What was
2 the risk?

3 A. The risk was that the commercial issues
4 that were arising would start to erode the working
5 relationship of the folks at the site. And, you
6 know, particularly in a situation where you're
7 under an EPC contract and you're not directing the
8 work; you're just overseeing things, a good working
9 relationship with the contractor is directing the
10 work and the activities and using their means and
11 methods is very important, and on a nuclear project
12 it's even more important because of NRC oversight.

13 So the NRC would hold the licensee,
14 which would be SCE&G and Santee Cooper, responsible
15 even if it was activities that were done by the
16 contractor. So a good working relationship with
17 the contractor at the site level was very
18 important.

19 Q. Did the commercial disputes that
20 existed between the owners and the Consortium
21 persist into 2015?

22 A. Yes. It certainly did.

23 Q. Did SCE&G ever consider the possibility
24 of litigation with the Consortium?

25 A. Well, I can tell you -- again, that's

105

1 **outside of my area, but I know that our lawyers did**
2 **contemplate the possibility of litigation with the**
3 **Consortium.**

4 Q. And if you turn to Page 40 of your
5 prefile testimony, you tell the commission that
6 litigation might occur.

7 **A. Correct.**

8 Q. Specifically at Line 9, Page 44 of
9 Exhibit 15, you state that litigation may occur.

10 **A. That's correct.**

11 Q. So to kind of give a snapshot of where
12 the project was in early 2015, you had a new EAC
13 that was presented by Westinghouse; right?

14 **A. Correct. Presented in 2014, but you're**
15 **framing 2015?**

16 Q. Right.

17 **A. Okay.**

18 Q. And work had been done by the NND teams
19 to scrub both the schedule and the cost estimates
20 contained in the revised EAC?

21 **A. That's right.**

22 Q. There was a performance factor
23 assumption built into Westinghouse's EAC that was
24 1.15 even though historically they had achieved
25 1.4.

106

1 **A. Right.**

2 Q. And there were ongoing disputes between
3 the owners and Westinghouse?

4 **A. Correct.**

5 Q. Was it during that time frame; that is,
6 the early 2015 time frame, that you first learned
7 of an effort to engage Bechtel to assist in some
8 way?

9 **A. I believe it was.**

10 Q. How did you first hear of the
11 possibility of Bechtel being engaged?

12 **A. Santee Cooper had proposed to SCE&G**
13 **that an outside or third-party assessment be done**
14 **and had proposed that Bechtel be brought in to do**
15 **that outside assessment.**

16 (DFT. EXH. 18, one-page handwritten
17 notes, 2/16/15, marked for identification.)

18 BY MR. BALSER:

19 Q. Mr. Byrne, you have been handed what we
20 have marked as Exhibit 18. Do you recognize
21 Exhibit 18?

22 **A. I do.**

23 Q. What is Exhibit 18?

24 **A. These are my handwritten notes of two**
25 **different meetings.**

107

1 Q. Okay. I want to focus your attention
2 on the second meeting; that is, the meeting with
3 Santee Cooper.

4 **A. Uh-huh.**

5 Q. Are the notes of that meeting reflected
6 below the line --

7 **A. Below the horizontal line. Yes.**

8 Q. So what do your notes reflect about who
9 suggested that Bechtel come in to do an assessment
10 on the project?

11 **A. It will be LC, which is Lonnie Carter.**

12 Q. So to get the shorthand of the
13 nomenclature down in your note-taking convention,
14 can you tell us who was at the Santee Cooper
15 meeting and what your abbreviations reflect.

16 **A. LE is Lonnie Carter. MC would be**
17 **Michael Crosby. KM was Kevin Marsh.**

18 **Now, there were other people there. I**
19 **was there and a gentleman from Santee named Marty**
20 **Watson was there.**

21 Q. What do you recall being discussed
22 about Bechtel in this meeting with Santee Cooper
23 that is reflected in your notes?

24 **A. It appears from my notes that in this**
25 **February '15 time frame Mr. Carter was proposing**

108

1 **that Bechtel be brought in to do a third-party**
2 **assessment. He is letting SCE&G know that one of**
3 **his board members has a relationship with the**
4 **former CFO of Bechtel, a gentleman named Mike**
5 **Adams. I believe he said that's how the connection**
6 **was made and that Bechtel had already given Santee**
7 **Cooper a proposal on what they could do for an**
8 **assessment.**

9 Q. Were you aware at that time of any
10 communications between Santee Cooper and Bechtel
11 about Bechtel coming in and taking on a larger role
12 on the project?

13 **A. At this point in time the only**
14 **indication of any conversation between Bechtel and**
15 **Santee was the reference that Lonnie made to one of**
16 **the board members having a relationship with a**
17 **Bechtel executive and the fact that Santee had**
18 **already received from Bechtel a presentation on**
19 **what they could do in assessment for them.**

20 Q. Did you learn at this time who it was
21 at Santee Cooper that had a relationship with Mike
22 Adams of Bechtel?

23 **A. I believe that Santee Cooper let us**
24 **know who it was, but I don't recall -- I don't**
25 **recall which board member it was.**

109

1 Q. Were you in favor of Bechtel doing an
2 assessment?

3 A. I was in favor of an assessment being
4 done. I was not necessarily in favor of Bechtel
5 doing the assessment.

6 Q. Did you interview other companies to do
7 the assessment yourself?

8 A. I did.

9 Q. Who did you interview?

10 A. I had communications with three other
11 entities.

12 So let's go back to your previous
13 question when you say: Were you in in favor of
14 Bechtel? One of the reasons that I -- Bechtel is a
15 company that has great capabilities. So I don't
16 want to be mistaken on that. But they would be
17 viewed in my mind as a competitor by both
18 Westinghouse and CB&I. Certainly those companies
19 all share a lot of the same capabilities and would
20 compete in the same market for things.

21 So the concern was that Bechtel would
22 be viewed as a competitor and that they wouldn't
23 get cooperation that they would really need from
24 the Consortium partners in doing the evaluation.
25 So that was a big concern going on.

110

1 So my thought process was that if there
2 was a company that would not be viewed by the
3 Consortium members as a competitor but could do an
4 evaluation like this then that might be a better
5 solution.

6 So I did have discussions with three
7 different entities. Narrowed it down to one,
8 Atkins, and had Atkins come to Columbia -- I think
9 it's Atkins International -- so that they could
10 cover what their capabilities are in doing an
11 assessment like this.

12 Q. And who participated in the interview
13 of Atkins besides you?

14 A. I don't recall who was in it.

15 Q. Did you ask any of the members of your
16 team for their views of hiring Bechtel to perform
17 an assessment?

18 A. I did. At some point, I think, after
19 this Santee shared the proposal or the pitch that
20 Bechtel had given to them, and I had forwarded it
21 to a couple of members of the New Nuclear
22 Development Team and just asked them for their
23 assessment. How do you think Bechtel would do on
24 the third-party assessment?

25 Q. And what did you hear back from your

111

1 team members?

2 A. I heard back some skepticism of Bechtel
3 to do the third-party assessment based on
4 experience that some of our folks had with Bechtel
5 in the past. When I say "our folks" I'm talking
6 about Alan Torres, Ron Jones, Jeff Archie, and
7 those individuals who had given me feedback on
8 Bechtel.

9 Bechtel had done a steam generator
10 replacement at V.C. Summer probably in the 1994
11 time frame, and Mr. Archie had worked directly with
12 Bechtel in that time frame. That was prior to my
13 involvement with the company, so I was not involved
14 with that.

15 Mr. Torres let me know about some
16 projects that Bechtel had been involved with that
17 didn't go very well, including the Watts-Bar
18 nuclear plant in Tennessee.

19 Q. What did Mr. Torres tell you about the
20 difficulties that Bechtel had had at Watts-Bar?

21 A. What Mr. Torres told me was that
22 Bechtel -- the way he termed it was "tossed out" by
23 TBA as the EPC contractor.

24 Q. And had he told you anything about
25 whether they were easy to work with or difficult to

112

1 work with?

2 A. I don't remember Mr. Torres
3 categorizing that. Mr. Archie certainly said that
4 from his experience with the Bechtel folks that
5 they were difficult to work with.

6 (DFT. EXH. 19, one-page handwritten
7 notes, marked for identification.)

8 BY MR. BALSER:

9 Q. Mr. Byrne, we are handing you Exhibit
10 19, which is another set of handwritten notes.

11 Do you recognize these notes?

12 A. I do.

13 Q. What are they notes of?

14 A. These are my handwritten notes of a
15 meeting that the owners had with Bechtel.

16 Q. And there is a date at the top of
17 4/7/15.

18 Do you believe that is the date of the
19 meeting that is reflected on your notes?

20 A. I do.

21 Q. Who was in attendance at this meeting?

22 A. Kevin Marsh, myself, Michael Crosby,
23 and Marty Watson. So Michael Crosby and Marty
24 Watson are Santee Cooper. Kevin and I are
25 obviously SCANA.

113

1 **In addition to that from Bechtel was**
2 **Mike Adams, Craig Albert, and Carl Rau.**

3 Q. About halfway down the page there is a
4 notation, and it starts with a K. And I don't know
5 if it's -- the only K is probably Kevin Marsh; is
6 that right?

7 A. Yes.

8 Q. The question appears to be how CB&I
9 viewed Bechtel.

10 What does that reference? What was
11 the --

12 A. Kevin Marsh was just asking a question
13 about how Bechtel thought that they would be viewed
14 by Chicago Bridge & Iron.

15 Q. And your notes reflect that CA, who is
16 Carl Albert --

17 A. Craig Albert.

18 Q. Craig Albert of Bechtel said what?

19 A. "Initially not well. The concept of an
20 owners' engineer (I think this is what they want)
21 is not foreign to them."

22 Q. What does the parenthesis mean? Tell
23 us what that means.

24 A. The parenthical there, "I think this is
25 what they want," is my assessment of what Bechtel

115

1 A. My feelings at the time were that that
2 would not have been a good idea, for a couple of
3 reasons.

4 First off, I think we had talked
5 earlier about some issues between the Consortium
6 partners. So this was CB&I and Westinghouse that
7 were partnered on this project. They had a
8 consortium agreement on this project and they were
9 having some issues. So introducing now a third
10 party was going to potentially make that situation
11 even worse, which became more manifest as time went
12 on. When we actually got to the evaluation I think
13 we had just started some negotiations to allow CB&I
14 to exit the program and then introducing an owner's
15 engineer like Bechtel, somebody that Westinghouse
16 would view as a competitor, was then just going to
17 strain relations even more. So more in the
18 opposite direction than what we wanted to.

19 Secondly, let's say a school board were
20 to want to build a new school and the school board
21 doesn't really have any experience with
22 construction. They might hire an owner's engineer
23 to advise on how the contractor is doing with
24 regard to the construction process. But in the
25 situation that SCE&G and Santee Cooper were in they

114

1 appeared to be angling for.

2 Q. And so can you just spell that out for
3 us a little bit.

4 A. Yeah. So an owner's engineer is
5 somebody that an inexperienced party on
6 construction project management might bring in to
7 advise them when they're dealing with a contractor
8 that's building or constructing something for them
9 or doing a project for them.

10 So "owner's engineer" is kind of an
11 amorphous term, but it really means you can have
12 somebody from outside come in to advise the owner.

13 Q. What was leading you to have the
14 impression at that time that Bechtel was trying to
15 pitch to be hired as the owner's engineer on the
16 project?

17 A. Well, 1, the fact that they utilized
18 the term "owner's engineer." So that was kind of a
19 tip-off. And I don't think it was in the question,
20 but then it's in the answer that they're familiar
21 with an owner's engineer. So that led me to
22 believe that that is what they were angling for.

23 Q. What were your feelings at the time
24 about whether it was a good idea for the owners to
25 hire an owner's engineer on this project?

116

1 hired in-staff in order to facilitate oversight of
2 construction. And at this point in time it was
3 probably 600 people, maybe 150 to 200 of which were
4 dedicated to oversight on some of the construction.

5 So essentially under the EPC contract
6 that SCE&G had and with the oversight plan that
7 SCE&G was providing it had its own owner's engineer
8 that it hired in. So bringing in another owner's
9 engineer was going to be redundant.

10 And lastly, I'm aware of the fact that
11 Santee Cooper does projects differently than SCE&G
12 did. So Santee would opt to be directing the work
13 as a general contractor and not enter into an A, B,
14 C type of agreement. And, of course, those are
15 generally going to be on much smaller projects.
16 Natural gas plant, for example, and that kind of
17 thing.

18 So the difference in philosophy really
19 meant that what Santee Cooper might have been
20 interested in in conversations with Bechtel was
21 having Bechtel start to direct activities. That
22 would have worked against the EPC contract and
23 would have meant more change orders and more cost.
24 And so while an owner's engineer might let the
25 owners know what the difficulties are, the

117

1 difficulties are not a secret to SCE&G or to Santee
2 Cooper. We're well aware of what the problems and
3 what the issues were.

4 So the concept of having anybody come
5 in as owner's engineer was probably something I
6 would have said I was not in favor of, and then
7 having somebody that would have been viewed as a
8 competitor would have meant I would have been not
9 favorable.

10 Q. Ultimately Bechtel was engaged?

11 A. They were.

12 Q. And to your understanding what was the
13 purpose for which Bechtel was engaged?

14 A. I was informed that Bechtel was going
15 to be engaged and I was informed that the -- by our
16 legal department that that was for the purposes of
17 potential litigation down the road and that they
18 would be engaged by an outside law firm.

19 (DFT. EXH. 20, Professional Services
20 Agreement, marked for identification.)

21 BY MR. BALSER:

22 Q. Mr. Byrne, you have been handed what we
23 have marked as Exhibit 20, a document entitled
24 "Professional Services Agreement."

25 Have you ever seen Exhibit 20?

118

1 A. I don't know that I have. I don't know
2 that I have. I just don't know that I have seen
3 Exhibit 20 before.

4 Q. I'll represent to you this is a
5 Professional Services Agreement entered into
6 between Bechtel and Smith Currie & Hancock, which
7 is a law firm, a construction law firm based in
8 Atlanta, Georgia. And if you turn to Page 5 of
9 this agreement it's signed by George Wenick on
10 behalf of Smith Currie & Hancock and Ty Troutman as
11 president of BPC.

12 Do you see that?

13 A. I do.

14 Q. Do you know who George Wenick is?

15 A. I do.

16 Q. Have you ever met George Wenick?

17 A. I have.

18 Q. What is your understanding of who
19 George Wenick is?

20 A. The SCANA legal department hired George
21 Wenick prior to this. I can't remember when. I
22 believe that George Wenick was hired perhaps even
23 back when the EPC was presented to the owners, and
24 the owners were looking at complex negotiations
25 with the Consortium over that EPC. George Wenick

119

1 was hired by our internal lawyers because of his
2 construction litigation experience.

3 Q. And who is Ty Troutman?

4 A. The president of Bechtel Power
5 Corporation.

6 Q. Had you known Mr. Troutman before
7 Bechtel became involved with this assessment?

8 A. I had met Mr. Troutman one time prior.
9 He had called me and said: Look. You're going to
10 be at this meeting in Washington. Let's have a
11 get-acquainted meeting. Meet in the hotel before
12 our meeting starts at 7 o'clock.

13 So I met him one time prior to this, a
14 get-acquainted type meeting.

15 Q. Was it in the same general time frame
16 of their pitching for this work or was it --

17 A. I don't remember exactly when it was.
18 Since it was just a get-acquainted type meeting I
19 didn't take notes of the meeting. It was probably
20 sometime in late '14 or early '15, but exact time
21 frame I don't recall.

22 So I don't know if at that point in
23 time Santee had made their pitch to bring Bechtel
24 in. So I'm not sure what the time frame was.

25 Q. Understood. So turn -- if you would,

120

1 there is an Attachment A to the Professional
2 Services Agreement that we've marked as Exhibit 20
3 which describes both the assessment objectives and
4 the execution approach.

5 The first paragraph on Page 1 of
6 Attachment A says: The objective of Bechtel's
7 assessment is to assist SCH, which is Smith Currie
8 & Hancock, and owners in better understanding of
9 the current status and potential challenges of the
10 project in anticipation of litigation and also to
11 help assure the project is on the most cost
12 efficient trajectory of completion.

13 Is that consistent with your
14 understanding of what Bechtel was being asked to
15 do?

16 A. It is. And I have seen that language
17 in other places. I think it may have actually been
18 in a presentation that Bechtel gave to the owners
19 in October of '15.

20 Q. To your knowledge was Bechtel asked to
21 do any alternative schedule analysis?

22 A. No. No. I don't -- I don't recall
23 them ever being asked to run a schedule.

24 Q. Did you attend Bechtel's presentation
25 of its preliminary findings on October 22nd, 2015?

1 **A. I did.**
2 **(DFT. EXH. 21, copy of Preliminary**
3 **Results of Bechtel Assessment, marked for**
4 **identification.)**
5 BY MR. BALSER:
6 Q. I'm handing you what we've marked as
7 Exhibit 21. Do you recognize Exhibit 21?
8 **A. I do.**
9 Q. What do you understand Exhibit 21 to
10 be?
11 **A. This was a draft of a presentation that**
12 **was given to the owners by Bechtel at the**
13 **conclusion of their third-party evaluation.**
14 Q. Do you recall the individuals from
15 Bechtel who were present at the presentation?
16 **A. I know I have some notes on that**
17 **presentation, and it's in those notes. I believe**
18 **that Craig Albert, Carl Rau were present. I know**
19 **that there was a guy named -- I think it was Jason**
20 **Moore. There were probably a couple of others.**
21 Q. Was Ty Troutman present at that
22 meeting?
23 **A. No. No, he wasn't.**
24 Q. You referenced your notes. I'll hand
25 those to you. We'll mark those as Exhibit 22.

1 (DFT. EXH. 22, copy of handwritten
2 notes, 10/22/15, marked for identification.)
3 Q. (Continued) You have been handed what
4 we have marked as Exhibit 22. Do you recognize
5 Exhibit 22?
6 **A. I do.**
7 Q. What is Exhibit 22?
8 **A. These are my handwritten notes from the**
9 **meeting that we're discussing here on October 22nd,**
10 **the draft presentation from Bechtel.**
11 Q. Where did this meeting occur?
12 **A. It took place in SCANA's headquarters**
13 **building in Cayce.**
14 Q. What was your reaction to Bechtel's
15 conclusion of the new project schedule in its
16 presentation?
17 **A. I would have to say I was surprised by**
18 **the inclusion of the project schedule in the**
19 **presentation.**
20 Q. Did you think Bechtel had enough
21 information to rerun a project schedule?
22 **A. I did not think that they had access to**
23 **the information that they would need to rerun a**
24 **schedule, nor did I think they had the resources at**
25 **the time either to rerun the schedule.**

1 Q. Your notes say "CR" -- is that Mr. Rau?
2 **A. Carl Rau.**
3 Q. -- Carl Rau of Bechtel said: Would
4 have to go much deeper to accurately predict SKED
5 probabilities.
6 Can you tell us what that means?
7 **A. "SKED" or S-K-E-D is my shorthand**
8 **notation for "schedule." So this was Carl Rau**
9 **explaining to the owners that they would have to go**
10 **much deeper to give us an accurate schedule.**
11 Q. And that was what -- so Mr. Rau of
12 Bechtel was saying that they would have to go
13 deeper?
14 **A. That's correct.**
15 Q. In the bottom right-hand corner of the
16 page of your notes there is a reference to -- it
17 says: Little real eval time. Do you see that?
18 **A. Yes.**
19 Q. What does that refer to?
20 **A. The entire assessment that Bechtel did**
21 **was only about seven weeks, I think it was by their**
22 **count, and they -- I don't think that they were**
23 **working on the schedule for the entire time such**
24 **that -- you know, in order to run a schedule they**
25 **had fairly little real evaluation time, and I only**

1 **know of one person from Bechtel that worked on the**
2 **schedule. So that this was a -- I thought that**
3 **they would have needed far more time and effort in**
4 **order to rerun the schedule.**
5 Q. Your notes go on to say in the lower
6 right-hand corner: Focus on docs. Couldn't get
7 more redaction. What does that mean?
8 **A. Bechtel spent a lot of time explaining**
9 **that they couldn't get ahold of information,**
10 **documents from Westinghouse primarily or the**
11 **Consortium in general or that when they -- even**
12 **when they did get documents they oftentimes would**
13 **be in redacted form.**
14 **So it was a complaint throughout the**
15 **evaluation process that continued here in the**
16 **presentation to us about what they couldn't get**
17 **from Westinghouse.**
18 Q. What was your overall impression of the
19 level of detail of the usefulness of Bechtel's
20 schedule that was included in the October 2015
21 presentation?
22 **A. I thought it was -- it included some**
23 **fairly high level assumptions. So, you know,**
24 **honestly I didn't find it very useful; and again, I**
25 **was a little concerned that they were angling to**

125

1 get to work on the project. And so if that was
2 their goal was to get work on the project then
3 making things look or sound worse than they were
4 would allow them to then come in and be a white
5 knight to save the day kind of thing.

6 So I was a little skeptical of their
7 motives since a rerunning of the schedule was not
8 asked for and their high level assumptions -- you
9 know, they limited the work hours. They limited
10 the work shifts. They limited the amount of
11 people, which was, you know, far different than
12 what even CB&I at the time and certainly Fluor
13 later was going to attempt to staff up to. So some
14 of their limitations I found to be unrealistic.

15 Q. You note -- again, in these notes in
16 the lower right-hand corner of Exhibit 22 there is
17 a notation that says: Focus on their
18 expertise/experience. Do you see that?

19 A. I do.

20 Q. What does that refer to?

21 A. From the first time that we met with
22 the Bechtel team back in April all the way through
23 everything that they did they harped on the amount
24 of number of years of experience that they had in
25 their team and really tried to play that up to the

126

1 point where I thought they really oversold it.

2 Q. Were the owners receptive to having
3 Bechtel play a role on the project?

4 A. I think -- if I were to answer from the
5 SCE&G perspective, I would say that not receptive,
6 and on the Santee Cooper side I think that Michael
7 Crosby was receptive to that. I don't know how
8 strongly the other members of the Santee team felt.

9 Q. Did you think that Bechtel's assessment
10 of the schedule contained in its October 22nd, 2015
11 preliminary assessment was reliable?

12 A. I did not think it to be reliable based
13 on some of the assumptions that they made that were
14 not things that the current Consortium or later
15 Fluor was looking at pursuing.

16 The fact that they didn't have enough
17 time and the fact that they had complained about
18 not getting access to enough information or
19 documents -- in fact, I believe it was Jason Moore
20 that made reference to the fact that they had
21 received some schedule information on a CD and it
22 was too big to even run. So they couldn't run the
23 scheduling CD.

24 So all of the stuff that they said led
25 me to believe that the schedule may not be

127

1 accurate. In addition to what Carl Rau said, I
2 believe in the assessment there was a warning not
3 to make changes to your baseline schedule based on
4 what they had come up with.

5 Q. Did you ever have a conversation with
6 anyone at Bechtel about the October 22nd
7 presentation?

8 A. I know I had a -- outside of the
9 presentation you mean?

10 Q. Yes.

11 A. Yes. Anybody from Bechtel -- I know I
12 had a conversation with Ty Troutman. I think he's
13 the only person I had a conversation with about
14 their assessment.

15 Q. Tell us what you remember about the
16 conversation with Mr. Troutman.

17 A. I know that Mr. Troutman gave me a call
18 in December of 2015 and asked me what was up with
19 the assessment.

20 You know, I told him that from my
21 perspective I was a little disappointed in the
22 quality of the assessment overall, that I would
23 have expected more from a company like Bechtel,
24 particularly with the amount of experience that
25 they claimed to have on it.

128

1 He complained about some things that
2 George Wenick was doing, but I was not privy to
3 those, so I couldn't really discuss that with him.
4 He had much more information on that than I did.
5 He asked me at the tail end what I thought was the
6 next steps with the assessment, and I told him that
7 from my perspective as far as I was concerned the
8 presentation that they gave us was nothing.

9 Q. What did -- do you recall what he said
10 about his discussions with Mr. Wenick, what the
11 issue was?

12 A. I don't -- I don't recall any specifics
13 about that. I just remember that he was
14 complaining about George Wenick making comments on
15 the report, but I don't remember specific details.
16 No.

17 Q. Did you discuss the schedule assessment
18 with Mr. Troutman in this telephone conversation in
19 December of 2015 that you just described?

20 A. I don't recall discussing it with him
21 specifically.

22 Q. Did you have any other conversations
23 with Mr. Troutman about Bechtel's assessment?

24 A. Not after that. I did see
25 Mr. Troutman, I think, on site once. I believe he

129

1 attended a -- what do you call it? Alignment
2 meeting, is what we termed it, between the owners
3 and Bechtel. That would have happened on site, so
4 I had seen him and would have talked to him at that
5 point in time. But as far as I recall that was
6 about it.

7 Q. Did you -- to the best of your
8 recollection sitting here today did you ever
9 discuss this schedule assessment with Mr. Troutman?

10 A. I don't recall. I'm not saying I
11 didn't do it; I just don't recall doing it.

12 Q. Were you ever interviewed by anyone at
13 Bechtel in connection with the assessment?

14 A. Yes. As a part of the assessment they
15 interviewed -- Bechtel interviewed a number of
16 members of the SCANA leadership team, myself
17 included. So I had an interview with both Carl Rau
18 and Dick Miller.

19 Q. What do you recall about the details,
20 if any, of that interview?

21 A. What I recall about the interview was
22 it was far shorter than I had anticipated it would
23 be. If it was 30 minutes I would be surprised, and
24 I had allocated an hour plus for the meeting. And
25 in my mind if you didn't have an opportunity to sit

130

1 down with somebody who was the president of the
2 company and two very high level folks from Bechtel
3 that they should engage in, you know, a much more
4 detailed conversation. It was fairly superficial
5 from that respect.

6 They asked me some questions about
7 organization and structure, and I was a little bit
8 surprised by Carl Rau asking about -- asking for
9 details about the negotiations revolving the
10 Consortium.

11 So at this point in time the Consortium
12 had approached the owners and said CB&I would like
13 to get out, and the negotiations around that were
14 ongoing that led to the October of 2015 agreement
15 to do that. Mr. Rau appeared to know some details
16 about that, which puzzled me and was pressing me
17 for more details, and I let him know that, you
18 know, whatever was going on I'm under a
19 nondisclosure agreement and I'm not going to
20 violate that.

21 (DFT. EXH. 23, copy of handwritten
22 notes, 1/14/15, marked for identification.)

23 BY MR. BALSER:

24 Q. Mr. Byrne, you have been handed what we
25 have marked as Exhibit 23, which appear to be

131

1 another set of your handwritten notes.

2 Do you recognize Exhibit 23?

3 A. I do.

4 Q. What are they?

5 A. These are notes of a meeting relative
6 to the third-party assessment between SCANA and
7 Santee, which was also attended by George Wenick,
8 the attorney for the Atlanta law firm that you
9 referenced earlier that happened in January of '16.

10 Q. So this is -- these are notes of a
11 meeting January 14, 2016. And who do your notes
12 reflect attended from Santee Cooper?

13 A. From Santee Cooper it was Lonnie
14 Carter, their CEO; Mike Baxley, who is their
15 general counsel; Michael Crosby; Steve Pelcher, who
16 is an attorney for them, and Marion Cherry, who was
17 their representative at the project site.

18 From SCANA it was Kevin Marsh; Jeff
19 Archie; myself; Ron Lindsey, who is a general
20 counsel, and Al Bynum, who is our internal attorney
21 of nuclear activities, and then George Wenick from
22 the Atlanta law firm.

23 Q. So what was the purpose of this meeting
24 as you recall?

25 A. I don't recall exactly what the purpose

132

1 of the meeting was.

2 In looking through the notes it appears
3 that it's an opportunity to talk about the
4 third-party assessment that was done by Bechtel and
5 what to do with it.

6 Q. So your notes reflect that Mr. Wenick
7 was there. His abbreviated initials are "GW?"

8 A. Correct.

9 Q. And he began -- it seems based on your
10 notes that he gave an overview of why we engaged
11 Bechtel. Is that what that reflects?

12 A. That's correct.

13 Q. And then his next set of comments says:
14 I'm just counsel looking for guidance. Many
15 Bechtel recommendations moot by new agreement.

16 Do you see that?

17 A. I do.

18 Q. What does that mean?

19 A. That the -- this meeting happened after
20 the October -- I think it was October 27th of the
21 2015 agreement that allowed CB&I to exit, which
22 also amended a number of provisions of the EPC
23 contract. And so what -- Mr. Wenick was of the
24 opinion that many of the recommendations from
25 Bechtel were rendered moot by the agreement that

133

1 had been entered with Westinghouse that allowed
2 CB&I to exit.

3 Q. Were you involved in negotiating the
4 2015 amendment?

5 A. I was.

6 Q. And you spent a lot of time doing that?

7 A. I certainly did.

8 Q. Fair to say that in the August to
9 October 2015 time frame the negotiation of the 2015
10 amendment was one of your primary focuses at that
11 time?

12 A. I would say it was the primary focus
13 for September and October.

14 Q. So there were issues that Mr. Wenick
15 said were mooted by the 2015 amendment.

16 What about the issues that weren't
17 mooted by the 2015 amendment? What was going on
18 with those?

19 A. Well, of course, at this point in time
20 -- this is January of '16. The report from Bechtel
21 was still a draft. I call it a draft; they call it
22 preliminary. But it had only been that October --
23 that I knew of they had only the October 22nd of
24 '15 draft, and there weren't a significant amount
25 of details or recommendations in that in order to

134

1 -- you know, to handle -- but all of the
2 recommendations relative to the Consortium, the
3 Consortium not getting along, and the Consortium
4 needs to do this. With the breakup of the
5 Consortium that rendered moot most of those points.

6 There were some things in it that
7 would need to be addressed by the owners, but it
8 wasn't until the final report came out -- I think
9 it was in February of 2016 that the owners then
10 took that final report and did an evaluation for
11 which things were no longer applicable based on the
12 agreement and bringing in Fluor and then which
13 things would yet need to have some access to.

14 Q. With respect to the issues that SCE&G
15 had known about and was aware of for the Bechtel --
16 well, strike that.

17 Was there any issue regarding the
18 project raised in the Bechtel report that SCE&G had
19 not previously been aware of?

20 A. I would say that at a macro level the
21 owners were aware of all of the issues that were
22 presented in the Bechtel report, and I say that
23 because in large measure what Bechtel did was they
24 interviewed the owners' team, they interviewed the
25 Consortium's team, and then regurgitated that in a

135

1 report.

2 So it's like asking to borrow your
3 watch and telling you what time it is. So that was
4 -- those things are not going to be a surprise when
5 they got them from either the Consortium or from
6 the owners.

7 There were some things in the report
8 that I would say were beneficial things that the
9 owners should look at. I don't know that there
10 were any big "ah-ha" moments in it. I recall there
11 being some things in the engineering area that we
12 thought we'll take a look at it. There were some
13 things relative to morale. How do you get --
14 perhaps celebrate victories better; that, you know,
15 we probably don't do a good enough job of
16 celebrating the victories. But I don't view those
17 as material.

18 So I didn't think that from their
19 recommendations there was anything in there that
20 was really at a big picture. They did recommend
21 that SCE&G needed more EPC experience or help,
22 which I viewed as them wanting to get in as the
23 owner's engineer. So that was one that SCE&G
24 disagreed with.

25 So there were some things that we were

136

1 not in agreement over. So that's how I would kind
2 of characterize as a big picture of improvements.

3 Q. Going back to your notes on Exhibit 23,
4 I want to focus on Mr. Wenick's comments that are
5 reflected in your notes.

6 So we were looking -- I directed your
7 attention to Mr. Wenick's comment about many
8 Bechtel recommendations moot by new agreement.

9 The next line says: Re SKED -- and
10 that's schedule; right?

11 A. Yes.

12 Q. "They would need to have 'more robust'
13 look at schedule concern with Bechtel method for
14 schedule prediction."

15 What does that mean? What is that
16 referring to?

17 A. It just means that in Mr. Wenick's mind
18 that in order to come up with a good schedule they
19 would need a more robust approach, a more robust
20 look at the schedule, and he was concerned with
21 some of Bechtel's methods for schedule prediction.

22 Q. He goes on to say: If we don't -- and
23 there is a delta sign. Does that mean "change?"

24 A. Change. That's correct.

25 Q. "If they don't change their prediction

1 will be viewed as owner's opinion - consequences."
2 What do you recall Mr. Wenick saying
3 there?

4 **A. He was of the opinion that even if it's**
5 **a third party that makes a statement that you don't**
6 **necessarily agree with unless you contest it or**
7 **change it then it will be viewed as your opinion.**
8 **You know, that opinion could come with**
9 **consequences.**

10 Q. Wenick then goes on to say -- so
11 Mr. Wenick says: Disclosure issues potentially.
12 I'm construction lawyer and I'm telling you that
13 much of info provided is not useful, particularly
14 schedule, which is based on quote, dire
15 predictions, close quote.

16 **A. Correct.**

17 Q. What do you recall Mr. Wenick conveying
18 about that subject?

19 **A. What I remember him conveying is**
20 **exactly what I've written down here. "Dire**
21 **predictions" was in quotes because he used that**
22 **term. So this is somebody that the company has**
23 **hired for their -- for expertise, and Mr. Wenick**
24 **was advising our law firm and our internal lawyers**
25 **and lawyers from Santee Cooper, because it was**

1 **really a joint retention. And so the person that,**
2 **you know, our legal teams had hired to give advice**
3 **was giving advice.**

4 MR. COX: Can I get a break?

5 MR. BALSER: Sure. It's 12:20. Let's
6 go off the record.

7 THE VIDEOTAPE SPECIALIST: We will now
8 go off the record. The time is approximately 12:18
9 p.m.

10 (Lunch recess taken.)

11 THE VIDEOTAPE SPECIALIST: We are now
12 back on the record. The time is approximately 1:32
13 p.m.

14 BY MR. BALSER:

15 Q. Mr. Byrne, before we broke for lunch we
16 were looking at your notes of a meeting that
17 occurred in January of 2016 discussing Bechtel
18 assessment.

19 Did you ever receive a copy of any
20 draft of the Bechtel report before receiving a
21 final report?

22 **A. The only draft that I received was the**
23 **presentation that we have previously looked at that**
24 **was dated October 22nd of 2015.**

25 Q. Did you have any involvement in editing

1 or revising Bechtel's report?

2 **A. No, I did not.**

3 Q. Let me hand you what we've marked and
4 what we're going to mark as Exhibit 24.
5 (DFT. EXH. 24, Bechtel Project
6 Assessment Report, 2/5/16, marked for
7 identification.)

8 Q. (Continued) Do you recognize Exhibit
9 24?

10 **A. I do.**

11 Q. What do you understand it to be?

12 **A. I understand this to be the final**
13 **report on the third-party assessment that Bechtel**
14 **did on the project.**

15 Q. Did you receive a copy of this final
16 report?

17 **A. I did.**

18 Q. When did you receive it?

19 **A. I don't recall exactly when I received**
20 **it. I got it from our legal department. And it**
21 **would have been sometime after February the 5th,**
22 **but I don't recall the exact date.**

23 Q. This report, Exhibit 24, doesn't
24 include the scheduling information that was in the
25 October presentation.

1 Were you involved in removing the
2 schedules from the prior assessment to the final
3 report?

4 **A. No, I was not.**

5 Q. Did the owners take any action to
6 follow up on any of the recommendations in the
7 Bechtel assessment?

8 **A. Yes. The two owners took all of the**
9 **issues that were identified in the Bechtel report,**
10 **all of the recommendations, and evaluated those**
11 **against whether or not the October agreement would**
12 **have answered the question or taken care of the**
13 **recommendation or whether or not the owners needed**
14 **to take some other or more detailed action based on**
15 **the recommendations.**

16 Q. Did the company form a Construction
17 Oversight Review Board?

18 **A. The company did formulate a**
19 **Construction Oversight Review Board. That's**
20 **correct.**

21 Q. And what is -- I've heard that referred
22 to as "the CORB." Is that vernacular that you're
23 used to?

24 **A. Yes, it is.**

25 Q. So if we say "CORB," we're talking

1 about the Construction Oversight Review Board?

2 A. That's right.

3 Q. What did the CORB do?

4 A. The CORB was intended to answer the
5 perceived issues or questions around oversight on
6 the project, and it was actually an idea that I
7 came up with in order to take advantage of
8 experience from outside the project that could
9 change as the project developed. So the project
10 would go through different phases. It was
11 envisioned that the CORB membership could change.
12 The CORB membership would be visiting the site
13 roughly once a quarter and evaluating and then
14 reporting out to the two CEO's.

15 (DFT. EXH. 25, email chain with
16 attachment, marked for identification.)

17 BY MR. BALSER:

18 Q. Mr. Byrne, you have been handed what
19 we've marked as Exhibit 25, and I want to direct
20 your attention to both the cover email and the
21 attachment.

22 Do you recognize Exhibit 25?

23 A. I do.

24 Q. What is it?

25 A. It's what the owners called a Project

1 the Chief Executive Officer for SCE&G, was the
2 point person for SCE&G on the Bechtel assessment.
3 He was the coordinator for it.

4 Q. Who was involved in the Project
5 Assessment Report, like creating this and managing
6 it?

7 A. Well, certainly Mr. Cherry, Mr. Archie,
8 and Mr. Archie would have included some members of
9 his staff. I know that Kyle Young had been
10 involved in it, who was a manager at the new
11 nuclear group. Ron Jones who was a VP for nuclear
12 construction would have been involved. So
13 Mr. Archie would have had a number of his staff
14 that were involved in this.

15 Q. And were changes made and improvements
16 made as a result of the Project Assessment Report
17 process?

18 A. There were some proposed changes that
19 were made as a result of this process that were
20 presented to both boards of directors.

21 Q. When we were looking at your notes
22 before we talked for a minute about George Wenick's
23 comment that the 2015 amendment had mooted many of
24 the issues that had been raised in the Bechtel
25 report.

1 Assessment Report or PAR, P-A-R, and this Project
2 Assessment Report took issues from the Bechtel
3 report and was -- this one, I believe, was giving
4 Santee Cooper's input to those issues.

5 Q. So the attachment to --

6 A. I should be clear also. There were
7 some issues in addition to what was in the Bechtel
8 report that were included by the owners.

9 Q. So this was a Project Assessment Report
10 that was prepared by the owners that identified
11 certain issues raised by Westinghouse -- I mean by
12 Bechtel and then other issues. It was kind of a
13 tracking spreadsheet?

14 A. Yes. That's correct.

15 Q. In the column that says "Santee Cooper
16 comments," is that a -- does that reflect comments
17 that Santee Cooper provided input on with respect
18 to the issues that are identified in the third
19 column?

20 A. That's correct. And the person that
21 was -- if you look at the first sheet, from Marion
22 Cherry to Jeff Archie. Marion Cherry is Santee
23 Cooper. So Marion was sending his comments to
24 Mr. Archie.

25 I should point out Mr. Archie, who is

1 Can you -- let's go back to that time
2 frame starting in either late August or early
3 September of 2015. Can you walk us through what
4 led to -- I want to talk in some detail about the
5 amendment, but what led to the discussions about
6 the amendment. What was going on at the time?

7 A. Late August, early September the
8 Consortium members -- we were still dealing -- the
9 company still dealing -- the owners were still
10 dealing with commercial issues with the Consortium.
11 It was getting difficult to get the Consortium
12 members in the same room at the same time. The
13 leadership team I'm talking about, not the project
14 level folks but their executive leadership team.

15 Some things didn't seem to be going
16 well. And so CB&I and Westinghouse asked the
17 owners to meet, without necessarily giving a reason
18 for the meeting. In the meeting they proffered
19 some nondisclosure agreements and said that they
20 wanted to propose something but that the companies
21 would have to sign NDAs in order to review the
22 information, and after doing so Westinghouse and
23 CB&I let the owners know that things weren't
24 working well, that CB&I wanted out of the project,
25 and Westinghouse wanted to let them out of the

1 project.

2 I know Mr. Marsh questioned CB&I
3 representative there relative to why, and the CB&I
4 representative indicated that he saw the project
5 headed towards litigation and that he didn't view
6 the Consortium relationship working any longer and
7 thought that one entity needed to be in charge.

8 So that was kind of the kick-off to the
9 negotiations, changes to the EPC contract, which we
10 sometimes call the October of 2015 amendment. So
11 since Westinghouse wanted CB&I to leave that was
12 the leverage that the owners needed to renegotiate
13 some portions of the EPC contract.

14 (DFT. EXH. 26, Amendment to the
15 Engineering, Procurement and Construction
16 Agreement, marked for identification.)

17 BY MR. BALSER:

18 Q. Mr. Byrne, you have been handed what
19 has been marked as Exhibit 26. Is this the October
20 2015 EPC amendment?

21 A. It is.

22 Q. What were some of the key aspects of
23 the 2015 EPC amendment from your perspective?

24 A. Well, the owners evaluated what kind of
25 things that we would like to see different in the

1 EPC contract and went about trying to negotiate to
2 get to those things.

3 So one of the biggest things was what I
4 would call the carrot and the stick, incentives for
5 the Consortium to finish on time or the penalties
6 should they not finish on time. And the Consortium
7 had really, I think, acquiesced to the fact that
8 they were going to pay all the original liquidated
9 damages. So that was no longer becoming incentive
10 for them to finish. So the goal here was to incent
11 them to finish on time and meet production tax
12 credits.

13 So between the increase in liquidated
14 damages and the bonus for completion, that total
15 swing would be about a billion dollars. So that
16 there were some -- what the owners thought was
17 really money on the line for the -- Westinghouse in
18 this case now since the Consortium has been
19 absolved, for Westinghouse to complete the units on
20 time and qualify for production tax credits.

21 Another key change was the wording
22 around what constituted or allowed a change based
23 on a change in the law. The Consortium heretofore
24 had been making claims about changing the law that
25 the owners didn't necessarily agree with, and the

1 language, it seemed -- a simple language change
2 could take care of most of that. And so it really
3 tightened up what the Consortium would be allowed
4 to take a change order for. So that was viewed as
5 a very positive change.

6 It did allow CB&I to exit. It just
7 reaffirmed the parental guarantee for Toshiba
8 Corporation over the project now. It eliminated
9 some bonus payments for increased output from the
10 units that the Consortium felt like they would
11 likely achieve. So it eliminated those bonus
12 payments. That wasn't viewed as an incentive for
13 them to finish on time; it was viewed as reducing
14 the overall cost at the tail end if those bonus
15 payments could be eliminated.

16 Q. And, of course, one of the primary if
17 not the primary aspect of the amendment was the
18 fixed price option?

19 MR. COX: Object to the form.

20 A. The -- if we read through the rest of
21 this, certainly the large liquidated damages was a
22 big part of it. It resolved a majority of the
23 commercial issues that existed at the time between
24 the two companies, save for some things that were
25 still being negotiated, whether it was entitlement

1 -- and those were specifically listed in a separate
2 exhibit or attachment to this. Guaranteed
3 substantial completion dates were moved back. I
4 think it was about two and a half months.

5 Another big aspect was the change in
6 reference to the design certification document. So
7 a DCD 16 was what the plants were -- what the
8 contract was signed to, but what the plants were
9 actually licensed to was the latest revision of
10 that design certification document or DCD, which
11 was Rev. 19. So that caused some commercial
12 disputes between the owners and Westinghouse as
13 well. So this was going to clear up the fact that
14 the price was relative to DCD Rev. 19, the most
15 current revision of the DCD.

16 It allowed for a dispute resolution, a
17 Dispute Resolution Board or DRB, and the whole
18 intent of that Dispute Resolution Board or DRB was
19 to bring quicker resolution to commercial issues.
20 It also eliminated the 90% payment provisions where
21 there were disputed invoices such that the dispute
22 now, while there should be fewer disputes, would go
23 to the DRB and get timely resolution as opposed to
24 hanging around for many, many years.

25 Q. Going into the negotiations with

149

1 Westinghouse over -- that led to the amendment, was
2 there a goal set internally at SCE&G about trying
3 to obtain a fixed price option?

4 **A. The notion or concept of a fixed price**
5 **option had been discussed, understanding that that**
6 **fixed price option would come with a risk premium.**
7 **And so that was discussed during the negotiation**
8 **process with Westinghouse. And originally**
9 **Westinghouse came back with, I think, a fairly high**
10 **risk premium, but that was negotiated down to**
11 **roughly 500 million. I think it might have been**
12 **505. Something along those lines. But around a**
13 **\$500 million risk premium basis for fixing the**
14 **price going forward. And in the agreement what the**
15 **owners got was an option for a year at the owners'**
16 **so discretion to exercise that fixed price option.**

17 **Q. Did the management view -- management**
18 **of SCE&G view the fixed price option as a**
19 **potentially beneficial way of moving forward?**

20 **A. Certainly I think the -- I can speak**
21 **for the SCE&G side. I think the Santee side felt**
22 **the same way, that a fixed price would offer**
23 **protections to the company, protections to the rate**
24 **payers, and would simplify things. So things that**
25 **the company accountants would have to monitor to**

150

1 **ensure that the Consortium wasn't trying to bill**
2 **for something they shouldn't or double bill for**
3 **things. If it's a fixed price option then that no**
4 **longer is the case.**

5 **So the fixed price option was certainly**
6 **viewed as positive. Another positive outcome I**
7 **think that both companies were looking favorably**
8 **on, both Santee and SCANA, was the construction**
9 **milestone payment schedule. So where schedules in**
10 **the past were perhaps out of step with where the**
11 **project actually was, a construction milestone**
12 **payment schedule would eliminate the old progress**
13 **payments and substitute a construction milestone**
14 **payment schedule for all of the payments, meaning**
15 **that if Westinghouse didn't hit a milestone then**
16 **they weren't getting paid. So again, incentive for**
17 **them to start hitting milestones and getting the**
18 **plant done.**

19 **Q. You mentioned the creation of the DRB.**
20 **Was a fixed construction milestone**
21 **payment schedule agreed upon at the time the**
22 **October 2015 amendment occurred?**

23 **A. No. It was agreed upon that**
24 **Westinghouse and the owners would work together to**
25 **try to come up with a construction milestone**

151

1 **payment schedule but that that could take a number**
2 **of months. And so there was an interim payment**
3 **schedule outline until the construction milestone**
4 **payment schedule could be agreed upon.**

5 **So the concept was agreed upon; the**
6 **actual milestones were not yet agreed upon.**

7 **Q. And the parties eventually actually**
8 **could not agree?**

9 **MR. BALSER: Let's go off the record.**

10 **THE VIDEOTAPE SPECIALIST: Off the**
11 **record. The time is approximately 1:50 p.m.**
12 **(Discussion off the record.)**

13 **THE VIDEOTAPE SPECIALIST: We are now**
14 **back on the record. The time is approximately 1:53**
15 **p.m.**

16 **MR. BALSER: After a brief hiatus to**
17 **fix a technical problem we're back on the record.**
18 **If I could ask the court reporter just to read back**
19 **the last question and answer before we went off the**
20 **record.**

21 **(The court reporter read the previous**
22 **question and answer.)**

23 **BY MR. BALSER:**

24 **Q. So let me ask that -- so to pick up**
25 **where we left off, the October 2015 amendment**

152

1 **contemplated that the parties would agree upon a**
2 **construction milestone payment schedule; right?**

3 **A. That's correct.**

4 **Q. The parties were unable to reach an**
5 **agreement on a construction milestone payment**
6 **schedule; correct?**

7 **A. Yeah. The parties had reached at least**
8 **tentative agreement on the milestones but were not**
9 **able to reach agreement on the cash flow associated**
10 **with the milestones.**

11 **Q. And that issue; that is, the cash flow**
12 **associated with the milestones, was actually**
13 **litigated in front of the DRB in 2016?**

14 **A. That was referred to the DRB in 2016,**
15 **the end of 2016. I think the company filed with**
16 **the DRB or the owners filed with the DRB October --**
17 **I'm sorry. August the 1st of '16.**

18 **Q. Were you involved in the discussions**
19 **with Westinghouse as to the interim payments that**
20 **would be made monthly from the time of the**
21 **execution of the October amendment and agreement**
22 **upon a final construction milestone payment**
23 **schedule?**

24 **A. I was.**

25 **Q. All right. Tell us what you recall**

153

1 about those discussions and what agreements were
2 reached between the parties on that.

3 **A. So both sides, the owners and**
4 **Westinghouse, acknowledged that we didn't at**
5 **current have a construction milestone payment**
6 **schedule even though it was agreed that we would**
7 **switch to that payment method and that it might**
8 **take some time in order to get to that point -- I**
9 **don't know how long exactly it was contemplated,**
10 **but probably something along the lines of four to**
11 **six months -- and that Westinghouse had asked for**
12 **an amount of money to be paid in lieu of the**
13 **construction milestone payment schedule that would**
14 **allow them to make the transitions that were**
15 **contemplated in the October of 2015 agreement,**
16 **bring Fluor onboard, allow Fluor to start ramping**
17 **up the work force in order to hit the guarantee**
18 **substantial completion dates.**

19 **So what they essentially asked for was**
20 **ramp up funding, if you will, and allow them to**
21 **continue to operate while we negotiated the**
22 **construction milestone payment schedule.**

23 **The amount that they asked for was**
24 **something fairly high. I think it was 140 or 130**
25 **million dollars a month, and then a lot of back and**

154

1 **forth about, you know, what the right number is,**
2 **and it was agreed upon that -- we settled on, if**
3 **you will, a hundred million dollars a month.**

4 **Q. And then was there an understanding as**
5 **to whether there would be a true-up at some point;**
6 **and if so, how would that work?**

7 **A. Certainly both owners believed that the**
8 **agreement called for a true-up such that there**
9 **would be -- even though the payments were made to**
10 **Westinghouse, Westinghouse would still generate**
11 **invoices as if it was under our old tracking**
12 **system, and that the invoices would be utilized in**
13 **order to effect a true-up at the end of the period.**

14 **Q. Did that occur?**

15 **A. The true-up did not occur. One of the**
16 **issues that the DRB dealt with was this true-up**
17 **provision. And I don't think the owners thought**
18 **that the true-up provision was even in question up**
19 **to that point in time, but that Westinghouse,**
20 **through their attorneys, did complain about the**
21 **true-up provision and asked the DRB to -- not to**
22 **enforce the true-up provision, and the DRB agreed**
23 **with it.**

24 **Q. So it was a litigated issue in front of**
25 **the DRB?**

155

1 **A. That's correct.**

2 **Q. What was the process that the company**
3 **used to inform the Public Service Commission of the**
4 **October 2015 amendment?**

5 **A. The company had an ex parte briefing**
6 **with the Public Service Commission, let the**
7 **Commission know what was in the October agreement.**
8 **Also let the Commission know that the fixed price**
9 **option portion of that agreement would be evaluated**
10 **and that when that evaluation was complete that the**
11 **company would come back with whatever decision was**
12 **made, whether it was to exercise the fixed price**
13 **option or not in a formal litigated hearing**
14 **proceeding.**

15 **(DFT. EXH. 27, copy of Allowable Ex**
16 **Parte Communication Briefing, marked for**
17 **identification.)**

18 **BY MR. BALSER:**

19 **Q. Mr. Byrne, you have been handed what**
20 **has been marked as Exhibit 27. Do you recognize**
21 **this document?**

22 **A. I do.**

23 **Q. What is it?**

24 **A. This is a presentation used at the ex**
25 **parte briefing with the Public Service Commission**

156

1 **after the signing of the fixed price option --**
2 **sorry. After the signing of the October 22nd EPC**
3 **amendment.**

4 **Q. Were you present along with Mr. Marsh**
5 **and Mr. Addison at the ex parte briefing?**

6 **A. I was. All three of us presented at**
7 **that meeting.**

8 **Q. I want to direct your attention to Page**
9 **3 of Exhibit 27, which is a slide entitled "Goals**
10 **of Negotiations."**

11 **Does this slide accurately reflect what**
12 **SCE&G's goals in negotiating the October of 2015 --**
13 **2015 amendment were?**

14 **A. I would say yes, it does.**

15 **Q. Page 5 of Exhibit 27 includes a**
16 **description of how SCE&G plans to move forward, and**
17 **there is a reference to Fluor's assessment of the**
18 **impact on the schedule. Do you see that?**

19 **A. I do.**

20 **Q. What does that refer to?**

21 **A. It was referring to the fact that Fluor**
22 **was going to do -- as is the case when any new**
23 **constructor comes in, they want to utilize their**
24 **own means and methods to accomplish the task, do**
25 **their own staffing studies. Those kind of things.**

1 Fluor was going to do a review of the
2 schedule, and Westinghouse was directing that. So
3 in the arrangement that was going to take place
4 January 1st, Westinghouse was the only EPC
5 counter-party inasmuch as they owned themselves and
6 they own now Stone & Webster. And Fluor, rather
7 than being a consortium partner, was coming in as a
8 contract and construction manager. So that Fluor
9 was going to do their assessment of the schedule
10 and input to Westinghouse so that we could get a
11 new integrated project schedule.

12 Q. Was bringing Fluor on the project seen
13 as a positive for the project?

14 A. Yes. I would say that Fluor was viewed
15 as positive for a number of reasons. One is their
16 prior nuclear experience, which included V.C.
17 Summer Unit 1, which SCE&G had been operating there
18 at the Jenkinsville site.

19 Fluor had actually done construction on
20 another reactor that was adjacent to the site
21 called the power reactor back in late '50s, early
22 '60s, and Fluor had been involved in the nuclear
23 industry at a number of places, still had a nuclear
24 group, and actually operated their nuclear group
25 out of Greenville, South Carolina.

1 The CEO at Fluor was a University of
2 South Carolina graduate. The person that SCE&G and
3 Southern Company in fact were going to deal with
4 was a Furman graduate. So a lot of ties to the
5 state of South Carolina. But a significant amount
6 of experience and a different arrangement inasmuch
7 as they were not in a consortium arrangement any
8 longer with Westinghouse. And their leadership,
9 the Fluor leadership, was viewed as a change, which
10 would be a positive change for the project.

11 Fluor's ability to hire also was viewed
12 as positive, and we did see that come to fruition
13 that Fluor was able to hire. And in presentation
14 materials -- I've been to presentation materials
15 with Shaw and CB&I and other companies, and almost
16 everybody shows you metrics on how many contracts
17 they have, what kind of backlog they have, what
18 awards that they've won and all this kind of thing,
19 but Fluor was the only one that was able to tout
20 that they have won awards for being the most
21 ethical company in the business.

22 So yeah. I think that Fluor 's
23 involvement was positive. In addition to that,
24 SCE&G had positive experiences with Fluor and
25 recent positive experiences with Fluor in EPC

1 arrangements. So Fluor, for example, was the
2 constructor of the last couple of power plants that
3 SCE&G built. They were combined cycle gas plants.
4 The last couple of big modifications that the
5 company had done were an addition of scrubbers at
6 some of the big coal plants. And again, under the
7 EPC arrangement Fluor was the constructor there.

8 So the experience of SCE&G with Fluor
9 was good. Their ties to the state were positive.
10 Their nuclear background experience was positive.
11 So yes; very positive.

12 Q. Directing your attention back to Page 5
13 of the slide deck that we've marked as Exhibit 27,
14 the second bullet point says: Evaluate value of
15 the risk premium associated with fixed price
16 option.

17 What does that mean?

18 A. Well, as I said earlier, with a fixed
19 price or a fixed price option the contractor now is
20 assuming risk for things that otherwise they might
21 be able to pass on to the owners if they changed.

22 So with each contractor will come some
23 risk premium on the part of the contractor, and
24 when it's a fully fixed price you would expect that
25 to be fairly significant. So the risk premium

1 associated with exercise of the fixed price option
2 was roughly \$500 million. And so what the owners
3 wanted to do was evaluate how much they thought
4 there was value in paying that \$500 million risk
5 premium.

6 So if the new EPC was viewed as rock
7 solid and you could depend on it then you wouldn't
8 necessarily want to spend \$500 million in risk
9 premium. If you thought that there was risk there
10 and it was more than that \$500 million value, you
11 would transfer that risk to the contractor, and
12 that's what was done.

13 Q. And so the company undertook an
14 analysis to try to determine whether to exercise
15 the fixed price option?

16 A. That's correct.

17 Q. Who led that effort?

18 A. It was a multi-primed effort, but the
19 financial evaluation was done by the generation
20 planning group and Joe Lynch.

21 Q. And what determination did the company
22 make -- did SCE&G make as to whether it made sense
23 to exercise the fixed price option?

24 A. So the company did a sensitivity
25 analysis. That sensitivity analysis involved

1 changing different factors. I think there were 24
2 different solutions to that sensitivity analysis,
3 and a vast majority of them -- I think it was
4 something like 20 out of 24. It said that
5 exercising the fixed price option would be
6 beneficial. So only a minority of those would it
7 not have been beneficial.

8 In addition to that, some of the
9 anecdotal information that was coming out of Fluor
10 at the time was that they certainly understood that
11 they needed to hire more people, that they wanted
12 to put on a full night shift, a full second shift
13 or night shift. And so you're going to pay a
14 premium for the night shift, and hiring more people
15 meant more money.

16 So the mitigations that Fluor was
17 looking at, the mitigations that Westinghouse was
18 looking at, all pointed towards it costing more
19 money. So in addition to the sensitivity analysis
20 done by Dr. Lynch, the anecdotal information coming
21 out of the project was that it was going to cost
22 more money.

23 Q. And you indicated a few minutes ago
24 that as part of the October 2015 amendment the
25 guaranteed substantial completion dates were moved

1 back to -- a few months, August of 2019 and August
2 of 2020.

3 A. And that was sort of -- those were
4 Westinghouse dates. So those were the dates that
5 Westinghouse wanted.

6 Q. So as a result of the analysis that the
7 company did that you just described did the company
8 file a petition with the Public Service Commission
9 in 2016?

10 A. They did.

11 (DFT. EXH. 28, copy of Petition of
12 South Carolina Electric & Gas, marked for
13 identification.)

14 BY MR. BALSER:

15 Q. Do you recognize Exhibit 28?

16 A. I do.

17 Q. What is it?

18 A. This is the filing the company made in
19 2016 when it was looking to include the cost of the
20 EPC and exercise the fixed price option.

21 Q. At Page 4 of the petition the petition
22 describes the background for the request.

23 What, in a nutshell, was SCE&G seeking
24 to do with this petition?

25 A. SCE&G was seeking to reset the

1 guaranteed substantial completion dates to the
2 August '19 and August '20 dates that were in the
3 amendment. It was to take that schedule and then
4 from a cost perspective take all of the other cost
5 issues that were agreed to in that amendment,
6 include them in the petition, and then exercise the
7 fixed price option. Get approval for exercising
8 the fixed price option.

9 Q. Did you submit prefile testimony in
10 connection with the 2016 petition?

11 A. I did.

12 (DFT. EXH. 29, copy of Direct Testimony
13 of Stephen A. Byrne, marked for identification.)
14 BY MR. BALSER:

15 Q. Mr. Byrne, do you recognize Exhibit 29?

16 A. I do.

17 Q. Is this the testimony you submitted in
18 connection with the 2016 petition?

19 A. This was my prefile testimony, yes.

20 Q. If we could turn to Page 9 of Exhibit
21 29.

22 A. Okay.

23 Q. Starting at Line 13 you were asked to
24 describe the amendment. The first thing you note
25 is resolution of current disputes.

1 Why was the resolution of the disputes
2 with the Consortium important to the project?

3 A. Well, some of these disputes had
4 existed for a number of years, so it would be -- I
5 don't think it would have been viewed as successful
6 to go through a protracted negotiation with the
7 Consortium, settle things and then not settle some
8 of the outstanding commercial issues that existed
9 between the companies.

10 So this also would lay the ground work
11 for a better working relationship at the project
12 level, at the site level so that everybody was now
13 in the same footing going forward. So the
14 Consortium understood that they were going to be
15 awarded some of these change orders, perhaps if
16 there were contentious before, and everybody
17 understood what the basis was.

18 So it was to settle long-standing
19 disputes and create a better working relationship
20 on the plant site.

21 Q. You refer at Line 19 to the new
22 liquidated damages provisions. What -- can you
23 describe what the new liquidated damages provisions
24 were.

25 A. Yes. So tied to the guaranteed

165

1 substantial completion dates -- again,
2 contractually the guaranteed substantial completion
3 dates kick off liquidated damages such that if the
4 project isn't delivered by the guaranteed
5 substantial completion date, it starts the clock
6 running for liquidated damages.

7 Previously the liquidated damages
8 number was about a fourth of what they were under
9 this provision. So it was a significant increase.
10 You know, a fourfold plus increase in the amount of
11 liquidated damages.

12 Q. Why in your view was having a
13 liquidated damages figure as high as this
14 important; that is, in the \$371 million range?

15 A. I think the liquidated damages number
16 was important because liquidated damages are an
17 incentive for the contractor to complete in a
18 timely fashion.

19 So the previous liquidated damages
20 number really, I think, had been already broken by
21 the Consortium. They had acquiesced to the fact
22 that they were going to have to pay it. This was
23 going to reset everything and quadruple the amount
24 of liquidated damages.

25 So what the companies wanted was an

167

1 Q. The change in law definition we've
2 already talked about. That's on Page 11.

3 Let's look at -- let's go to Page 15
4 where you describe that the amendment accomplished
5 a restructuring of the Consortium. That starts at
6 Line 15.

7 Why was restructuring the Consortium
8 important to the project?

9 A. Well, important for a couple of
10 reasons. 1, the Consortium desired to restructure
11 themselves, and the owners thought that it was also
12 important to allow that to happen.

13 By restructuring, of course what we
14 mean is that we're allowing CB&I to exit, and for
15 CB&I to exit they still were responsible for
16 parental guarantee, and the owners would have to
17 relinquish that parental guarantee, which now would
18 all transfer over to Toshiba in order to let CB&I
19 exit.

20 So in order for Westinghouse to
21 effectuate some of the mitigation, some changes
22 that they wanted to see in the project, CB&I would
23 have to exit. So that meant a fundamental
24 restructuring of the Consortium.

25 Q. Which is what allowed them to bring

166

1 incentive for the contractor to complete these
2 units. So between the liquidated damages here,
3 which I would call the stick, and the performance
4 bonuses, which I would call the carrot -- between
5 the carrot and the stick it was about a billion
6 dollars. And these numbers, of course, in the
7 petition that SCE&G is filing is a 55% number. You
8 would have to increase that by 45% to get the
9 Santee Cooper portion as well.

10 Q. You've testified already about the
11 positive incentive of a bonus payment for
12 completion of the units in time for the company to
13 receive the tax credit -- the federal reduction tax
14 credits. That figure as reflected at Line 8 on
15 Page 10 of your testimony is 165 million.

16 A. And again, that's SCE&G's 55% portion.
17 The total number for both owners would have been
18 higher than that, on the order of 250 million.

19 Q. At Line 15 of Page 10 there is a
20 reference to parental guarantees.

21 Why was a parental guarantee of
22 particular importance to this project?

23 A. The short answer is the legal team was
24 pushing this. So the lawyers handled that aspect
25 of things. I really was out of that.

168

1 Fluor in under the restructuring?

2 A. Uh-huh.

3 Q. At that time had Fluor already started
4 to focus on making improvements on the project?
5 And I would direct your attention to Page 18 of
6 your testimony.

7 A. So what -- Fluor was to start on the
8 project once the deal for Westinghouse to buy Stone
9 & Webster closed. That deal didn't close until the
10 end of 2015. I think it was literally December 31
11 of 2015. So it was always envisioned that Fluor --
12 it was CB&I up to that point. So that Fluor would
13 start on the project on January 1. Since January 1
14 is a holiday functionally that's probably the 3rd
15 or 4th. I don't know when the real first day of
16 work was. But essentially the first of January
17 Fluor would come on.

18 Prior to Fluor showing up at the site
19 they went through -- and one of the things being
20 described here is Project Bluefin, and Project
21 Bluefin was an effort by -- a combined effort by
22 Westinghouse, Fluor, Southern Company and SCANA to
23 get together to discuss potential improvements to
24 the work streams. And what I mean by "work
25 streams" is what it takes to get people to the

169

1 project, what it takes to get the work done on the
2 project, what it takes to get parts and pieces to
3 the project. So work packages, for example, would
4 need to be streamlined so the craft could actually
5 go out and work more efficiently.

6 If Fluor was to increase the staffing
7 significantly, they wanted to make sure the
8 in-processing -- the process itself was as
9 streamlined as it could be. So those were the
10 kinds of thing that Fluor, Southern, SCANA,
11 Westinghouse were looking at on this project.

12 So prior to Fluor showing up on site
13 they went through that effort, an effort that was
14 described to me by the New Nuclear Development Team
15 folks that are involved in it as the best effort
16 they had seen like this, and they were very
17 heartened by the level of effort that both
18 Westinghouse and Fluor went through to support this
19 effort.

20 Q. If we could turn back to your Page 6 of
21 your 2016 testimony, which we have marked as
22 Exhibit 29. It's the document you're in.

23 A. Uh-huh.

24 Q. I want to direct your attention to your
25 testimony about the new guaranteed substantial

171

1 coming in with fresh eyes to review the project
2 schedule that Westinghouse was the custodian on.
3 So it was an opportunity for Fluor to put their
4 brand on the schedule, if you will, and give us a
5 fresh set of eyes on the schedule.

6 Q. On Page 9 in the first full paragraph
7 of your 2016 testimony you say: Nonetheless, this
8 remains a very complex and challenging project.
9 Meeting the current schedule will require a great
10 deal of construction management skill.

11 What did you mean by that?

12 A. That even with the new schedules, the
13 newly reset guaranteed substantial completion
14 dates, that there was still risk in the schedule
15 and still mitigations that would be required, and
16 those mitigations would need to be handled with
17 companies that would be adept at handling those
18 and Westinghouse and Fluor were going to have to
19 work together, albeit in a different arrangement
20 than had been in effect before with the Consortium
21 partnership. Now Fluor is working directly for
22 Westinghouse.

23 So that Westinghouse would have to
24 manage this project and allow Fluor to make the
25 mitigations relative to get the project done.

170

1 completion dates.

2 So starting at Line 13 you testify as
3 to what the new guaranteed construction --
4 substantial completion dates are for the units, and
5 then beginning at Line 19 you testified that the
6 substantial completion dates are reasonable.

7 What do you base your conclusion that
8 the new guaranteed substantial completion dates are
9 reasonable?

10 A. Well, first off, these proposed
11 substantial completion dates were what the
12 contractor requested when negotiating the
13 amendment, the 2015 amendment, October 2015
14 amendment. So on the one hand the contractor is
15 asking for these dates, which were moved back about
16 two and a half months from the previous dates. And
17 secondly, the SCE&G's New Nuclear Development Team
18 and Santee Cooper had had an opportunity to review
19 -- and again, similar to what we talked about
20 before, that all of the components were in the
21 schedule and the sequencing was logical.

22 Q. You told the PSC in your 2016 testimony
23 that Fluor was continuing to review the project
24 schedule. Why was that necessary?

25 A. The owners wanted the new constructor

172

1 Q. On Page 22 of your testimony, your 2016
2 testimony which we've marked as Exhibit 29, you
3 were asked to describe the fixed price option.

4 Can you just briefly describe for us
5 what the fixed price option that the company
6 elected was.

7 A. Yes. So the company asked the
8 contractor, Westinghouse, what it would take to
9 complete the units from here, and Westinghouse gave
10 the owners the to-go cost. So they picked a date
11 certain, and I think it was in June of 2015. So
12 that the fixed price was going to be: This is what
13 it's going to cost you from June of '15 onward.

14 So that there wouldn't be any changes
15 to it. So it was locked in. There was no
16 escalation associated with it. It was a fixed
17 price, save for -- I think it was 30-some million
18 dollars that the company carved out of T&M; that
19 the owners felt that they could actually effectuate
20 for less money than was in the T&M that would be
21 money that would be given to Westinghouse.

22 Q. At the time of the 2016 petition had
23 SCE&G decided to elect the fixed price option?

24 A. At the time of this petition?

25 Q. Yes.

173

1 A. Yes.

2 Q. And did you inform the PSC of that
3 decision?

4 A. We did.

5 Q. And I think you might have already
6 fully described this. And I want to give you the
7 opportunity to look at your testimony on Page 25 to
8 see whether there is anything that you wanted to
9 add, but what was the basis for the decision to
10 elect the fixed price option?

11 A. I think I did describe it earlier.

12 So there were some anecdotal
13 information coming out of the project from --
14 particularly from Fluor but even from Westinghouse
15 that said the mitigations that they were about to
16 undertake were going to cost more money. There was
17 more people, and more people translates to more
18 money. Increase the second shift, paying shift
19 premiums -- that translates into more money.

20 So the information coming from there
21 would indicate that it was going to cost more. The
22 information that the company had experience with
23 the contractor not hitting their performance
24 factors. So again, the performance factor doesn't
25 in and of itself mean you'll be late; it just means

174

1 you're going to have to put more resources on with
2 a poor performance factor in order to get the date.
3 So that, again, was going to indicate more money.

4 And then the sensitivity analysis that
5 was done by Dr. Lynch where he varied the cost of
6 labor and the PFs to come up with what was thought
7 as reasonable amounts, the majority of those runs
8 would say that it was going to be favorable to pick
9 the fixed price option.

10 Q. Was Dr. Lynch's sensitivity analysis
11 shared with the Office of Regulatory Staff?

12 A. As far as I know it was, and it was a
13 part of this proceeding as well. Dr. Lynch was a
14 witness in this case too.

15 THE VIDEOTAPE SPECIALIST: Five minutes
16 remaining on the tape, counselor.

17 BY MR. BALSER:

18 Q. So based on this analysis that you've
19 just described did SCE&G determine that electing a
20 fixed price option was the cheapest option for
21 SCE&G and its customers?

22 A. SCE&G thought that it was likely going
23 to be a lower cost to accept a fixed price option
24 than to go with the old contract, which was based
25 on some portion being T&M, some portion being

175

1 target, and then escalation factors associated with
2 some other firm areas of the contract. Yes.

3 Q. Were there other benefits to electing a
4 fixed price option?

5 A. There were some other benefits. One of
6 the benefits is you would not -- you would now not
7 have to review as closely all the invoices that the
8 contractor was providing. You didn't have to fight
9 over things like how many four-wheel drive vehicles
10 that they were buying, because it was all locked
11 into the fixed price.

12 The arguments over the commercial
13 disputes over things like tents, those would go
14 away because everything was going to be in the
15 fixed price. So there were other benefits to
16 electing the fixed price option.

17 Q. In consideration of electing the fixed
18 price option did SCE&G consider whether, if it were
19 to elect the fixed price option, that the
20 likelihood of increased productivity would
21 increase?

22 A. I think -- a couple of things to that.

23 One is the biggest thing is incenting
24 the contractor to improve productivity. And once
25 the fixed price option was there, as long as they

176

1 finished on time the productivity number was not as
2 important. So whether they employed more people to
3 get the same amount of work done or not, as long as
4 the owners were not paying that price then that was
5 going to be okay. So that the pressure on the
6 productivity, if you will, was off from the
7 perspective of the companies, but was on the
8 contractor.

9 So the biggest incentives for the
10 contractor to improve were: Yes. They were on a
11 fixed price. So getting it done faster would help.
12 The longer the people are there the more it would
13 cost them. So that would help.

14 The carrot and stick that I talked
15 about earlier, the performance incentive for
16 finishing on time and finishing in time to qualify
17 for production tax benefits and then the increase
18 in liquidated damages that they would not pay as
19 long as they came in time -- those were viewed as
20 incentives, combined with the construction
21 milestone payment schedule. So for them to get
22 paid they needed to hit milestones.

23 So, you know, those things combined
24 were viewed as a significant incentive for the
25 contractor to improve their own efficiencies, but

177

1 **really to finish on time.**

2 MR. BALSER: Let's change the tape.

3 THE VIDEOTAPE SPECIALIST: This
4 concludes Video No. 2 in the video deposition of
5 Steve Byrne. It is approximately 2:28 p.m.

6 (Short recess taken.)

7 THE VIDEOTAPE SPECIALIST: We are now
8 back on the record. Today's date is October 23rd,
9 2018. The time is approximately 2:34 p.m. This is
10 Video No. 3 in the video deposition of Steve Byrne.
11 BY MR. BALSER:

12 Q. Mr. Byrne, did SCE&G consider that
13 Westinghouse may not carry through and finish the
14 project under this new fixed price option?

15 A. **I think that in the terms or in the**
16 **vein of contingency planning, that was looked at or**
17 **evaluated. I don't believe that there was any**
18 **specific reason to believe that Westinghouse would**
19 **not, and in fact Westinghouse made representations**
20 **to the company and I think to the Office of**
21 **Regulatory Staff that they understood that they**
22 **were likely to lose money on this project and that**
23 **they were in this for the long haul and their aim**
24 **really was selling AP1000s around the world.**

25 I know at one point in time they had

179

1 Q. So as of August 5th, 2016 the docket
2 initiated by the petition that we just looked at
3 for 2016 was still open?

4 A. **That's correct.**

5 Q. And there was a meeting at which
6 representatives of Westinghouse, Fluor, ORS, SCANA,
7 the co-ops, Central and --

8 A. **South Carolina Energy Users Committee.**

9 Q. -- and SCEUC were present?

10 A. **That's correct.**

11 Q. What was the purpose of that meeting as
12 you understood it? What was the topic that was
13 being discussed?

14 A. **The purpose of the meeting was to give**
15 **the groups that were represented here, the groups**
16 **that you just read off, the opportunity to**
17 **interface with Westinghouse and Fluor and answer**
18 **their questions. That was the purpose of it.**

19 Q. What do you recall about that meeting?

20 A. **I thought that the meeting was a good**
21 **meeting. The SCANA folks, as you'll notice, didn't**
22 **say anything. So the SCANA folks that were there**
23 **just sat back and listened. And so it really was**
24 **free flowing back and forth between the folks that**
25 **represented those other groups and Westinghouse and**

178

1 signed contracts in India to deliver a number of
2 units. They had contracts in the UK to deliver
3 some units, and in addition to the units they were
4 completing in China had active plans to build many
5 more AP1000 units in China. So they were looking
6 at a fairly robust AP1000 units to be built around
7 the world.

8 Q. Who at Westinghouse made those
9 statements that you just described to you?

10 A. **There were a couple of folks at**
11 **Westinghouse who made those statements. One was**
12 **Danny Rodrick, who was the CEO of Westinghouse, and**
13 **Jeff Benjamin, who was their -- I think his title**
14 **was executive vice-president.**

15 (DFT. EXH. 30, one-page handwritten
16 notes, 8/5/16, marked for identification.)

17 BY MR. BALSER:

18 Q. Mr. Byrne, do you recognize Exhibit 30?

19 A. **I do.**

20 Q. What is Exhibit 30?

21 A. **Exhibit 30 is a meeting between a**
22 **number of parties in the 2016 case with**
23 **Westinghouse and Fluor that happened out at the**
24 **plant site in August of 2016. So these are my**
25 **notes of the meeting.**

180

1 **Fluor, and I thought that in particular**
2 **Westinghouse was pretty frank about that.**

3 **And I think that the groups that were**
4 **represented there -- the sense I got was that they**
5 **got out of the meeting what they wanted.**

6 (DFT. EXH. 31, email chain, marked for
7 identification.)

8 BY MR. BALSER:

9 Q. Mr. Byrne, I'm going to hand you -- or
10 you have been handed what has been marked as
11 Exhibit 31. It's a two-page document. It's copied
12 two-sided. Just take a minute and orient yourself,
13 if you would, to this document.

14 A. (Witness complies.) **Okay.**

15 Q. So as I understand it, there is an
16 email from you to Jeff Benjamin and Garry Flowers.

17 A. **Right.**

18 Q. It says -- on July 26, 2016 it says:
19 Jeff/Garry. Here are the topics of interest to the
20 group that will be meeting with you on August 5th.
21 Steve. And attached is a list of questions or
22 issues.

23 Did you prepare this list?

24 A. **I did.**

25 Q. Were these topics addressed at the --

1 that is, these topics listed on the second page of
2 Exhibit 31 -- addressed in the August 5th, 2016
3 meeting?

4 **A. Certainly some of them are. I don't**
5 **think that everything was asked by the intervening**
6 **groups, but certainly much of it was.**

7 **This email from me to Mr. Flowers and**
8 **Mr. Benjamin really was twofold. 1, I wanted the**
9 **meeting to be productive. So I wanted them to be**
10 **prepared for typical questions, and some of these**
11 **are really difficult questions.**

12 **And secondly, I wanted them to know who**
13 **they were going to be with. For example, they**
14 **might say: Why am I meeting with the electric**
15 **cooperatives? And I just wanted to make sure they**
16 **understood who the electric co-ops were.**

17 **Q. So on the second page of Exhibit 31 you**
18 **say: The Office of Regulatory Staff and three**
19 **other intervenors, South Carolina Energy Users**
20 **Committee, Central Electric Co-op and the electric**
21 **cooperatives of South Carolina would appreciate the**
22 **opportunity to sit down face-to-face with**
23 **Westinghouse and Fluor.**

24 **Did you have an understanding of why**
25 **ORS and the intervenors wanted to meet directly**

1 with Westinghouse and Fluor to talk about the
2 project?

3 **A. ORS already had access to Westinghouse**
4 **and Fluor. So I don't know that I could**
5 **necessarily answer for them.**

6 **The other groups did not have access to**
7 **Westinghouse and Fluor and would have to interface**
8 **through other groups. For example, if the co-ops**
9 **or Central wanted information, really they would be**
10 **going through Santee Cooper, and this was an**
11 **opportunity for them to get their questions before**
12 **these groups. And these are groups that were**
13 **looking at the possibility of signing on to a**
14 **settlement agreement, and I think they wanted the**
15 **opportunity to be able to ask their questions**
16 **face-to-face without going through Santee Cooper,**
17 **without going through SCE&G -- in some other case**
18 **without going through ORS -- and see what the**
19 **contractor, Fluor and Westinghouse, would have to**
20 **say.**

21 **Q. The next to the last bullet point on**
22 **the second page of Exhibit 31 says: Ramification**
23 **to Westinghouse for abandoning the project. Has**
24 **Westinghouse ever abandoned a project?**

25 **What did you take that to mean? What**

1 was the origin of that issue?

2 **A. Well, I think I explained up in the**
3 **opening paragraph where the topics came from, and**
4 **their topics of ORS, SCE&G, in discovery, informal**
5 **meetings, letters from ORS to the governor are**
6 **listed below. So these were really questions that**
7 **I thought that the ORS and perhaps those other**
8 **groups would want to know. So this more than**
9 **likely came from something that ORS asked somebody**
10 **at the company. Whether it was formally or**
11 **informally, I do not know.**

12 **Q. If we go back to your notes which we**
13 **marked as Exhibit 30 that you took at the August**
14 **5th, 2016 meeting -- I guess let me ask you that.**
15 **Did you take the notes reflected on Exhibit 30 at**
16 **the August 5, 2016 meeting?**

17 **A. I did.**

18 **Q. On the second page of your notes there**
19 **is a notation that JB --**

20 **A. Jeff Benjamin.**

21 **Q. -- Jeff Benjamin of Westinghouse said:**
22 **No interest and that must succeed here to sell in**
23 **other places. Do you see that?**

24 **A. I do.**

25 **Q. What do you understand that statement**

1 to mean?

2 **A. I think that he was -- he was referring**
3 **to what I was talking about earlier inasmuch as**
4 **Westinghouse was -- had some contracts to build**
5 **plants in some places and was actively**
6 **participating in RFPs or solicitation to build in**
7 **other countries, and if they didn't succeed at V.C.**
8 **Summer that means they may not succeed in other**
9 **places.**

10 **So he was responding to a question, but**
11 **the premise of his response was: We've got to be**
12 **able to succeed at V.C. Summer; otherwise, it will**
13 **ruin our opportunity to sell AP1000s elsewhere in**
14 **the world.**

15 **Q. Did the Public Service Commission**
16 **ultimately approve the election of the fixed price**
17 **option?**

18 **A. They did.**

19 **Q. All in all how would you describe the**
20 **prospects for the project in 2016?**

21 **A. Well, actually I thought the prospects**
22 **in 2016 were probably a lot better than they had**
23 **been in quite a long time. The owners had been**
24 **able to amend the EPC contract and put in some**
25 **provisions that they thought were going to be**

1 beneficial. Westinghouse had reconstituted the
2 Consortium agreement. They were now in so control
3 with Fluor as their construction contractor. They
4 had in my mind every incentive that they could
5 possibly have to finish these plants and finish
6 them on time.

7 Fluor was very viewed as very positive,
8 not just by SCE&G, but by Santee Cooper and some of
9 these intervenor groups. I know that I've heard
10 Mike Kallick from Central talk about his
11 favorability for Fluor. So I think Fluor was
12 viewed as very positive, not just by us but by
13 others.

14 The progress was actually starting to
15 pick up. Hiring was picking up. And I think at
16 the beginning of 2016 Fluor got off to a bit of a
17 rocky start with hiring, but then were hiring
18 between 150 to 200 people a month, and I think they
19 probably doubled the craft work force over a
20 one-year net. So that's making up for normal
21 attrition as well.

22 The Commission approved simulator,
23 which was an issue that not -- you know, the
24 contractor didn't necessarily have to work on, but
25 SCE&G was responsible for getting the simulator

1 approved. That was a licensing issue with the NRC.
2 There was an issue there, and that looked like it
3 was on the path towards resolution. A majority of
4 the major equipment was on site, and in fact a
5 majority of all of the equipment necessary to
6 construct the plants was there at the site. I say
7 "major." I mean a vast majority.

8 So the procurement issues looked like
9 they were getting behind us. The diversification
10 of the modules from Lake Charles to other places
11 looked like it was being -- and those modules were
12 coming in. The shield building modules, the
13 mitigation at the NI facility in Newport News --
14 their schedule was now looking like it supported
15 the construction meet dates, which was not always
16 the case.

17 So -- and if you look at some of the
18 big picture milestones that were hit, things like
19 setting the reactor vessel for the first time in
20 the country in 30 years and a lot of the big pours
21 and module sets that the contractor was hitting
22 were starting to increase. And the construction
23 manager for Westinghouse, Carl Churchman, had been
24 on the site for a year or so -- probably 18 months
25 towards the end of 2016 -- and was feeling a lot

1 more comfortable about completion.

2 So, you know, when I look at -- in 2016
3 after the fixed price amendment was authorized, I
4 felt pretty good about the project.

5 Q. When did you first learn that
6 Westinghouse was likely going to declare
7 bankruptcy?

8 A. I did not learn about that until March
9 of 2017 just before they actually declared a
10 bankruptcy.

11 Q. What did SCE&G do upon learning of the
12 bankruptcy?

13 A. When SCE&G learned that the bankruptcy
14 was likely, they had already retained bankruptcy
15 counsel. So between the SCANA general counsel and
16 the Santee Cooper general counsel they had agreed
17 on bankruptcy counsel and had retained those; had
18 started some discussions -- these are legal teams
19 starting discussions on an Interim Assessment
20 Agreement which would allow for Westinghouse to
21 continue to work in bankruptcy while the project
22 did an evaluation as to whether or not to continue
23 with both plants, continue with one plant; their
24 own general contractor, look for another EPC
25 contractor. Those kind of things. So they signed

1 an Interim Assessment Agreement.

2 (DFT. EXH. 32, Interim Assessment
3 Agreement, marked for identification.)

4 BY MR. BALSER:

5 Q. And is Exhibit 32 the Interim
6 Assessment Agreement that you were just referring
7 to?

8 A. It seems to be, yes.

9 Q. So what evaluation did the company
10 undertake in this period in which -- right after
11 Westinghouse had failed bankruptcy?

12 A. The owners put together an EPC
13 evaluation team. That EPC evaluation team was
14 headed by Kyle Young, and Mr. Young and his team
15 took the information that was learned from the
16 bankruptcy process, included bringing in some
17 outside experts and went through a full evaluation
18 of the schedule and costs in the interim assessment
19 period.

20 Q. What did the evaluation show?

21 A. The evaluation showed that it was going
22 to take much longer than anticipated and that the
23 cost was going to be much higher than anticipated,
24 continuing without the benefits of the fixed price
25 -- protections of that fixed price contract. So

189

1 Westinghouse let us know that they were going to
2 reject that fixed price contract through the
3 bankruptcy process.

4 There was an estimate from Westinghouse
5 that was given to our chief financial officer for
6 the rough magnitude of the portion of the
7 impairment that Toshiba claimed on the U.S.
8 projects that was due to the V.C. Summer project,
9 and that was about \$1.5 billion. The parental
10 guarantee from Toshiba, which they had committed to
11 pay and they did pay, was a little -- in excess of
12 the \$1.5 billion.

13 So the evaluation was intending to see
14 -- if the Westinghouse numbers were accurate, if it
15 was going to cost an additional 1.5 billion and the
16 potential guarantee was going to cover that, then
17 the plan could go forward on the same cost basis as
18 it had before. Unfortunately that's not what it
19 showed.

20 Q. How was it that the first time that
21 SCE&G was able to come to the conclusion that the
22 costs and schedules were understated was in March
23 of 2017?

24 MR. COX: Object to the form.

25 A. The interim assessment period allowed,

190

1 again, for work to continue while the evaluation
2 team did its work. The evaluation team was
3 augmented with experts from outside, and there was
4 information made available during the bankruptcy
5 process that SCE&G previously didn't have available
6 to it.

7 SCE&G also now had unfettered access to
8 Fluor, whereas previously since Fluor worked for
9 Westinghouse the only access to Fluor was through
10 Westinghouse. And Westinghouse always wanted to be
11 involved in those meetings or didn't necessarily
12 want you meeting with Fluor. After the bankruptcy
13 had unfettered access to Fluor.

14 So it was a degree of information that
15 the NND team said that they didn't have available
16 to them previously that they now said they had
17 available to them to allow them to do the
18 evaluation and supplementing the team with some
19 outside experts and access to Fluor.

20 Q. What conclusion did SCE&G make at the
21 end of this interim period?

22 A. Well, the interim assessment that was
23 going on during this agreement -- and the interim
24 assessment period was extended twice. And so
25 during this evaluation a cost and schedule for two

191

1 units, continuing both units, Unit 2 and Unit 3,
2 the first two nuclear units was done, and it was
3 determined that that cost was very high. And then
4 the focus shifted to complete the first unit and
5 either mothball or cancel the second.

6 At some point before that evaluation I
7 think was complete Santee Cooper let SCE&G know
8 that they were likely not going to be able to move
9 forward, and that was the premise for SCE&G to try
10 an evaluation to see if they could go it alone, and
11 from a cost perspective that dispute was
12 prohibitive.

13 SCE&G then attempted to get some
14 federal support and support from other utilities.
15 So come in and replace Santee as a partner. Both
16 of those efforts were also unsuccessful. So with
17 no support forthcoming, the loss of the fixed price
18 contract, the costs and schedule that was being
19 faced and loss of partner, SCE&G made the decision
20 to cancel.

21 Q. In your view what was the driving
22 factor of the need to abandon?

23 A. Well, I will tell you that from my
24 perspective had Westinghouse not gone into
25 bankruptcy and pulled a fixed price contract or --

192

1 yeah; a fixed price contract that the two utilities
2 would still be doing those projects today.

3 MR. BALSER: That's all I have. Thank
4 you, Mr. Byrne.

5 EXAMINATION

6 BY MR. COX:

7 Q. Mr. Byrne, do you need a break or are
8 you okay to go?

9 A. I'm good.

10 Q. All right. We met just before your
11 deposition began. Again, my name is Jim Cox. I'm
12 an attorney representing the South Carolina Office
13 of Regulatory Staff in both the PSC proceedings and
14 as an intervenor in the state court actions in
15 which your deposition is being taken.

16 Before we get into the substance of my
17 questions to you I would like to just go over a few
18 of the same admonitions that Mr. Balsler discussed
19 with you.

20 If at any point you need a break,
21 that's fine. We can take a break as long as you
22 answer the question that is pending. However, I
23 won't know that you need a break unless you let me
24 know. So would you let me know if you need a
25 break?

193

1 **A. Certainly.**
2 Q. If I ask questions of you that are
3 confusing and that you don't understand, I would be
4 happy to try to improve the question, but I need
5 for you to let me know that you don't understand
6 the question for me to do that.
7 Will you let me know if you don't
8 understand a question?
9 **A. I will.**
10 Q. You took an oath at the beginning of
11 the day today at the beginning of your deposition,
12 and it's the same oath that you would take if we
13 were in a courtroom and it carries the same
14 penalties of perjury. Do you understand that?
15 **A. I do.**
16 Q. I know you had your deposition taken in
17 August 14th of this year in these same proceedings,
18 and my question for you is: Have you ever had your
19 deposition taken before today on any other occasion
20 except for that date in August?
21 **A. No.**
22 Q. Other than speaking with your attorneys
23 and the attorneys for SCE&G in preparation for your
24 deposition what else did you do to prepare for your
25 deposition?

194

1 **A. Outside of the prep sessions I would**
2 **have had with my attorneys, reviewed some notes**
3 **outside of those sessions. That's about it.**
4 Q. And can you describe what those notes
5 were about.
6 **A. Those would have been notes that would**
7 **have been given to me by my attorneys during the**
8 **sessions, and they would have been similar to the**
9 **notes that were presented to me here today.**
10 Q. Did you review any documents in
11 preparation for your deposition that you haven't
12 reviewed as an exhibit to your deposition today?
13 **A. Between today and the previous**
14 **deposition you're talking about?**
15 Q. Fair enough. Correct.
16 **A. Possibly. I can't think off the top of**
17 **my head what they might be, but it's possible that**
18 **that's the case.**
19 Q. Did you review your PSC prefile
20 testimony in preparation for your deposition today?
21 **A. Yes.**
22 Q. Did you speak to anyone about your
23 deposition other than your attorneys and SCE&G's
24 attorneys?
25 **A. No.**

195

1 Q. When was the last time you spoke with
2 Kevin Marsh?
3 **A. I think it was probably December of**
4 **last year.**
5 Q. And when is the last time you spoke
6 with --
7 **A. I'm sorry. I saw Mr. Marsh one time in**
8 **the SCANA headquarters building when he was**
9 **answering some questions of attorneys and I was**
10 **waiting outside. I saw him just to say hello.**
11 Q. About what month was that?
12 **A. I would be guessing, but I would say**
13 **probably in the April, May time frame.**
14 Q. When was the last time you spoke with
15 Jim Addison?
16 **A. The it would have been while I was**
17 **still working with the company. So December of**
18 **last year.**
19 Q. When was the last time you spoke to Ron
20 Jones?
21 **A. When I was still working for the**
22 **company. So probably December of last year.**
23 Q. When was the last time you spoke to
24 Jeff Archie?
25 **A. When I still worked for the company.**

196

1 **Probably December of last year.**
2 Q. When was the last time you spoke to
3 Kyle Young?
4 **A. The same answer. December of last year**
5 **when I still worked for the company.**
6 Q. How about Kevin Kochems; have you
7 spoken with him?
8 **A. I have not spoken with him.**
9 Q. Are you currently employed?
10 **A. I am not currently.**
11 Q. What was your last job?
12 **A. My last job was the job that I left,**
13 **SCANA.**
14 Q. What was that job?
15 **A. It was the President of Generation and**
16 **Transmission.**
17 Q. And were you also the Chief Operating
18 Officer of SCANA?
19 **A. The Chief Operating Officer of SCE&G.**
20 Q. And in that position you were really
21 the second in charge of SCANA; is that correct?
22 **A. I'm not sure I could phrase it that**
23 **way. There were a number of people that were**
24 **direct reports to the CEO that may also think that**
25 **they were second in charge. So it was one of the**

197

1 people that would have been considered second in
2 charge.

3 Q. You reported directly to the CEO,
4 didn't you?

5 A. That's correct.

6 Q. Why did you leave that job?

7 A. The Board of Directors approached
8 myself and Mr. Marsh probably in the October -
9 November time frame of 2017 and said that they were
10 trying to strike some kind of a deal with the
11 legislature and said that that was not going to be
12 possible in their minds unless somebody left the
13 company, and they asked if Kevin and I would
14 consider retiring. So Kevin and I did consider
15 retiring and both of us did retire.

16 Q. Who approached you with that
17 information?

18 A. That would have been the chairman of
19 the Board of Directors at that time.

20 Q. And who was that?

21 A. That was Maybank Hagood.

22 Q. Did he say anything about what the
23 nature of the deal was with the General Assembly?

24 A. It was a deal to allow for some form of
25 cost recovery for the abandoned units. So that

198

1 was, I think, pretty well known that SCANA was
2 seeking to recover some costs. Certainly not all
3 of the costs. But that was the gist of it.

4 Q. Did he say your employment would be
5 terminated if you did not voluntarily resign?

6 A. He did not.

7 Q. Did you get that impression?

8 A. I did not.

9 Q. Were you given any compensation in
10 exchange for resigning?

11 A. I was not.

12 Q. Do you currently have any contractual
13 relationship --

14 A. Retiring, not resigning.

15 Q. I'm sorry. Retiring.

16 A. Right.

17 Q. Do you currently have any contractual
18 relationship with SCANA or SCE&G?

19 A. I don't have any contractual
20 relationship with SCANA or SCE&G.

21 Q. Are you currently receiving a
22 retirement annuity from SCANA or SCE&G?

23 A. Yes.

24 Q. And how much is that?

25 A. I don't remember off the top of my

199

1 head. It's -- I don't recall.

2 Q. Is it paid to you monthly?

3 A. I think it is paid to me monthly. So
4 when you say retirement annuity, the retirement
5 plan that I have is a cash balance plan. So that
6 accounts cash balance plan I haven't touched. So
7 it still exists. There was a -- one of the
8 executive retention program payouts that you have
9 the option to take in a lump sum or in an annuity,
10 so for -- I did choose an annuity. I just don't
11 remember -- I just don't remember what the figure
12 is.

13 Q. Is it more than \$10,000 a month?

14 A. No.

15 Q. Is it more than \$5,000 a month?

16 A. No.

17 Q. Is it more than a thousand dollars a
18 month?

19 A. I don't believe so.

20 Q. What is your balance in the cash
21 balance retirement plan of SCANA?

22 A. The exact balance I don't know.

23 Q. Is it more than a million dollars?

24 A. No, I don't believe so. No, it's not.

25 Q. Is it more than \$500,000?

200

1 A. It's right around there.

2 Q. Do you currently own any SCANA stock?

3 A. I do.

4 Q. How much stock do you own?

5 A. I own -- I think it's 2,300 shares
6 outright and maybe 25,000 shares through the 401(k)
7 program.

8 Q. When you left SCANA did you sign any
9 nondisclosure agreements?

10 A. I did not.

11 Q. Have you read any of the deposition
12 transcripts of witnesses who have had their
13 depositions taken in this case?

14 A. I have not.

15 Q. You received over \$2 million in
16 compensation in 2014, didn't you?

17 A. I think the total compensation number
18 is right around that number. Yes.

19 Q. You received over \$2 million in
20 compensation in 2015, didn't you?

21 A. I think so.

22 Q. You received over \$2 million in
23 compensation in 2016, didn't you?

24 A. I believe so.

25 Q. During the time of construction on the

201

1 project you received bonus payments due to progress
2 on the construction of the project; correct?

3 **A. There was some portion of the bonus**
4 **that was paid out based on achieving milestones,**
5 **yes.**

6 Q. You had never had oversight over
7 construction of the new nuclear development before
8 this project; correct?

9 **A. That's correct.**

10 Q. Part of your compensation during
11 construction on the project was allocated to the
12 capital cost of the project, wasn't it?

13 **A. I don't recall a bonus incentive goal**
14 **that was relative to capital cost of the project,**
15 **no.**

16 **There were -- in each year I would have**
17 **four or five goals. Since I had responsibility for**
18 **areas outside of nuclear, some of those goals would**
19 **be relative to fossil hydro or transmission**
20 **generation planning. So other groups that reported**
21 **to me. So I did have a couple of goals that would**
22 **be specific to new nuclear. I don't remember one**
23 **based on capital cost. And there were a couple of**
24 **times when I missed the full bonus opportunity**
25 **based on not hitting the new nuclear development**

202

1 **goal.**

2 Q. And I think I might have asked a
3 confusing question there. My question is: We've
4 had witnesses testify that they noted how much time
5 they spent working on the project versus working on
6 other company missions and goals and that the
7 percentage of time that they spent working on the
8 project, a certain percentage of their income would
9 be allocated to the cost of the project.

10 **A. That is accurate. So a portion of my**
11 **salary would be allocated to the project based on**
12 **how much time I spent on the project. Yes. That's**
13 **correct.**

14 Q. And do you recall roughly what that
15 percentage was during the life of the project?

16 **A. I don't. I would probably say it was**
17 **over 50%, but I don't know the exact number. I**
18 **would have to review time sheets to know what that**
19 **was.**

20 Q. Mr. Byrne, Exhibit 9 in front of you,
21 this was an application by SCE&G for permission to
22 construct and operate a nuclear facility consisting
23 of two AP1000 reactors; correct?

24 **A. Yes.**

25 Q. And you would agree with me that SCE&G

203

1 was not successful in constructing and operating
2 those two AP1000 reactors; correct?

3 **A. I don't know that I would agree with**
4 **that premise. I will say that the construction was**
5 **stopped based on a bankruptcy at Westinghouse. So**
6 **the company, the owners, did have to go through an**
7 **evaluation to determine whether continuing with**
8 **construction was the right thing to do.**

9 Q. SCE&G's goal in submitting this
10 application to the PSC was to build two AP1000
11 units and operate them; correct?

12 **A. Certainly the goal was to build two**
13 **AP1000 units and operate them.**

14 Q. And that goal was not achieved, was it?

15 **A. That goal was not achieved.**

16 Q. Unit 1 at V.C. Summer is not an AP1000
17 reactor; is that correct?

18 **A. Unit 1 is a Westinghouse reactor but**
19 **not an AP1000. That's correct.**

20 Q. And no AP1000 reactors had ever been
21 constructed at the time that SCE&G submitted this
22 Exhibit 9 to the PSC; correct?

23 **A. None had completed construction. There**
24 **were some under construction.**

25 Q. How long had those units been under

204

1 construction at the time this application was
2 submitted?

3 **A. I think that they had been under**
4 **construction for something like two years. Maybe**
5 **three years.**

6 Q. And SCE&G in this application
7 acknowledged that there were first-of-a-kind risks
8 in constructing the AP1000; correct?

9 **A. Correct.**

10 Q. In submitting this application SCE&G
11 was requesting that the Commission approve SCE&G's
12 request to build an AP1000 reactor; correct?

13 **A. That's right. Two AP1000 reactors.**

14 Q. And it's correct that SCE&G did not
15 give the PSC the option of approving construction
16 of a GE reactor; correct?

17 **A. What SCE&G presented to the Public**
18 **Service Commission was the results of the**
19 **reevaluation that SCE&G did that compared the**
20 **different forms of nuclear generation that were**
21 **available to it at that point in time.**

22 Q. And SCE&G said we think the best option
23 is to build an AP1000 reactor; correct?

24 **A. Presented the results of the evaluation**
25 **that led to the selection of the AP1000.**

1 Q. And the results of the analysis were
2 that SCE&G believed that the best option was to
3 build an AP1000 reactor; correct?

4 A. That's correct.

5 Q. Mr. Byrne, it's correct that the EPC
6 agreement between SCE&G and the Consortium
7 permitted SCE&G to use an owner's engineer on the
8 project; correct?

9 A. **There was a contract definition for
10 owner's engineer, and if the company had elected to
11 go that route it would have required approval by
12 the contractor.**

13 Q. Can you turn to Page 74 of Exhibit 10.
14 If you could look at -- I'm sorry. Exhibit 10 is
15 the mammoth exhibit in front of you, the EPC
16 agreement.

17 A. Okay. What page?

18 Q. 74. Subparagraph 4 -- this is the
19 paragraph that permits SCE&G to designate an
20 owner's engineer subject to Consortium approval; is
21 that correct?

22 A. Right.

23 Q. And the contract provides that the
24 Consortium could not unreasonably withhold approval
25 of such a designation; correct?

1 A. That's correct.

2 Q. And it's correct that SCE&G at no point
3 in time during the life of the project exercised
4 its prerogative to designate an owner's engineer?

5 A. **I think as I explained earlier SCE&G
6 opted to hire in its own owner's engineers. So
7 SCE&G from the start hired in expertise that would
8 be consistent with and in greater number than an
9 owner's engineer would be. So at the time of
10 cancellation I think SCE&G probably had about 200
11 people that were dedicated to oversight on the
12 project. So that was de facto on the owner's
13 engineer, not what is contemplated here.**

14 **But again, if you don't have the
15 expertise certainly an owner's engineer is a
16 standard part of one of these contracts, but SCE&G
17 opted to hire in its own expertise.**

18 Q. And who led this group of experts?

19 A. **It was different at different times.
20 At the start it was a gentleman named Ron Clary.
21 That transitioned to a gentleman named Ron Jones,
22 and over the construction piece was a gentleman
23 named Alan Torres for the whole time.**

24 Q. And it's your view that those
25 individuals filled the role of owner's engineer on

1 the project; is that correct?

2 A. **That's correct.**

3 Q. You mentioned earlier that one drawback
4 that you saw in having an outside owner's engineer
5 is that it would strain the relationship with the
6 Consortium; is that correct?

7 A. **Not just -- I don't think you heard me
8 correctly there. Not just an outside person acting
9 as owner's engineer, but somebody who will be
10 viewed as a competitor.**

11 **So Westinghouse and CB&I viewed Bechtel
12 as a competitor. So somebody that would not be
13 viewed as a competitor, I don't think that would
14 have been as big an issue with the contractors.**

15 Q. So there is some -- you would agree
16 that there is some third-party options that the
17 Consortium would not view as competitors like
18 Bechtel?

19 A. **I think there were some third-party
20 options that the Consortium would have viewed and
21 Westinghouse would have viewed far more favorably
22 than they would have viewed Bechtel, yes.**

23 Q. You mentioned that SCE&G held Fluor in
24 great respect, but SCE&G never considered Fluor to
25 be an owner's engineer on the project, did it?

1 A. **No. We did not consider Fluor to be an
2 owner's engineer before it was constructed.**

3 Q. I'm talking about 2008. At that time
4 Fluor had no role in the project; correct?

5 A. **Fluor did not have a role in the
6 project in 2008. And once again, if you have no
7 background in what it is that you're doing an
8 owner's engineer might be useful, but SCE&G opted
9 to hire in the expertise that it needed. So SCE&G
10 did have the experience that it needed to fulfill
11 that role as owner's engineer.**

12 Q. And it's correct to say that SCE&G did
13 not consider the option of hiring Fluor to be an
14 owner's engineer in 2008?

15 A. That's correct.

16 Q. You made a point, I thought, that an
17 owner's engineer might be redundant under the EPC,
18 and I wasn't sure I understood that. I wonder if
19 you could expound on that.

20 A. **I'm not sure what -- you would have to
21 refresh what I said.**

22 Q. You had mentioned some concerns about
23 an owner's engineer, and I thought you had
24 mentioned that an owner's engineer would be
25 redundant. I didn't know if that refreshed your

209

1 recollection of that concern.
2 **A. It doesn't.**
3 **Q.** You testified that SCE&G knew the
4 difficulties that existed on the project; is that
5 correct?
6 **A. I did.**
7 **Q.** Is it fair to say that SCE&G, while it
8 may have known about the difficulties, had a
9 difficult time getting these difficulties fixed?
10 **A. Yeah. I would say that the owners had**
11 **a very difficult time in convincing or pushing the**
12 **Consortium counter-parties to correct the issues.**
13 **And so it isn't that SCE&G was not aware of or the**
14 **owner is not aware of the issues.**
15 **Lake Charles, for example. From the**
16 **very first time that SCE&G visited Lake Charles**
17 **along with Southern Company, both of them voiced**
18 **concerns over the Lake Charles facility. So it**
19 **isn't that the companies didn't try to impact**
20 **change; it's just that under the EPC contract there**
21 **are some limitations that you can do with a**
22 **contractor who has chosen their own means and**
23 **methods.**
24 **Q.** Did you ever feel that Ron Jones was
25 too nice and wasn't strict enough in dealing with

210

1 the Consortium on these issues?
2 **A. I don't think I would ever say that**
3 **Mr. Jones was too nice. I think that Mr. Jones did**
4 **have a favorable disposition, but I don't think**
5 **that compromised his ability to deal with the**
6 **contractor on these issues. And SCE&G would deal**
7 **with them as a team. And so there certainly were**
8 **members of the team that would hold the**
9 **contractor's feet to the fire. Alan Torres, Carl**
10 **Young, for example, and a number of other folks in**
11 **the construction arena, the business and financial**
12 **arena. Skip Smith, who I think you've seen on a**
13 **number of these letters that go back to the**
14 **Consortium, project letters, would certainly hold**
15 **the contractor's feet in the fire.**
16 **The negotiations even at the executive**
17 **levels, including CEOs of the companies, all the**
18 **companies involved, not just Santee Cooper and**
19 **SCE&G, but Westinghouse, Shaw, CB&I, Fluor. So I**
20 **think the negotiations happened at every level, and**
21 **I think it's safe to assume that the owners let the**
22 **contractors know of their dissatisfaction at every**
23 **level.**
24 **Q.** Did you ever counsel any of your
25 employees that they needed to be stricter in

211

1 dealing with the Consortium on construction
2 problems?
3 **A. I don't remember.**
4 **Q.** Let me get an idea of the kind of chain
5 of command here. You reported to the CEO; correct?
6 **A. That's right.**
7 **Q.** Who were the direct reports to you?
8 **A. I had -- Jeff Archie was the chief**
9 **nuclear officer. So Jeff Archie had responsibility**
10 **for the operating nuclear plant and the new nuclear**
11 **construction plant.**
12 **Mr. Archie had as a direct report to**
13 **him the vice-president for our operating unit, Unit**
14 **1. He had the vice-president for construction and**
15 **had the training director, who was responsible for**
16 **training both for the operating plant and for the**
17 **development of the training programs for the new**
18 **nuclear plant.**
19 **I had additional direct reports to me.**
20 **Fossil hydro vice-president, for example. VP for**
21 **transmission, for example. And then at times I had**
22 **different direct reports for field procurement. In**
23 **the last couple of years, as an example, I had the**
24 **land-site management at one point in time. So some**
25 **of the other things would kind of come and go.**

212

1 **Q.** Were you or Mr. Archie more involved in
2 dealing with the construction issues on the
3 project?
4 **A. The short answer is it depends. If it**
5 **was a day-to-day construction type activity on the**
6 **project itself, I would say Mr. Archie was a lot**
7 **closer to those activities than was I. If it was**
8 **an issue that was being dealt with at a higher**
9 **level with executives of the companies -- for**
10 **example, Mr. Benjamin from Westinghouse,**
11 **Mr. Flowers from Fluor -- that were referenced in**
12 **an earlier email, I would probably deal with them**
13 **more than Mr. Archie.**
14 **Q.** Did Mr. Archie have any nuclear
15 construction experience?
16 **A. Mr. Archie was at V.C. Summer Unit No.**
17 **1 during construction.**
18 **Q.** Anything else?
19 **A. Responsible for steam generator**
20 **replacements. Worked with Bechtel on steam**
21 **generator replacements. And steam generators are a**
22 **very large, very difficult component, so the outage**
23 **to replace those would be a hundred plus days**
24 **long. Very detailed or involved. So he had some**
25 **specific nuclear construction background.**

213

1 **Mr. Archie was also at one point in**
2 **time the outage manager, so would run schedules**
3 **when the plant shut down fixing things you couldn't**
4 **work on when the plant was online. So had that**
5 **kind of experience.**

6 Q. What was Mr. Archie's job during the
7 construction of Unit 1?

8 **A. I don't remember. It was a long, long**
9 **time ago and long before my involvement with SCE&G.**

10 Q. So you don't know if he was responsible
11 for oversight on the construction of Unit 1?

12 **A. No. I don't believe he was responsible**
13 **for oversight. It would have been too early in his**
14 **career to be responsible for that.**

15 Q. Mr. Byrne, it's correct that SCE&G
16 recommended that the PSC approve the EPC contract?

17 **A. Certainly the EPC contract was a part**
18 **of the package that was taken to Public Service.**

19 **You know, it may be playing semantics.**
20 **I don't know if we recommended its approval or not.**
21 **I just don't recall that. It certainly was part of**
22 **the package.**

23 Q. Is it fair to say that SCE&G requested
24 approval of that contract?

25 **A. Yeah. Again, it may be semantics. I'm**

214

1 **not sure what the terminology is, but we certainly**
2 **presented as a part of the whole package for the**
3 **approval of building the plant on the BLRA lead**
4 **times.**

5 Q. Did SCE&G desire to have the EPC
6 contract approved by the PSC?

7 **A. Certainly, yes.**

8 Q. Did SCE&G propose or submit to the PSC
9 any other contracts other than the PSC in -- strike
10 that.

11 Isn't it true that SCE&G did not submit
12 any other contracts for approval to the PSC in 2008
13 other than the EPC?

14 **A. I believe that SCE&G submitted the**
15 **contract for construction and transmission to the**
16 **Public Service Commission; and I don't know if the**
17 **contract was a part of the submission, but**
18 **certainly it was a siting hearing for transmission**
19 **that was separately -- transmission associated with**
20 **the new unit. That was separately than this, than**
21 **the Certificate of Convenience and Necessity for**
22 **the plants themselves. That was a separate**
23 **contract that may have been presented to the Public**
24 **Service Commission.**

25 Q. Is it correct, though, Mr. Byrne that

215

1 SCE&G did not submit any other alternative
2 construction contracts in 2008 aside from the EPC?

3 **A. SCE&G didn't have any alternative**
4 **construction contracts in 2008.**

5 Q. You discussed the Lake Charles issues
6 and I think that you mentioned that the owners
7 asked for a recovery plan from the Consortium.

8 Did the owners ever receive a recovery
9 plan?

10 **A. There was a recovery plan generated by**
11 **-- and I believe it was Shaw Group at the time,**
12 **which was the then owner of that facility. I don't**
13 **know that it satisfied the owner's needs and**
14 **desires for that facility. So one of the things**
15 **that the owners were looking for was how parts**
16 **could be built elsewhere. That was not provided in**
17 **that 2000 -- I guess it would be '10-'11 time**
18 **frame. It's where we ended up, but it's not what**
19 **they provided to us in that time frame.**

20 Q. When did SCE&G place in-house observers
21 at Lake Charles?

22 **A. The exact date I don't recall, but it**
23 **was fairly early on. I would say it was probably**
24 **in the 2011 time frame.**

25 Q. So it's your recollection that SCE&G

216

1 placed an SCE&G employee at Lake Charles in 2011?

2 **A. I said we placed an inspector there. I**
3 **didn't say necessarily it was an SCE&G employee.**
4 **So SCE&G would have retained a quality consultant**
5 **from an outside firm that was done by Mr. Torres.**
6 **So the details on that you would have to get from**
7 **him, but did place a resident inspector in the**
8 **facility. Again, I think it was 2011. Maybe it**
9 **was 2012. I don't know.**

10 Q. How many times did you visit Lake
11 Charles?

12 **A. I visited Lake Charles three or four**
13 **times.**

14 Q. When was your first visit?

15 **A. I believe my first visit to Lake**
16 **Charles was in 2010.**

17 Q. Who did you travel with?

18 **A. I don't remember. I know that there**
19 **was a group that went down. I just don't remember**
20 **who else was with me on the trip.**

21 **I believe that Santee Cooper**
22 **accompanied me, and I believe that was Bill McCall.**
23 **At least that's at that time. He was the chief**
24 **operating officer at Santee Cooper at that time.**
25 **There were other SCE&G employees that went. I just**

217

1 don't recall who they were.

2 Q. Did you ever visit The Woodlands
3 facility in Texas?

4 A. I never visited The Woodlands, no.

5 Q. Did you ever visit the Newport News
6 facility in Virginia?

7 A. I did.

8 Q. How many times did you visit there?

9 A. Once.

10 Q. What year?

11 A. I think it was 20 -- it was either '15
12 or '16. I can't remember.

13 Q. Why did you visit there?

14 A. I wanted to see what the facility was
15 offering. I wanted to get a gauge as to whether or
16 not, you know, we thought that they were going to
17 be able to meet the requirements of delivering the
18 modules to the project site on time. I wanted to
19 have an opportunity to talk to their leadership.

20 Q. Was that in conjunction with their
21 fabrication of shield building panels?

22 A. It was, yeah. And there was also a
23 proposal to expand that facility. So I wanted to
24 find out whether that was necessary or not. Their
25 leadership certainly convinced me that that would

218

1 be a good thing. I thought the leadership was a
2 lot more attune to nuclear issues than other
3 vendors that I had been to, specifically Lake
4 Charles; that their shop operated in a much more
5 professional manner, that their craft work seemed
6 more professional, and they also seemed to be much
7 more attune to oversight. So people looking over
8 their shoulder, that didn't seem to bother the
9 Newport News folks, whereas the work force at Lake
10 Charles always seemed to have an issue with those
11 sort of things.

12 So the visit to the Lake Charles -- to
13 Newport News in my mind was a good visit, and I
14 know that Santee Cooper accompanied me on that
15 visit along with a couple of other SCE&G guys.

16 Q. Did it solve any problems with
17 fabrication in that facility?

18 A. Did what solve problems?

19 Q. Your visit.

20 A. Did my visit solve problems?

21 Q. Right.

22 A. I have no idea whether my visit solved
23 problems or not. My visit wasn't -- the intent of
24 my visit there wasn't to solve problems; the intent
25 of my visit there was to gain an understanding of

219

1 the capabilities of the facility and hear from the
2 leadership what they thought they could do there.

3 Q. If you could turn to Exhibit 11 in the
4 stack in front of you.

5 A. Yeah. 11.

6 Q. This is the letter dated May 6, 2014
7 from Mr. Marsh and Mr. Carter to Mr. Asherman and
8 Mr. Rodrick.

9 Did you review this letter before it
10 was sent to the Consortium?

11 A. I believe I did I review it.

12 Q. Is this letter accurate?

13 A. I think so. I would have to read
14 through everything to see if I think that there is
15 anything out of place, but at the time I thought it
16 was fairly accurate.

17 Q. I would like to know if you believe
18 this letter is accurate, so you do what you need to
19 do, then, to confirm it.

20 A. Okay. Okay. I've read it. So there
21 are some of the things represented from NRC
22 inspections that I don't have specific recollection
23 of to know they're accurate, but I don't have any
24 reason to believe that they're not.

25 Q. So there is nothing in here that you

220

1 know is inaccurate?

2 A. That's correct.

3 Q. On Page 4 of this document, the first
4 paragraph on that page, is it true that the
5 Consortium assured SCE&G in July of 2012 that it
6 had resolved the module production problem?

7 A. I believe so.

8 Q. And looking at the next page, Page 5
9 right under III it's true, isn't it, that module
10 production did not improve after the 2012 agreement
11 despite the Consortium's assurances?

12 A. That is what it says, yes.

13 Q. And is that true?

14 A. I would say that certainly the
15 improvements in module fabrication were not what
16 the Consortium had promised.

17 Q. And if you look at the bottom of Page
18 6, the last line says that CB&I promised that the
19 Consortium would deliver four modules in the second
20 quarter of 2013, 40 modules in the third quarter
21 and 39 modules in the fourth quarter; is that
22 correct?

23 A. That's correct.

24 Q. And it's correct that CB&I failed in
25 that promise?

221

1 **A. I believe that is right.**

2 Q. And is it correct that CB&I also
3 provided that the CA-20 unhook date would be
4 October 31st, 2013 and as of the date of this
5 letter on May 6, 2014 had still not reached that
6 milestone?

7 **A. Say that again.**

8 Q. Sure. Isn't it true that CB&I stated
9 that it would have a CA-20 unhook date of October
10 31st, 2013 and that as of the date of this letter,
11 May 6, 2014, the CA-20 was still not unhooked?

12 **A. That's correct.**

13 Q. And it's true that the Consortium was
14 also not on schedule as of the date of this letter
15 to meet the revised CA-01 unhook date of September
16 4, 2014?

17 **A. I believe that's right.**

18 Q. And under Subparagraph E on Page 7 it's
19 correct that the owners saw no improvement over the
20 next several months?

21 **A. No improvement with the module delivery
22 schedule, yes.**

23 Q. If you turn to Page 11 there is a
24 subparagraph A entitled "IFC Design Delays," and
25 the third paragraph down on that page references a

223

1 **A. It was -- it was a complaint by SCE&G.
2 This letter -- again, I think I explained this
3 once, but it was really -- the real intent of this
4 letter was Toshiba Corporation.**

5 **Toshiba is the company that had said
6 that they had significant amounts of experience.
7 Toshiba officials had actually come to Columbia in
8 years earlier and talked about their level of
9 experience in Asia, how they got these construction
10 means and methods and techniques down and that they
11 would be passing those along to Westinghouse. And
12 honestly, the owners hadn't seen much involvement
13 or interaction with Toshiba. So this was an effort
14 to put Toshiba on notice that their daughter
15 company, Westinghouse, wasn't doing what it had
16 promised it would do. And this letter was followed
17 up by a visit from the CEOs to Tokyo to meet with
18 Toshiba.**

19 Q. And the last page of this letter -- I'm
20 sorry. The next to the last page, Page 13, there
21 is a subparagraph No. 5 entitled "Our Frustration
22 Continues to Mount." And the second sentence says
23 there, quote: You have made promise after promise,
24 but fulfilled few of them.

25 That was a true statement; right?

222

1 May 19, 2011 monthly project review minutes in
2 which Westinghouse estimated the design of the
3 project was 95% complete. Is that correct?

4 **A. Yeah. I'm not sure if they're talking
5 about the issue for design or issue for
6 construction drawings at 95% complete. I think
7 that's what they're talking about.**

8 Q. And is it correct that on March 31st,
9 2014 Westinghouse reported that the IFC documents
10 were only 88% complete?

11 **A. That's right.**

12 Q. So Westinghouse was reporting a lower
13 percentage completion on IFC documents in 2014 than
14 they had in 2011; correct?

15 **A. I think they had -- they were looking
16 at the issue for construction drawings as a
17 percentage complete of all of the drawings. With
18 design changes that were being implemented on the
19 project their scope had grown. So as the scope
20 grows the denominator, if you will, is bigger, so
21 that the overall percentage complete actually
22 dropped.**

23 Q. But isn't it true that SCE&G is
24 complaining that the percentage of completion on
25 this issue is heading in the wrong direction?

224

1 **A. I think this was probably, if you will,
2 a negotiating posture. So certainly the Consortium
3 had made some promises around that module facility
4 around the time that the modules were supposed to
5 be being delivered to that facility that they were
6 not living up to. So this was the frustration.**

7 **And again, I didn't write the paragraph
8 or the title. So certainly there was some
9 frustration on the part of the owners relative to
10 modules not being produced in a timely fashion out
11 of that Lake Charles facility.**

12 Q. Isn't it true that SCE&G is complaining
13 that the Consortium has made promise after promise
14 but fulfilled few of them?

15 **A. Again, I think that's a negotiating
16 tactic aimed at throwing things up at Toshiba to
17 force them to get more involved in the project.**

18 Q. Was it a true statement?

19 **A. I think that the frustration was
20 continuing to mount. They had made promises. I
21 don't know that I would have necessarily
22 characterized it this way had I written the letter,
23 but this was not me writing the letter.**

24 Q. Mr. Marsh characterized it this way;
25 correct?

225

1 **A. I think it was a joint effort between**
2 **Mr. Marsh and Mr. Carter.**

3 Q. If you could turn to Exhibit 13,
4 Mr. Byrne.

5 **A. Got it.**

6 Q. I think you testified earlier this is a
7 copy of the Consortium EAC cost estimate in August
8 2014; correct?

9 **A. Yeah. And to be clear, this was a copy**
10 **that was sent ahead of time to -- from JoAnne Hyde**
11 **with Westinghouse to Carlette Walker, who then**
12 **forwarded it.**

13 **So I don't know if there may have been**
14 **any changes made to us between the day before when**
15 **this was forwarded to Carlette and when**
16 **Westinghouse actually presented it to us.**

17 Q. But this is a document that you
18 received on August 29th; correct?

19 **A. It is.**

20 Q. And you attended this briefing as well,
21 correct?

22 **A. I did.**

23 Q. If you could turn to Page 28 again.

24 **A. Okay.**

25 Q. The second bullet point is, quote:

227

1 **have reforecasted earlier or later, I don't think**
2 **that that makes any difference.**

3 Q. Well, to be clear, you didn't reveal to
4 the PSC that the Consortium had notified SCE&G that
5 it typically would not reforecast its PF until it
6 had reached a higher level of completion that it
7 had reached; correct?

8 **A. I think what various company witnesses**
9 **had testified before the PSC is the performance**
10 **factor was not where it needed to be, though the**
11 **Consortium were the ones that were reforecasting**
12 **it. So I don't know whether -- why this would be**
13 **germane.**

14 Q. And Mr. Byrne, I'm not worried about
15 what the other witnesses testified to. I'm just
16 talking about your testimony here, and I just want
17 to know if your testimony which you reviewed in
18 preparation for your deposition included this
19 statement that the Consortium was not at the level
20 of completeness where it typically would reforecast
21 its PF.

22 **A. My testimony would not include the --**
23 **your statement. No.**

24 Q. And the last statement on this page
25 that the Consortium was promising to reach a PF of

226

1 Current PF equals 1.41. (U2 equals 2.15, U3 equals
2 1.74, SS equals 1.07), end quote.

3 This reflects that the PF on Unit 2 was
4 worse than the PF on Unit 3; correct?

5 **A. That's correct, which would be**
6 **expected.**

7 Q. And below that it says, quote:
8 Currently only 12.9% complete with direct
9 construction. Typically would not reforecast PF
10 until 20% complete with a particular scope, end
11 quote.

12 This is the Consortium warning SCE&G
13 that it would typically not reforecast its PF until
14 it had reached a higher level of completion than it
15 had reached. Isn't that correct?

16 **A. That's what it appears to be, yes.**

17 Q. You did not reveal that to the
18 Commission in your prefile testimony in 2015, did
19 you?

20 **A. I don't recall what I revealed to the**
21 **Commission. I believe that we got to the**
22 **Commission the fact that their PFs were not what**
23 **they intended to be. I don't know that I would**
24 **have viewed this as germane to that discussion. If**
25 **they were not meeting the PFs, whether they would**

228

1 1.15 in six months, that fact was not in your
2 testimony to the PSC in 2015, was it?

3 **A. I don't remember.**

4 Q. Go ahead and review it. It's Exhibit
5 15.

6 **A. 15. Could you repeat your question?**

7 Q. Sure.

8 MR. COX: Could you repeat the
9 question?

10 (The court reporter read the pending
11 question.)

12 **A. So on Page 21 of the testimony**
13 **beginning on Line 11 it reads: For various reasons**
14 **today Westington/CB&I has not met the overall PF on**
15 **which its original cost estimates were based in**
16 **preparing the revised fully integrated construction**
17 **schedule. Westinghouse/CB&I forecasted an increase**
18 **in its PF across the board. The higher rate**
19 **indicates more hours required for a task. SCE&G**
20 **does not accept the responsibility to pay for this**
21 **increased labor. Unfavorable productivity factors**
22 **have been a matter of frank and direct discussion**
23 **between the parties, and Westinghouse and CB&I**
24 **senior leadership has recognized the need to**
25 **improve in this area.**

1 Q. Do you believe that quote --

2 A. Hold on.

3 If you go also on Page 38 starting on

4 Line 19: As to both timing and cost, schedules are
5 based on productivity factors that Westinghouse and
6 CB&I represents can be met given the current status
7 of the project. Meeting these productivity factors
8 will pose a challenge to Westinghouse and CB&I, but
9 doing so will benefit the project both in terms of
10 cost and schedule. For that reason the owner has
11 no basis or interest in insisting that
12 Westinghouse/CB&I should use less challenging
13 assumptions; however, SCE&G does recognize that
14 Westinghouse and CB&I has set itself a significant
15 challenge as to future productivity.

16 So I do believe that the essence of
17 what you're talking about was captured in this
18 testimony. In addition to that, there is -- this
19 is just the prefile testimony. The total hearing
20 process before the Public Service Commission
21 involves a summary of the testimony and then
22 question and answers from intervenor's attorneys
23 and the commissioners themselves. So I don't know
24 what else I might have said in those other forums.
25 (DFT. EXH. 33, copy of transcript)

1 before Public Service Commission of South Carolina,
2 marked for identification.)

3 BY MR. COX:

4 Q. So, Mr. Byrne, I've handed you a
5 document marked Exhibit 33. It's an excerpt from a
6 hearing transcript dated July 21st, 2015 in which
7 you were called as a witness on behalf of SCE&G.

8 Isn't it correct, Mr. Byrne, that at
9 this conference you adopted your prefile testimony
10 in whole?

11 A. I did.

12 Q. And that was under oath; correct?

13 A. That's correct.

14 Q. So returning back to my earlier
15 question, I think you're saying that in your
16 prefile testimony you pointed out that the
17 Consortium would have a real challenge to meet the
18 PF factor projected and that it had said it could
19 do that; right?

20 A. What I said was the Consortium has had
21 problems with meeting productivity factors and in
22 proposing a new schedule they increased those
23 productivity factors across the board and that they
24 would be challenged in meeting those productivity
25 factors.

1 Q. And isn't it true that you never told
2 the Commission that the Consortium actually pegged
3 a specific time period in which it could attain
4 that goal of the PF, a time period of six months?

5 A. I don't -- I don't know what difference
6 it would make to say that the Consortium is
7 pledging to get to a specific PF, whether it was
8 over a day, six months or a year if, 1, they
9 haven't attained it historically; and 2, if the
10 company had doubts as to whether or not they will
11 be able to attain them.

12 Q. The reason it matters here, Mr. Byrne,
13 is because the promise was made seven months ago
14 and the Consortium didn't meet its goal. So there
15 is actually specific evidence that that assurance
16 that the Consortium had given the company was no
17 good, just like the past assurances.

18 MR. BALSER: Objection. Argumentative,
19 and there is no question.

20 Q. (Continued) Let me ask you a question.

21 The representation that the Consortium
22 had made to the company of reaching a PF of 1.15,
23 that was made in August 2014; is that correct?

24 A. That was on the presentation. That's
25 correct. Yes.

1 Q. And the Consortium said that it could
2 reach that goal in six months; correct?

3 A. I believe that's right.

4 Q. And the Consortium did not meet that
5 goal six months after August 2014, did it?

6 A. No. The Consortium's goal was to reach
7 that PF in six months, and it did not get there.
8 That's correct.

9 Q. And isn't it true that your prefile
10 testimony which you adopted at a hearing under oath
11 did not reveal to the Commission that the
12 Consortium had stated that it could reach that goal
13 in six months?

14 A. Did my prefile testimony say anything
15 about six months? No. I don't know what
16 difference that makes; however, if they didn't meet
17 the goal, whether it was at six months, a year, a
18 day, and the company said -- not just myself, but
19 other witnesses said that we didn't think they were
20 going to be able to meet the goal. And I said that
21 fairly consistent through testimony and --

22 Q. And isn't it true, Mr. Byrne, that your
23 prefile testimony that you adopted under oath did
24 not reveal that the Consortium had not met that
25 goal six months after it made that pledge?

233

1 A. Again, I'll go back to my previous
2 answer. I think that what I and other company
3 witnesses testified before the Commission was that
4 the performance factor had not been met and the
5 performance factor was not likely to be met and
6 that the Consortium had adopted a higher
7 performance factor across the board going forward.

8 So if I didn't think it was going to be
9 met, I'm not sure it's germane to say: Oh, by the
10 way, they haven't -- they've done exactly what I
11 said. They haven't met it.

12 Q. So it's your testimony that the company
13 stated that it was -- that the Consortium was not
14 likely to meet its goal?

15 A. We've said that it would be a challenge
16 for them to meet the goal that they set for the
17 performance factor. That's correct.

18 Q. Did the company testify that it -- did
19 the company provide testimony that the company
20 believed it was unlikely that the Consortium would
21 reach its goal of a PF of 1.15?

22 A. The company said that it would be
23 challenging for the Consortium to reach their
24 performance factor.

25 Q. Did the company testify, Mr. Byrne,

235

1 testimony?

2 A. In the testimony on Page 38 at Line 21
3 I said: Many of those productivity factors would
4 pose a challenge to Westinghouse and CB&I, but
5 doing so would benefit the project. SCE&G has no
6 interest -- continuing on the next page. No basis
7 or interest in assisting and WEC/CB&I should use
8 less challenging assumptions. However, SCE&G does
9 recognize that Westinghouse/CB&I and has set itself
10 a significant challenge as to future productivity.

11 Q. So it's your testimony that that
12 paragraph indicates that the company was pointing
13 out that its unlikely that the Consortium would
14 reach its goal of the productivity factor?

15 A. Yeah. I think the statement fairly
16 well speaks for itself that the company was
17 skeptical that the Consortium was going to meet its
18 goal.

19 Q. Yet in the following paragraph,
20 Mr. Byrne, isn't it true that you stated, quote:
21 For these reasons, I can affirm that these
22 schedules represent the best and most definitive
23 forecast of the anticipated costs and construction
24 schedule required to complete this project that is
25 available as of the date of the filing -- this

234

1 that it would be unlikely for the Consortium to
2 reach its goal of a PF of 1.15?

3 A. Was that specific language used?

4 Q. Correct.

5 A. I just -- I told you what the company
6 testified to, and the specific language that you're
7 posing wasn't in what the company said.

8 Q. Mr. Byrne, I'm proposing that language
9 because you said it, and I don't recall saying
10 that. I recall seeing the language about the
11 challenge.

12 A. What did I say?

13 Q. You said that the company testified
14 that it was unlikely that the Consortium would
15 reach that goal of a productivity factor of 1.15.

16 A. No. You're putting words in my mouth
17 that did not come out of my mouth.

18 I said the Consortium would not meet
19 their productivity goal. I didn't say anything
20 about 1.15. You said that.

21 Q. Okay. So your testimony is that the
22 company told the Commission that the Consortium was
23 unlikely to reach its productivity goal?

24 A. That's correct.

25 Q. And where did the company provide that

236

1 filing of the testimony. End quote.

2 A. That's correct.

3 Q. And do you believe that statement was
4 true?

5 A. Yes.

6 Q. Mr. Byrne, you mentioned the SCE&G
7 schedule team that reviewed the Consortium's
8 schedule analysis; is that right?

9 A. You're talking about the 2014 Estimate
10 of Completion?

11 Q. Correct.

12 A. Yes.

13 Q. You don't have any personal knowledge
14 of the method that that team used to assess the
15 Consortium's schedule, do you?

16 A. The team did give a presentation on the
17 method that they went through to evaluate the
18 Consortium's schedule. I don't have a recollection
19 of what it is off the top of my head, no, and I
20 don't have the presentation.

21 Q. You didn't perform the assessment
22 yourself; correct?

23 A. I did not perform it myself. A very
24 experienced team from SCE&G did perform that along
25 with Santee Cooper.

237

1 Q. Do you have any personal experience in
2 developing construction schedules for nuclear
3 projects?

4 A. When you say "construction schedules
5 for nuclear projects" -- I'm not a scheduling
6 expert. I've never professed to be a scheduling
7 expert, so I rely on scheduling experts that work
8 for me.

9 MR. BALSER: When you reach a good
10 stopping point -- we've been going almost two
11 hours. We should take a break.

12 MR. COX: I just have a couple more
13 questions on this point.

14 MR. BALSER: Yeah.

15 BY MR. COX:

16 Q. I think you testified earlier,
17 Mr. Byrne, that the internal SCE&G schedule
18 assessment team in 2014 said it would not be
19 realistic to use earlier substantial completion
20 dates than June 2019 and June 2020; correct?

21 A. Correct.

22 Q. That's information that they told you.
23 That was not your personal conclusion; is that
24 correct?

25 A. It certainly is information that they

239

1 negotiations with the Consortium and based on the
2 mitigations that I knew that they were going to
3 have to try to rely upon that I would have come to
4 the same conclusion, that relying on earlier dates
5 was probably not wise.

6 Q. And why is that?

7 A. Again, because of mitigations that the
8 Consortium would have to do.

9 So, you know, if they were looking at
10 having to hire so many more people or they're not
11 improving their PF as they would want to, some of
12 the mitigations that they were doing at some
13 vendors was going to take some time in my mind. So
14 my anecdotal impression just based on being in
15 negotiations and interfacing with the folks from
16 CB&I and Westinghouse was that it would have been
17 probably towards the later end of their own
18 schedule. And then when your own team comes to you
19 and confirms that, and that was what I ...

20 MR. COX: Okay. Let's go off the
21 record.

22 THE VIDEOTAPE SPECIALIST: This
23 concludes Video No. 3 in the video deposition of
24 Steve Byrne. The time is approximately 4:11. We
25 are now off the record.

238

1 gave to me, and being involved in the negotiations
2 with executive teams from CB&I and Westinghouse I
3 would also have come to the same conclusion that
4 relying on earlier dates was probably not wise at
5 that point in time.

6 Q. It was based on the previous failed
7 promises of the Consortium?

8 A. What previous failed promises?

9 Q. The ones that you referred to in your
10 -- or that the company referred to in its May 2014
11 letter.

12 A. Yeah. I'm not sure that I would say
13 that my assessment of the schedule was based on
14 anything in 2014.

15 Q. You were relying on your schedule
16 team's analysis in forming your conclusions
17 regarding the most accurate schedule; is that
18 correct?

19 A. The team that did the evaluation was
20 performing the most accurate schedule evaluation on
21 the EAC, yes.

22 Q. You relied on their analysis? You
23 didn't perform your own; correct?

24 A. Did not perform my own specific
25 detailed analysis. What I said was based on my

240

1 (Short recess taken.)

2 (DFT. EXH. 34, EAC Review Team
3 Preliminary Update, marked for identification.)

4 THE VIDEOTAPE SPECIALIST: We are now
5 back on the record. Today's date is October 23rd,
6 2018. The time is approximately 4:17 p.m. This is
7 Video No. 4 in the video deposition of Steve Byrne.
8 BY MR. COX:

9 Q. Mr. Byrne, I've had labeled Exhibit 34
10 to your deposition -- it's a Power Point slide and
11 labeled "EAC Review Team Preliminary Update
12 Preparation For 10/13/14 Executive Meeting," Bates
13 labeled SCANA_RP024674 through 686.

14 Were you present at this briefing?

15 A. I think that I was.

16 Q. And the names on the first page of this
17 document -- Kim Brown, Margaret Felkel, Kevin
18 Kochems, Shari Wicker and Kyle Young -- were those
19 the individuals that were on the SCE&G Estimate to
20 Complete cost team in 2014?

21 A. They were -- yes, they were.

22 Q. And just to be clear, there were no
23 other SCE&G cost estimate teams put together other
24 than this one; is that correct?

25 A. Not that I'm aware of. And this team

1 **did report to Carlette Walker. I don't know to**
2 **what extent Miss Walker may have had input into**
3 **this outcome.**

4 Q. The third page of this document is
5 labeled "CB&I Direct Craft Productivity."

6 If you look at the third bullet down,
7 isn't it true that the SCE&G EAC team had
8 calculated the cost that would be associated with
9 the 1.40 PF that it anticipated occurring for the
10 rest of the project?

11 **A. What was the question again? I'm**
12 **sorry.**

13 Q. Sure. Isn't it true that the SCE&G EAC
14 team calculated an approximate cost associated with
15 the higher to-go PF of 1.40 that it anticipated
16 versus the 1.15 that the Consortium anticipated?

17 **A. The EAC team certainly did calculate a**
18 **to-go cost based on a 1.4 PF.**

19 Q. And that cost was 101 million,
20 approximately; correct?

21 **A. That's what it appears here, yeah.**

22 Q. The next page of this document is
23 labeled "CB&I Schedule Impact." There is some
24 handwriting on that page.

25 Do you recognize whose handwriting that

1 **can only tell you what is written.**

2 Q. Is it your understanding that the EAC
3 team believes that the CB&I FNM plan is too
4 aggressive and that CB&I wouldn't be able to meet
5 its goals in that respect?

6 **A. Again, I can just tell you what is**
7 **written on here, which is that the FNM plan is lean**
8 **and the EAC team does not anticipate that CB&I will**
9 **be able to comply with this plan.**

10 Q. Is it correct to say that a goal in the
11 project is to keep the FNM ratio as low as
12 possible?

13 **A. I don't know that I would agree with**
14 **that. Certainly FNM could be looked at as**
15 **overheads and more cost.**

16 **So yes; the project -- the owners --**
17 **from the owner's perspective you would want to keep**
18 **costs as low as possible, so you would want to keep**
19 **overhead as low as possible. However, you have to**
20 **balance that with the fact that some of these field**
21 **nonmanual personnel may actually be performing**
22 **tasks that could actually accelerate the completion**
23 **date by things like resolving engineering issues.**

24 **So a field engineer would be an example**
25 **of somebody who is a field nonmanagement personnel,**

1 is?

2 **A. I don't. I can -- safe to say it's not**
3 **mine because I can read most of it.**

4 Q. If you scroll through two pages further
5 to the page Bates numbered 24679, there is a slide
6 entitled "CB&I Shield Building Risk."

7 Isn't it correct to say that the SCE&G
8 EAC team calculated a cost of 14.9 million in
9 connection with the shield building that the
10 Consortium had not included in its cost estimate?

11 **A. That's what it appears, yes.**

12 Q. On the next page, Bates labeled 24680
13 entitled "CB&I Field Nonmanual," the second bullet
14 point states that, quote: EAC team verified the
15 EAC using the current CB&I FMN plan, which is lean.
16 The EAC team does not anticipate that CB&I will be
17 able to comply with this plan.

18 Can you explain what this means?

19 **A. Well, I can tell you that FNM is field**
20 **nonmanual personnel. So field nonmanual personnel**
21 **would be people that support the craft but are not**
22 **members of the craft. So they're not direct craft**
23 **labor or indirect craft labor, but they would be**
24 **professional or semi-professional employees. But I**
25 **can only -- since this isn't my presentation, so I**

1 **and the owners were actually pressing the**
2 **Consortium to use more field engineers. So the**
3 **FNM, I think, had to be taken with a grain of salt.**

4 Q. If you can turn to --

5 **A. And I'm not sure that the financial EAC**
6 **evaluation team necessarily would recognize that.**

7 Q. Why do you say that?

8 **A. Well, people with a financial**
9 **background are looking at giving you information**
10 **that's going to minimize costs, but wouldn't**
11 **necessarily be looking at the other side of that**
12 **equation in that it may improve schedule to have**
13 **field engineers at the site.**

14 Q. Kim Brown and Kyle Young had
15 engineering expertise; correct?

16 **A. Both of those individuals had**
17 **engineering expertise, but I don't know to what**
18 **extent they participated in the financial aspects**
19 **of this.**

20 Q. Okay. If you could turn two more pages
21 further to Page 24682 labeled "CB&I Woodlands
22 Cuts." This says, quote: CB&I cut the EAC by 296
23 million at a very high level. How these cuts will
24 be realized has yet to be determined. Under target
25 price scheme all actual costs are reimbursed.

245

1 Is it correct to say that the EAC team
2 in this slide is pointing out that CB&I has
3 estimated a cut of 296 million in costs that if
4 it's not realized would be reimbursed to the
5 contractor in full?

6 **A. I don't know that to be the case
7 necessarily.**

8 **Some of the things that are in here --
9 in distributors, for example, I don't know what is
10 going to be in there. Some of the direct
11 subcontracts could be in the fixed price portion of
12 the contract. So I don't think it's a good
13 assumption to just say that you can assume 296
14 million will be billed to the office.**

15 **Q. Isn't it fair to say, though, that the
16 EAC team here is pointing out that it is not
17 convinced that CB&I can realize this cut in cost
18 that it projects in this category?**

19 **A. I think what the EAC team is pointing
20 out is that CB&I has taken a reduction here. So
21 they're saying that we're going to reduce these
22 costs, but they don't at the time know where those
23 costs are going to come from. So that was yet to
24 be determined.**

25 **Q. If you could turn back to Exhibit 15,**

247

1 careful study and review that you're referring to
2 of the Consortium's cost projections, that study
3 and review was done by the team that consisted of
4 Kim Brown, Margaret Felkel, Kevin Kochems, Sheri
5 Wicker and Kyle Young; correct?

6 **A. Well, what I know is that that team did
7 this review. What I'm telling you is a lot of time
8 transpired between this review and the development
9 of the testimony and the case. So there could have
10 been other information that went into it.**

11 **So I'm not willing to acquiesce to the
12 fact that this review is the only thing that went
13 into the file.**

14 **Q. And that's fair enough. I understand
15 your point that there might have been work product
16 by this team.**

17 **What I'm trying to understand from you
18 is whether the review that you're talking about in
19 your testimony on Page 38 -- if you're referring to
20 the work that this team did -- this team listed in
21 Exhibit 34 -- did both before that document was
22 prepared and afterward.**

23 **A. Well, what I was referring to in
24 testimony would be what the company financial
25 witness would be testifying to.**

246

1 your prefile testimony. If you could turn to Page
2 36 of your testimony. Actually turn to Page 38,
3 please. On Line 9 of Page 38 you say, quote: They
4 are based on the cost projections and construction
5 schedule data that WEC/CB&I has provided to SCE&G
6 in which SCE&G has carefully studied and reviewed
7 consistent with its duties as owner, end quote.

8 **The review that you're talking about
9 with respect to cost projections is the work done
10 by the EAC review team that is referenced on the
11 front page of Exhibit 34; correct?**

12 **A. This EAC review team output that is
13 Exhibit 34 was in October of '14. This prefile
14 testimony and the subsequent hearing were much
15 later in 2015.**

16 **So I don't know that there weren't a
17 number of changes between this report coming out
18 and what was submitted as a part of the financial
19 aspects of this. And while introduced by me, there
20 would have been a financial witness associated with
21 the case as well.**

22 **Q. And who was that?**

23 **A. I think it was Carlette Walker, who
24 this team reported to.**

25 **Q. And my question to you is that the**

248

1 **Q. But this is your testimony; right?**

2 **A. This is my testimony. But not unusual
3 in testimony, as I think you're probably aware,
4 that lead witnesses for the company would talk
5 about other witnesses presenting other areas.**

6 **And so, yes. My -- as the lead witness
7 for the company I'm talking about everything in the
8 project, but there were other witnesses in this
9 process. So you're asking me about this specific
10 evaluation and this specific team and I'm telling
11 you I don't know that this specific evaluation and
12 this specific team went into what was filed and
13 that I'm talking about the company did do a
14 detailed review -- and that's true -- and that the
15 specific information about that would be contained
16 in the other company witness who was the financial
17 witness at that hearing.**

18 **Q. Fair enough. Let me just ask a broader
19 question.**

20 **What review are you referring to with
21 respect to the cost projections that the company
22 did?**

23 **A. The review that would be discussed by
24 the company financial witness.**

25 **Q. And I understand that witness is**

249

1 discussing it. You reference it -- you say that
2 SCE&G has carefully studied and reviewed the cost
3 projections, and I want to understand what your
4 knowledge is of what the company study and review
5 was.

6 **A. So I'm aware of the fact that the**
7 **company put a team together that was under the**
8 **financial group. So this would be under the CFO's**
9 **wing. So Jim Addison was the CFO. Carlette Walker**
10 **would have been the VP reporting to the CFO and**
11 **Carlette Walker's team would have done the**
12 **evaluation.**

13 **So I know that Carlotte's team worked**
14 **on the evaluation. I believe that I participated**
15 **in this out-briefing. I don't know that I didn't**
16 **participate in more out-briefings. You're talking**
17 **about something that was a number of years ago and**
18 **that the financial witness was the one presenting**
19 **the financial information to the company.**

20 **Yes. I'm talking about it in this**
21 **presentation and I'm aware of the fact that the**
22 **company had done a detailed review, but you asked**
23 **me earlier whether it was this team, this report,**
24 **and I don't know that that is necessarily the case.**

25 Q. Is it correct to say that you're not

251

1 Q. Is it correct to say that the financial
2 witness would be the person who is in the best
3 position to know the work that the company did to
4 review the Consortium's cost estimate?

5 **A. Certainly the financial witness would**
6 **be the best person to ask those questions of, yes.**

7 Q. If you could turn to Page 43 of Exhibit
8 15. On Line 5 there is a question presented to
9 you: Why are disputed amounts properly included in
10 the cost schedules presented here?

11 And your answer: The BLRA requires
12 SCE&G to present the anticipated cost to complete
13 the project. SCE&G in no way disputes the fact
14 that the project will incur the amount presented
15 here to complete the units. The question is who is
16 required to absorb these additional and disputed
17 costs, end quote.

18 Was that a true statement?

19 **A. Yes.**

20 Q. And it's correct to say that the cost
21 schedules that the company was presenting to the
22 Commission in March 2015 from the Consortium -- the
23 company was not saying that it was obligated to pay
24 a hundred percent of those cost estimates?

25 **A. What the company was saying was that**

250

1 aware sitting here today of any other review done
2 by the company of the Consortium's cost projections
3 other than the review performed by the financial
4 witness and the review team listed in Exhibit 34?

5 **A. Let me just say that I would be very**
6 **surprised if an October 6th report was the last**
7 **thing that the company did on this before filing.**

8 Q. And I'm probably making a mistake or
9 confusing the issue by tying it to that document,
10 because I don't mean to tie it to that document. I
11 mean to tie it to the work of that team. And so my
12 question is: Are you aware of any work that the
13 company did to review the Consortium's cost
14 schedules that was performed by any other part of
15 the company other than the financial witness and
16 this team that we referred to that produced Exhibit
17 34?

18 **A. I'm not aware of anything that would**
19 **not have been in the financial witness's**
20 **presentation.**

21 **This team may have been augmented with**
22 **other folks and this team may have done more work.**
23 **So I just don't want to leave you with the**
24 **impression that this is it. This is final. These**
25 **things are generally iterative.**

252

1 **the cost that the company was going to have to pay**
2 **was going to be 90% of those invoices or charges**
3 **that were disputed, and so the 90% figure was what**
4 **was included in these figures.**

5 Q. So you're saying that the cost
6 schedules the company presented in March 2015 had
7 already been reduced to reflect amounts that the
8 company did not believe it had to pay the
9 Consortium?

10 **A. Again, let's look at it this way: The**
11 **Consortium had invoiced the company for certain**
12 **charges. The company was rejecting some, paying**
13 **nothing, not included in this file. For others the**
14 **company was saying: We're disputing those. And it**
15 **isn't that the charges are not legitimate. It**
16 **isn't that they're paid. It's a question of who is**
17 **going to pay them, and there was some dispute over**
18 **that.**

19 **So disputed charges under the EAC**
20 **contract would be paid at 90%. So the company was**
21 **letting the Public Service Commission know that**
22 **there were charges that were disputed and the 90%**
23 **was included here, not the hundred percent, such**
24 **that if the company were not to prevail on the**
25 **claim there may be additional charges coming.**

1 **Should the company prevail on part of the claim**
2 **there might be some money coming back.**

3 Q. Isn't it fair to say, though, that in
4 this answer what you're telling the Commission is
5 that the cost schedule that you're providing the
6 Commission from the Consortium, the company is not
7 agreeing that it is responsible for paying all of
8 those anticipated costs?

9 A. **What the company is saying is that**
10 **there is a dispute. So where the company says**
11 **there is just no way that we're responsible for**
12 **these, those are not included in here. So those**
13 **were rejected. Those invoices were rejected.**

14 **For invoices where there is a dispute,**
15 **perhaps the Consortium is right. They certainly**
16 **take the position that they're in the right. The**
17 **company takes the position that it is in the right.**
18 **The approved contract says you pay at 90%. So that**
19 **it's the 90% charges that are included here.**

20 Q. Well, here we're talking about
21 projected costs, not incurred costs; correct?

22 A. **In some cases it's things that the**
23 **Consortium had billed for, but the company had not**
24 **recouped up to that point in time. It may actually**
25 **be for services that had already been rendered, but**

1 **the company hadn't paid them. So we hadn't -- we**
2 **hadn't put them in rates, if you understand what**
3 **I'm saying.**

4 **So some of the costs may have been**
5 **projected, but some of the costs were actually**
6 **costs that had been incurred by the Consortium and**
7 **they're trying to get costs recovered from the**
8 **company.**

9 Q. So is it your testimony that the
10 anticipated costs that the company is presenting to
11 the Commission here to complete the project, that
12 the company is acknowledging that it's responsible
13 for paying a hundred percent of those costs?

14 A. **No. My testimony was that the company**
15 **was responsible for paying 90% of the costs under**
16 **the EPC contract.**

17 Q. So the number that -- the number
18 reflecting the anticipated future cost to complete
19 the project that the company is presenting to the
20 Commission here, the company is stating that it is
21 not responsible for paying a hundred percent of
22 those costs; correct?

23 A. **Well, let's see if I can say this a**
24 **better way perhaps.**

25 **The Consortium would say the company is**

1 **responsible to pay for a hundred percent of those**
2 **costs. The company has a dispute over that**
3 **position. Under the contract the company is**
4 **required to pay 90% of disputed invoices, and the**
5 **dispute will get worked out at some point in the**
6 **future.**

7 **So without any way to know how that**
8 **resolution is going to take place the company**
9 **deferred to the contract, not wanting to breach the**
10 **contract and paid the 90% and let the Commission**
11 **know that should there be a resolution to those**
12 **disputed issues that that money could be recouped,**
13 **but also there is a chance that if the company**
14 **didn't prevail on those issues it would actually be**
15 **responsible for a hundred percent.**

16 **So there was a dispute over the costs.**
17 **The costs were real costs. We weren't disputing**
18 **the fact that the money had been spent; it was just**
19 **a question of who was responsible for paying that**
20 **charge, if you will.**

21 Q. But this document isn't about costs
22 that have already occurred, is it?

23 A. **Well, it could be about costs that have**
24 **already occurred if the Consortium is making the**
25 **point that the company was eligible to pay them and**

1 **the company has not yet paid them.**

2 Q. Let me ask it to you one more way and
3 see if this will avoid any confusion.

4 It's true that the company did not
5 reduce the Consortium's cost estimate to reflect
6 the amount of money that the company believed it
7 will ultimately have to pay to the Consortium?

8 A. **I'm not sure -- that didn't clear it up**
9 **for me, so I'm not sure that I understand. You say**
10 **that the company did not include amounts -- well,**
11 **how about you ask the question again.**

12 Q. Yeah. Let me -- isn't it true that
13 SCE&G took the cost estimate that the Consortium
14 prepared in August 2014 and presented that number
15 to the Commission without making any edits to it?

16 A. **No. That's not the case.**

17 Q. What edits were made to it?

18 A. **Edits were made for charges that the**
19 **company contested. Edits were made for charges**
20 **that the company said the Consortium was not**
21 **eligible for. Edits were made for liquidated**
22 **damages, offsets. So there were changes made.**
23 **There were offsets.**

24 Q. And owner's cost was added too;
25 correct?

1 **A. Owner's cost was included. And I don't**
2 **remember off the top of my head, but there may have**
3 **been some change orders that were edited as well.**

4 Q. You referenced earlier in your
5 testimony that the legal team advised the company
6 that it would be speculative to use the PF factor
7 that the internal SCE&G team anticipated would
8 occur for the rest of the project instead of the
9 Consortium number; correct?

10 **A. That's correct.**

11 Q. Who on the legal team provided that
12 advice?

13 **A. I don't know that it was one lawyer. I**
14 **think it was the company's regulatory attorneys.**
15 **So that would have been Chad Burgess, Makis &**
16 **Banner, and then two external regulatory attorneys**
17 **that the company used, Mitch Willoughby and Belton**
18 **Zeigler.**

19 Q. Was this one meeting where this advice
20 occurred or was it numerous ones?

21 **A. I don't recall. In reviewing testimony**
22 **generally it was done in a room something like**
23 **this, perhaps even a little bit larger than this,**
24 **with a relatively large group of folks that would**
25 **always include the four attorneys that I just**

1 **mentioned. It would typically also include our**
2 **general counsel, witnesses, and then some support**
3 **staff.**

4 **So it was -- I don't remember it being**
5 **one meeting. I remember it being discussed at**
6 **multiple sessions.**

7 Q. And do you recall which one of those
8 attorneys provided that advice or more than one?

9 **A. I believe that it was their consensus**
10 **opinion that that was the case; but again, you**
11 **would have to -- that's about all I know about that**
12 **topic. So you would have to ask the legal**
13 **department for that, the answers to those**
14 **questions.**

15 Q. No. I would like to know if you
16 actually received that information directly from
17 them that --

18 **A. I think I just told you that that was**
19 **information that I received from our legal**
20 **department, and I've named the four attorneys**
21 **involved. I told you when it took place, and I**
22 **believe it was their consensus decision.**

23 **Now, if one specific attorney told me,**
24 **I don't know. And I've also been advised that**
25 **specific discussions between SCANA attorneys and**

1 **myself the company is not waiving the privilege on.**

2 Q. Are we talking about a specific meeting
3 here?

4 **A. Huh?**

5 Q. It sounds to me like -- let me ask you
6 this question: Did that advice factor into the
7 company's decision to use the 1.15 PF in its March
8 2015 filing?

9 **A. I believe that's the case, yes.**

10 Q. Who made that decision?

11 **A. I don't recall who made the decision.**

12 Q. You don't know who made the decision to
13 use the 1.15 PF rather than the 1.4 PF?

14 **A. I don't recall who specifically made**
15 **that decision.**

16 Q. Was Mr. Marsh involved in these
17 meetings?

18 **A. Mr. Marsh was certainly involved in the**
19 **meetings.**

20 Q. Did you make the decision?

21 **A. Not that I recall.**

22 Q. Did Carlette Walker make the decision?

23 **A. I don't recall who made the decision.**

24 Q. Do you know of any reason that the 1.15
25 PF was used in the PSC filing other than the

1 recommendation of counsel?

2 **A. I think, as has been enumerated in the**
3 **filing by myself and other witnesses -- and I think**
4 **I saw -- I remember seeing something this morning**
5 **that was a question from ORS where I think a**
6 **similar answer was given that it would be in the**
7 **company's best interest to hold -- I'm paraphrasing**
8 **-- to hold the Consortium's feet to the fire, not**
9 **to give them an out at all on their 1.15; that even**
10 **though you don't think necessarily that they can**
11 **make it, you want to push them to do as good as**
12 **they can do or as well as they can do. And then**
13 **when the experts, the people who own the schedule**
14 **who have all these construction expertise are**
15 **telling you that we think we can do this, to say**
16 **"well, I'm going to do that plus something else"**
17 **that would be viewed as contingency.**

18 Q. Isn't it true, Mr. Byrne, that there
19 was no prohibition on SCE&G informing the
20 Commission that it calculated a higher to-go PF
21 than the Consortium had calculated?

22 **A. I'm sorry. Say that again.**

23 Q. Sure. Isn't it true that there was no
24 prohibition on SCE&G notifying the Commission that
25 it had calculated a higher likely to-go PF than the

261

1 Consortium had calculated?

2 **A. Was there a prohibition? I'm not aware**
3 **of any prohibition, but I don't know why the**
4 **company would want to proffer a higher PF than the**
5 **company, pending consensus format, decided was the**
6 **appropriate PF to use and the PF that the**
7 **Consortium's -- at least aspiration said that they**
8 **wanted to achieve, particularly in light of the**
9 **fact that when your attorneys are advising you to**
10 **use something that wasn't -- don't use something**
11 **that might be viewed as contingency.**

12 Q. Isn't it correct to say, Mr. Byrne,
13 that the company could have informed the Commission
14 that it had calculated a higher to-go PF, but that
15 it would not allow the Consortium to recover any
16 additional costs that would accrue from that higher
17 PF?

18 **A. The company did withhold monies higher**
19 **than the PF. So anything above the 1.15 PF money**
20 **was withheld from the Consortium for that.**

21 Q. Couldn't the company have told the
22 Commission: We don't think the Consortium can meet
23 the PF that it projects it's going to achieve and,
24 therefore, the costs are likely going to be higher
25 than the Consortium is anticipating?

262

1 **A. I think I did say that this would be a**
2 **big challenge for the Consortium to hit and let the**
3 **Public Service Commission know that there could be**
4 **higher costs.**

5 Q. You also said that the Consortium's
6 cost estimate was the best cost estimate that you
7 were aware of; correct?

8 **A. That's correct.**

9 Q. And isn't it true that the company EAC
10 team did come up with a different cost estimate
11 than the Consortium's?

12 **A. So a team from the company did at least**
13 **at one point in time run a higher PF. They could**
14 **have run all kinds of PF numbers. They could have**
15 **run numbers between 1.4 and 1.15. They could have**
16 **run a number of one. They could have run all kinds**
17 **of numbers.**

18 They chose to use a number that the
19 experts gave to the company that said this is what
20 we can -- we want to achieve, and I think that
21 based on the advice of our attorneys to do anything
22 other than that would have been viewed as
23 contingency, which in their minds was not allowed.

24 Q. You didn't reveal to the Commission
25 that the internal company had calculated a

263

1 different EAC cost than the Consortium, did you?

2 **A. I don't recall that being the case.**

3 Q. Is it your testimony that the ORS was
4 aware of the calculations made by the SCE&G EAC
5 team?

6 **A. I believe that the ORS was aware of**
7 **that. I don't know that to be the case here, sir.**

8 Q. Why do you believe that?

9 **A. Because the Office of Regulatory Staff**
10 **made frequent visits to the site. I've been shown**
11 **today a question came from the Office of Regulatory**
12 **Staff relative to that PF. The audit group at the**
13 **Office of Regulatory Staff had an office out at the**
14 **site and they had interactions with the NND team,**
15 **both financial team and construction team on at**
16 **least a monthly basis.**

17 So I believe the ORS had access to all
18 the information that SCE&G has. I didn't
19 personally have those interactions with the Office
20 of Regulatory Staff, so I don't know.

21 Q. Did the ORS have access to Exhibit 34?

22 **A. What is Exhibit 34?**

23 Q. The October 2014 EAC review team Power
24 Point.

25 **A. No.**

264

1 Q. So it's your testimony that the ORS had
2 the historical productivity data on the project;
3 correct?

4 **A. I believe that the Office of Regulatory**
5 **Staff would have had access to the historical data**
6 **on the project. Correct.**

7 Q. But isn't it true that you don't know
8 that ORS had access to the specific calculations of
9 the anticipated cost that the SCE&G 2014 EAC team
10 reached?

11 **A. So what I'm telling you is I didn't**
12 **have personal interactions with ORS on this topic.**
13 **I had actually relatively few personal interactions**
14 **with the Office of Regulatory Staff. So you would**
15 **probably have to ask either ORS or the NND**
16 **financial team or NND construction team about their**
17 **level of interaction on this topic with the Office**
18 **of Regulatory Staff.**

19 Q. And that's fine. And I can understand
20 you're short-circuiting the conversation. I just
21 want to establish for the record that you are not
22 testifying that ORS had access to the cost
23 calculations performed by the SCE&G 2014 EAC team.

24 **A. I believe that the Office of Regulatory**
25 **Staff had access to all the information that our**

265

1 team had. The one exception that you mentioned was
2 a privileged document. So our attorneys told me
3 that that document was privileged, and I didn't
4 have the authority to release that privilege.
5 Q. Are you talking about Exhibit 34?
6 A. You were the one that brought up
7 Exhibit 34 a minute ago.
8 Q. Yes.
9 A. So I think you said 34 was the October
10 22nd report.
11 Q. Take a look at it.
12 A. (Witness complies.) No. I'm sorry.
13 Not 34. I thought you were talking about something
14 different.
15 Yeah. I don't know if the Office of
16 Regulatory Staff had this. I don't have any reason
17 to believe that they wouldn't have, but I don't
18 know that they did.
19 Q. Okay. And I want to ask a more general
20 question; and I don't mean to repeat it, but I feel
21 like I haven't gotten a yes or no answer.
22 You do not know whether the ORS had the
23 information -- the calculations made by the 2014
24 SCE&G EAC team; correct?
25 A. My personal interactions with the

266

1 Office of Regulatory Staff did not include that, so
2 I can't say definitively that they had it.
3 (DFT. EXH. 35, V.C. Summer Units 2 & 3
4 2014 EAC Analysis and Discussion of Cost Changes,
5 marked for identification.)
6 BY MR. COX:
7 Q. Mr. Byrne, I've handed you a document
8 labeled Exhibit 35 to your deposition. It's Bates
9 No. RP_0015652 through 16 -- I'm sorry. 15658.
10 It's an EAC validation report.
11 Have you ever seen this document
12 before?
13 A. I don't recall seeing this document,
14 no.
15 Q. On the top of Page 3 the document says,
16 quote: In its EAC the Consortium assumed that the
17 project would reach a goal PF of 1.15 within six
18 months. This does not appear to be achievable.
19 The owner does not believe the assumed to-go PF of
20 1.15 is achievable with the current CB&I
21 organization. So that each review team
22 recalculated the costs with a PF factor of 1.40
23 to-go. This resulted in the owner's EAC estimate
24 increasing 167,461,000 for direct craft labor.
25 Isn't it true, Mr. Byrne, that the

267

1 SCE&G EAC team determined that the Consortium's PF
2 goal was not achievable?
3 A. I don't know that I've seen this
4 document before, so all I can do is go by what is
5 written here. So I didn't have any conversation
6 with them about this document.
7 Q. Okay. You did not mention in your 2015
8 PSC testimony that SCE&G did not believe the to-go
9 PF by the Consortium was not achievable?
10 A. I believe that I testified that the PF
11 that was used by the Consortium would be difficult
12 for them to achieve, and I believe I said it would
13 be a challenge. So I think that the gist of what
14 is here was in the testimony.
15 Q. You think that your testimony let the
16 Commission know that the Consortium's PF was not
17 achievable?
18 A. I believe that -- I believe that my
19 testimony was accurate on the topic of PF and that
20 it would be difficult for the Consortium to
21 achieve.
22 Now, even this team doesn't know that
23 it's impossible. So I think that perhaps they were
24 overstating it here, but I think that I captured
25 the gist of the team's comments when we presented

268

1 the testimony to the Public Service Commission,
2 yes.
3 Q. This team turned out to be correct; is
4 that right?
5 A. Well, I don't know if the team turned
6 out to be correct. No.
7 Q. SCE&G is the entity that commissioned
8 this team to do its work; correct?
9 A. That's correct.
10 (DFT. EXH. 36, email chain, marked for
11 identification.)
12 BY MR. COX:
13 Q. Mr. Byrne, Exhibit 36 is an email from
14 Michael Crosby to you entitled "BCS NND Target
15 Costs." It includes several Power Point
16 attachments.
17 If you can go ahead and review this, I
18 would like to have you review the Power Point
19 attachments to this email when you're prepared to
20 do so.
21 A. (Witness complies.) Okay.
22 Q. So the first Power Point slide -- the
23 top of it is labeled "Target Cost 64.2 Million Over
24 EAC Basis in Five Months Following Receipt of EAC."
25 Isn't it true that the target costs on

1 the project in the five months since the Consortium
2 gave you its estimate had overshot the Consortium's
3 estimate by \$62.4 million?

4 **A. I'm not sure.**

5 Q. Is that what this chart reflects?

6 **A. Yeah. This is a Santee Cooper document
7 and it does state the 62.4 million, but I don't
8 know this to be necessarily the case.**

9 Q. The chart -- the first chart on that
10 page, Direct Craft Productivity, it shows actual
11 PFs greater than 1.5 for every month since the
12 Consortium's EAC estimate; correct?

13 **A. At or above. Yeah.**

14 Q. What was the nature of your
15 interactions with Mr. Crosby during the course of
16 the project?

17 **A. My interactions with Mr. Crosby?**

18 Q. Right.

19 **A. He was a counterpart to me. We were
20 both on the -- what was called the Executive
21 Steering Committee that met quarterly. Mr. Crosby
22 was involved in most of the negotiations with the
23 Consortium. So I would speak with him relatively
24 frequently. Not necessarily in person, but on the
25 phone.**

1 Q. Is it fair to say that he was very
2 concerned during the course of the project about
3 the productivity problems?

4 **A. Certainly, as we all were.**

5 Q. Would you characterize him as being
6 among the more concerned in your group about those
7 issues?

8 **A. I don't know that I could characterize
9 him that way.**

10 Q. Was your company doing these charts
11 that he sent you?

12 **A. Yeah. I don't know that -- I believe
13 that our NND teams were doing productivity charts.
14 I don't know that they did the ones that he sent
15 me.**

16 Q. You refer to these as Santee Cooper
17 charts.

18 Mr. Crosby's email says that Marion
19 worked with Business and Finance. Do you
20 understand that to be SCE&G Business and Finance?

21 **A. I would say that's likely.**

22 Q. Mr. Cherry was the only Santee Cooper
23 employee permanently stationed at the project;
24 correct?

25 **A. No.**

1 Q. Who else was there?

2 **A. Jason Williams was there and they had
3 one other -- they had one other employee whose name
4 escapes me.**

5 Q. Is it fair to say that the information
6 in this email that Mr. Crosby sent to you on April
7 6, 2015 -- that you had that information at the
8 time that you received the email?

9 **A. That I had this information?**

10 Q. Right.

11 **A. I don't know that I -- I did not have
12 this information in this format. So I would say
13 that no; I wouldn't say that.**

14 Q. Is it fair to say that you received
15 this email from Mr. Crosby?

16 **A. I have no reason to doubt that I
17 received the email.**

18 Q. And is it your common practice to
19 review emails that you receive from Mr. Crosby?

20 **A. Yes.**

21 Q. So is it fair to say that you reviewed
22 these attachments to this email at or near the time
23 that you received the email?

24 **A. I would say that's likely.**

25 Q. Mr. Byrne, you had mentioned that you

1 had considered other companies to do an assessment
2 of the project aside from Bechtel; is that correct?

3 **A. Correct.**

4 Q. What were the names of those other
5 companies?

6 **A. I covered one earlier called Atkins
7 International. The other two companies, I can't
8 remember the names.**

9 Q. Was one of them Southern Cross
10 Management?

11 **A. Possibly.**

12 Q. You can't recall the other two
13 companies for sure?

14 **A. I don't. I don't remember.**

15 **(DFT. EXH. 37, email chain, marked for
16 identification.)**
17 **BY MR. COX:**

18 Q. Mr. Byrne, I've handed you an email
19 labeled Exhibit 37. It's an email chain between
20 you and several other individuals, including
21 Mr. Crosby.

22 If you can go ahead and take a few
23 moments to review the email. I have questions for
24 you about the initial email at the end of the
25 document. It's sometimes useful to start at the

1 end of the document, the first email.

2 **A. (Witness complies.) So you're talking**
3 **about the one that's on Page 2 on October 31, 2014?**

4 Q. Correct.

5 **A. Okay. Okay.**

6 Q. What was the purpose of your initial
7 email to Mr. Marsh, Addison, Crosby, Canning and
8 Jones on October 31st, 2014?

9 **A. We had evidently been discussing doing**
10 **-- having an outside assessment done, and this was**
11 **letting them know some of the companies that I had**
12 **been considering for the outside assessment.**

13 Q. And this email reflects that one of the
14 companies you in fact were considering was Atkins;
15 correct?

16 **A. Correct.**

17 Q. And you were also considering Southern
18 Cross Management Services; is that correct?

19 **A. Yes.**

20 Q. And it's correct that one purpose of
21 getting a third party was to look at the schedule
22 on the project; correct?

23 **A. Yes.**

24 Q. Mr. Byrne, the information that you
25 testified to earlier regarding information you

1 received about Bechtel's past performance on other
2 projects, you did not have firsthand exposure to
3 Bechtel's performance on those projects; is that
4 correct?

5 **A. Did I have firsthand exposure to**
6 **Bechtel on those projects that they had problems**
7 **with? No, I did not.**

8 Q. All that information was relayed to you
9 by other individuals who became aware of it; is
10 that correct?

11 **A. That's correct. And then later by**
12 **media.**

13 Q. If you could turn to Exhibit 21. It's
14 the October 2015 Bechtel presentation.

15 **A. Okay.**

16 Q. You referred to this as a draft of a
17 presentation.

18 Isn't it true that this is the actual
19 presentation that was given to the executive team
20 on October 22nd, 2015?

21 **A. This was a presentation given to the**
22 **executive team on October 22nd labeled by Bechtel**
23 **as "draft."**

24 Q. And isn't it true that the executive
25 team became aware of the information in this Power

1 Point on October 22nd, 2015?

2 **A. That's correct.**

3 Q. And it's correct that you received a
4 hard copy -- strike that.

5 Isn't it true that you received an
6 electronic copy of this presentation soon after it
7 was made?

8 **A. I believe that's correct.**

9 Q. Do you know how long after it was made?

10 **A. I couldn't tell you.**

11 Q. Was it within a week?

12 **A. I don't know.**

13 Q. Are you personally aware of whether
14 Bechtel had access to schedule information from the
15 Consortium?

16 **A. I'm aware of what Bechtel said about**
17 **their schedule information from the Consortium and**
18 **I'm aware that they had said that they had**
19 **difficulty in obtaining documents from Westinghouse**
20 **primarily and CB&I and that they had some**
21 **difficulty within redactions in documents, and I**
22 **know that their scheduling person said that he**
23 **could not run their schedule. I guess he received**
24 **it on some kind of a drive but could not run the**
25 **schedule.**

1 **So yeah; I'm aware that Bechtel said**
2 **they had problems with documentation.**

3 Q. And were those statements made in the
4 October 22nd presentation?

5 **A. They were. And Bechtel had raised some**
6 **issues with regard to access to documents through**
7 **the evaluation period as well.**

8 Q. Many of those concerns were resolved;
9 correct?

10 **A. Some of those concerns were resolved.**
11 **I don't know that I would -- I don't know that I**
12 **could categorize it as many.**

13 Q. You testified earlier that you didn't
14 think Bechtel was working on the schedule the
15 entire time. How do you know that?

16 **A. I know that they brought their schedule**
17 **person in a little bit later than the team that**
18 **showed up originally. So my team, Mr. Archie and**
19 **Mr. Jones, indicated to me that -- I think his name**
20 **was Jason Moore did not show up right away with the**
21 **rest of the team.**

22 Q. But you don't know that Bechtel wasn't
23 doing schedule work before Mr. Moore showed up;
24 correct?

25 **A. I suppose I don't know that, but by**

277

1 **their own admission they only worked on this for**
2 **seven weeks.**

3 Q. You testified earlier you were
4 interviewed by Bechtel; correct?

5 **A. I testified earlier that I was**
6 **interviewed by Bechtel. That's correct.**

7 Q. You were interviewed by Carl Rau;
8 correct?

9 **A. Carl Rau and Dick Miller.**

10 Q. Were you ever interviewed by Mr. Rau on
11 his own?

12 **A. Not that I recall.**

13 Q. Did you ever mention to Mr. Rau
14 anything about not wanting to go to jail over the
15 project?

16 **A. I believe that that was during the**
17 **interview with Rau and Miller where Mr. Rau was**
18 **pressing me for details on the negotiations that**
19 **were covered by a nondisclosure agreement between**
20 **the owners and Westinghouse.**

21 Q. And how did that concern -- what did
22 that concern about jail relate to?

23 **A. Well, I didn't want to violate the**
24 **covenants of the nondisclosure agreement. So that**
25 **was what the comment was. I don't remember the**

278

1 **specific comment, but it was something to that**
2 **effect.**

3 Q. Did you feel that Bechtel was pressing
4 you for information that you couldn't provide due
5 to the nondisclosure agreement?

6 **A. Yes. Absolutely.**

7 Q. What time of information were they
8 pressing you for?

9 **A. They wanted details about what was**
10 **going on between Westinghouse, the Consortium**
11 **members themselves, and the companies. So I got**
12 **the sense that they got some of that information**
13 **from somewhere, but they weren't going to get**
14 **anything more from me.**

15 Q. So you did not give them that
16 information?

17 **A. I did not.**

18 Q. Despite your concerns about having
19 Bechtel perform an assessment your company did
20 agree voluntarily to contract with Bechtel to have
21 the assessment performed; correct?

22 MR. BALSER: Object to the form.

23 MR. COX: Let me rephrase that.

24 Q. (Continued) Isn't it true that your
25 company authorized an attorney to enter an

279

1 agreement with Bechtel to do an assessment of the
2 project?

3 **A. I was informed that the assessment was**
4 **going to be done and I was informed that it would**
5 **be done by an outside law firm and it would be**
6 **privileged.**

7 Q. And your understanding -- or you were
8 informed that your company agreed to that
9 arrangement; correct?

10 **A. I'm telling you that's what -- that's**
11 **what I was informed.**

12 Q. And isn't it true that SCE&G paid
13 Bechtel \$1 million to perform the assessment?

14 **A. I believe the owners paid Bechtel a**
15 **total of a million dollars through -- yeah; both**
16 **owners. So 55% would be SCE&G and 45% would be**
17 **Santee Cooper.**

18 Q. For a total of \$1 million?

19 **A. That's my understanding, yes.**

20 Q. At no point in time did you notify ORS
21 about the Bechtel assessment; is that correct?

22 **A. Certainly I did not notify anybody**
23 **about the Bechtel assessment. Our attorneys told**
24 **me that it was privileged, and I didn't have the**
25 **authority to release that privilege and discuss**

280

1 **that report.**

2 Q. If you turn to Exhibit 21, the October
3 2015 presentation. If you turn to page Bates No.
4 6950 of the presentation there is a chart on the
5 bottom of the page that includes Bechtel's
6 preliminary assessment of the Unit 2 and 3
7 commercial operation dates. Do you see that?

8 **A. I do.**

9 Q. Were you aware of Bechtel's conclusions
10 or preliminary assessment of the commercial
11 operation dates prior to this presentation?

12 **A. No.**

13 Q. But you became aware at this
14 presentation; correct?

15 **A. That's correct.**

16 Q. And this is information that SCE&G had
17 prior to entering into the 2015 amendment to the
18 EPC; correct?

19 **A. I don't remember when -- the EPC**
20 **actually was finalized -- I think it was about a**
21 **week after this. Maybe a little bit less than**
22 **that. I don't remember to what extent everything**
23 **was buttoned up and awaiting all of the**
24 **coordination between all the companies and the**
25 **boards and everything, so -- but it would have been**

1 roughly around the same time frame.

2 Q. You would agree that the 2015 amendment
3 to the EPC was actually executed on October 27th;
4 correct?

5 A. Correct.

6 Q. So it's correct to say that SCE&G was
7 aware of this Bechtel Power Point prior to
8 execution of the 2015 amendment to the EPC?

9 A. Certainly SCE&G, which would include
10 our attorneys, were in the presentation along with
11 Santee Cooper when this draft presentation was
12 given.

13 Q. What attorneys were present for the
14 Bechtel presentation?

15 A. I know that from the SCE&G side Ron
16 Lindsay was present. I would have to see my notes
17 on that meeting. We may have those here. But I
18 think George Winick was present. I don't recall
19 how many attorneys from the Santee Cooper side were
20 present. Maybe I should find those notes.

21 Q. It's Exhibit 22, I believe.

22 A. 22. So Mike Baxley was the general
23 counsel for Santee, Ron Lindsay was the general
24 counsel for SCE&G, and then George Winick, outside
25 attorney for both companies.

1 Q. At the bottom of Page -- Exhibit 22 the
2 bottom right corner there is several lines of text
3 there. The top line says: Better than previous.

4 Do you know what that means?

5 A. I'm not sure.

6 Q. Do you have any thoughts as to what it
7 likely is?

8 A. It's not ringing a bell.

9 Q. That skepticism that you had about
10 Bechtel's motives in performing the assessment, you
11 had that skepticism at the time that you received
12 the October 22nd, 2015 briefing; correct?

13 A. I had the skepticism from well prior to
14 that, yes.

15 Q. I think you mentioned that you didn't
16 feel the Bechtel assessment was reliable because of
17 the assumptions that Bechtel used; is that correct?

18 A. The schedule portion of that
19 assessment, I didn't think it was reliable because
20 of some of the assumptions that they used, yes.

21 Q. What are the assumptions that you felt
22 were not worthy?

23 A. Some of their high-level assumptions on
24 working hours. So that's how many people hours
25 would be working on the project.

1 So Bechtel had actually scaled back on
2 the work week. Bechtel had actually scaled back on
3 the back shift, the number of people working on the
4 back shift. They had scaled back on that number.
5 They had scaled back the number of craft proposed,
6 total craft proposed to work.

7 So they were scaling back on the number
8 of craft and they were scaling back on the hours
9 the craft were working and they were -- they
10 included some assumptions around no improvements,
11 mitigations for the current PF. So no anticipation
12 of any mitigations for any of the civil work, which
13 would include no improvements for Unit 3 over Unit
14 2.

15 So there were a number of assumptions
16 that Bechtel used that were kind of big picture
17 that I didn't necessarily agree with and that the
18 Consortium at the time wasn't working towards and
19 that Fluor ended up not working towards.

20 Q. So you mentioned a couple of
21 assumptions that I have listed here. You mentioned
22 Bechtel made an assumption on limiting work hours
23 that you didn't agree with, total craft and shifts,
24 and you also said that Bechtel didn't give credit
25 to mitigation efforts on productivity factor; is

1 that correct?

2 A. Correct.

3 Q. Are there any others?

4 A. They made adjustments to the second
5 unit, moving it out to 18 months without
6 necessarily a justification.

7 Q. Do you mean the schedule completion
8 date?

9 A. They put a split between the units. So
10 between Unit 2 and Unit 3. They had moved that out
11 by six months.

12 Q. What page is that?

13 A. That is on Page 24.

14 Q. Did you feel that was an assumption or
15 a conclusion?

16 A. It looked to me like it was an
17 assumption.

18 Q. I read that as being part of their
19 results of the Unit 2 and 3 commercial operation
20 dates are now separated by 18 months. Do you read
21 it differently?

22 A. Yeah. I read it differently.

23 Q. What do you think the assumption is?

24 A. I think that they're just using their
25 experience in saying we don't think that you can

bring the unit in within 12 months and we just want to arbitrarily move it out 18 months.

Q. Any other assumptions that you felt were not appropriate that Bechtel used?

A. Well, without knowing all of their assumptions I'm just going based on the assumptions that they listed here.

The other thing that led me to believe that the schedule was not to be relied on was their warning up front that -- I think it was Carl Rau gave when he said a much more in-depth or robust look -- something along those lines -- would be needed for the schedule; their criticism of the documentation, that they didn't have accurate documentation, and then their last bullet on Page 25 says: A more robust approach is needed prior to finalization of any changes based on target schedule.

So by Bechtel's own assessment they're admonishing not to make changes based on a more robust assessment.

Q. And I appreciate that. I'm focusing just on your assumption points. You had made several points about your concerns that the Bechtel assessment, and I was focused on assumptions.

2015 that the Consortium could improve productivity factors despite the fact that they hadn't been able to at that point in time?

A. The answer is yes and no. And I'm not trying to be evasive. Yes; I thought that they could improve efficiencies and practices. The work streams that Fluor, Westinghouse, Southern and SCANA went through, I told you earlier that the NND team gave feedback that that was one of the best processes that they had ever seen from any of these contractors. So that did give us reason to have confidence. However, as I also explained earlier some of the mitigations were actually going to decrease the PF.

So if I had a back shift, for example, Fluor certainly was looking at adding a back shift and staffing it up to a thousand people. That would mean you're doing work at night, whereas previously you're not doing work at night, but there is a turnover, a hand-off, and any turnover/hand-off means some level of inefficiency.

So some of the things that they were going to do were actually going to make things less efficient. So would the PF number have necessarily gotten better? No; I'm not sure that it would

Are there any other assumptions that you had a problem with other than the ones you've mentioned here so far?

A. Well, the fact that the civil progress and performance will remain unchanged. Their piping in electrical progress they say is based on similar Bechtel experience, and I'm not sure that similar Bechtel experience would be relevant for a couple of reasons.

1, this is a different type of construction. It's modular construction, which Bechtel hadn't been involved with and they had no experience building under 10 CFR Part 52 and the fact that the only people with experience building under Part 52 was Westinghouse and their contract partner, their construction partner, and the two utilities, Southern and SCANA.

Again, they peaked craft at 3,700, where I think the CB&I numbers were more like 4,500.

That's all that hits me as I'm reading this now.

Q. You mentioned the mitigation efforts on the productivity factor.

Were you still hopeful in October of

have, but with the October 2015 agreement the PF number meant cost to the owners, and with a fixed price cost that really was ameliorated for the owners anyway.

Q. Now, it turned out that -- Bechtel's assessment of the schedule on the project turned out to be more accurate than the Consortium's schedule that existed at that time; correct?

A. Well, I don't know necessarily that it was more accurate than what the Consortium had. You know, the Consortium had access to things that Bechtel did not have access to, just like SCE&G did not have access to some of these things. You know, quantities and commodities, for example. That's something that Bechtel would tell you that they did not have, but Fluor and CB&I at the time and Westinghouse would have had access to those.

So there were things that that team didn't have -- the Bechtel team didn't have access to. So I don't know that they necessarily were more accurate. I think that what they were trying to do was gain worth on the project. You know, if you look at their desire to come in as owner's engineer, the fact that one of their executives called Kevin Marsh at one point saying "hey, we've

1 got a couple of hundred people that have been freed
2 up at another facility. Can we send them your way"
3 just lends you to believe that they want to come in
4 and do work on the project.

5 So one of the thought processes was
6 they want to give you a schedule that they know
7 that they can achieve and probably come in and do
8 better and look good.

9 Q. If Westinghouse had not declared
10 bankruptcy, when did you anticipate Unit 2 would be
11 substantially complete?

12 A. When did we? Is that the question?

13 Q. Right; if Westinghouse had not declared
14 bankruptcy.

15 A. Yeah. I think the short answer is we
16 don't know what that is going to be. I know what
17 the -- the date from Westinghouse was at the time.
18 I know that the EAC team went through an
19 evaluation, but that evaluation was really
20 different. That was getting rid of Westinghouse in
21 the EPC role. It was self-performed by the
22 utility, having a little bit of Westinghouse
23 engineering and start-up support and starting again
24 with a -- you know, a contractor, whether that was
25 Fluor or somebody else to do the construction.

1 So a similar process to what the
2 Southern Company is going through on the Vogtle
3 project. So in reality they're different. They're
4 different questions. So had the EPC still been in
5 place with the fixed price option, that protection,
6 and Westinghouse was incented to get this thing
7 done, \$5 billion plus hitting schedule milestones
8 before they get paid, I'm not sure what they would
9 do.

10 Q. But it's correct to say that SCE&G's
11 analysis in 2017 after Westinghouse's bankruptcy
12 indicated a substantial completion date of the
13 units even later than what Bechtel had projected in
14 2015; correct?

15 A. That was under a different model,
16 though. As I just outlined, it was a different
17 premise. But the EAC team that SCE&G put together
18 did come up based on the assumptions that they used
19 with Westinghouse not being involved, no fixed
20 price contract -- did come up with a different
21 premise. Yeah.

22 Q. And the numbers that SCE&G came up with
23 for completion dates even under those different
24 circumstances were even later than the dates that
25 Bechtel was coming up with; correct?

1 A. Yeah. Again, another reason to believe
2 that the Bechtel report was not accurate.

3 Q. It was too optimistic; is that right?

4 A. It could have been. I just think that
5 the Bechtel -- 1, Bechtel told us that they would
6 need a more robust approach. They warned us not to
7 use this to make changes. They made assumptions
8 that, you know, were not assumptions that the
9 utility would have used, and in fact were not
10 utilized in the EAC that the utility came up with
11 going forward and had to make some high-level
12 assumptions about things that they didn't know
13 because they didn't have access to some of
14 information.

15 Q. You mentioned the federal production
16 tax credits earlier.

17 A. Yes.

18 Q. The schedule assessments by the Bechtel
19 report would put obtaining those tax credits in
20 jeopardy; correct?

21 A. The Bechtel report would have, absent
22 those tax credit dates being extended, which they
23 ultimately were.

24 Q. I'm sorry. They ultimately were?

25 A. They were extended.

1 Q. To what dates were they extended?

2 A. I don't know that they have a finish
3 date on them. And at the time of cancellation the
4 legislation to change that was through the House of
5 Representatives and had not yet come to the Senate,
6 but Southern Company and SCANA were working very
7 hard to try to make that happen.

8 Q. You mentioned earlier that you did not
9 have a final report from Bechtel until February of
10 2016; correct?

11 A. That's correct.

12 Q. Isn't it true that SCE&G suggested that
13 Bechtel not write a report after the October 2015
14 presentation?

15 A. Yeah. I don't know what SCE&G
16 suggested. I can tell you that when I had a
17 conversation in December with Mr. Troutman he asked
18 me what I thought, and I told him I thought that
19 the presentation was enough. So that's not an
20 SCE&G position; that was my thoughts. Because he
21 just asked me for my opinion. I gave him my
22 opinion. But Bechtel was working with the law firm
23 from Atlanta to do this report. So whatever
24 direction they were going to get was going to come
25 from that law firm.

293

1 Q. You testified earlier that you did not
2 edit the Bechtel report; is that correct?

3 A. **That's correct.**

4 Q. Did you provide recommendations to
5 anyone in management or to Mr. Wenick as to the
6 edits to make to the Bechtel report?

7 A. **No, not that I recall.**

8 **(DFT. EXH. 38, Bechtel Schedule**
9 **Assessment Report, marked for identification.)**

10 BY MR. COX:

11 Q. Mr. Byrne, Exhibit 38 to your
12 deposition is a Bechtel Schedule Assessment Report
13 dated February 5th, 2016.

14 Did you receive this document in
15 February of 2016?

16 A. **I did receive this document. It may**
17 **have been in February; it may have been a little**
18 **bit later, but I certainly received the document.**

19 Q. You had this document at the time that
20 you submitted your prefile testimony to the PSC in
21 the 2016 modification docket; correct?

22 A. **Do you recall what date that was? I**
23 **don't know off the top of my head.**

24 Q. You don't recall? That's fine.

25 A. **I don't recall.**

294

1 Q. You mentioned the CORB. How many times
2 did that group meet?

3 A. **I'm not sure. It would have been**
4 **three, maybe four times.**

5 Q. Do you know when its first meeting was?

6 A. **I think it was in the fall of 2016.**

7 Q. If you could turn to Exhibit 25 from
8 earlier in your deposition.

9 A. **25?**

10 Q. The attachment to this email, was this
11 a spreadsheet that was created by Santee Cooper or
12 SCE&G?

13 A. **I believe that it was a spreadsheet**
14 **that was prepared by SCE&G and commented on by**
15 **Santee Cooper.**

16 Q. I would like to talk about the 2015
17 amendment now.

18 MR. BALSER: Can we go off the record
19 for a minute?

20 THE VIDEOTAPE SPECIALIST: We're now
21 going off the record. The time is approximately
22 5:38 p.m.

23 (Discussion off the record.)

24 THE VIDEOTAPE SPECIALIST: We are now
25 back on the record. The time is approximately 5:38

295

1 p.m.

2 BY MR. COX:

3 Q. You're looking at the October 2015
4 agreement?

5 Q. Yes.

6 A. **26?**

7 Q. Okay.

8 MR. COX: Let's go off the record. I
9 need a moment to find something.

10 THE VIDEOTAPE SPECIALIST: We will now
11 go off the record. The time is approximately 5:39
12 p.m.

13 (Short recess taken.)

14 THE VIDEOTAPE SPECIALIST: We are now
15 back on the record. The time is approximately 5:44
16 p.m.

17 BY MR. COX:

18 Q. Mr. Byrne, did you ever express the
19 opinion that your feelings were hurt by the Bechtel
20 assessment?

21 A. **I don't recall ever expressing that**
22 **opinion.**

23 Q. Were your feelings hurt by the Bechtel
24 assessment?

25 A. **My wife would tell me I'm an engineer**

296

1 **and I don't have feelings.**

2 Q. What would you say?

3 A. **No. I would say that when Mr. Troutman**
4 **asked me about what I thought about the report, I**
5 **did tell him that I was disappointed in the report.**
6 **I don't remember ever saying anything about**
7 **feelings.**

8 Q. Did you ever express to Mr. Troutman or
9 anyone else that you felt was Bechtel too rough on
10 SCE&G?

11 A. **I don't know if I characterized it as**
12 **too rough. I did think their characterization of**
13 **SCE&G's onsite management of the EPC was not**
14 **accurate. So if somebody described that they may**
15 **be paraphrasing.**

16 Q. Did you express that disagreement in
17 the October 22nd meeting?

18 A. **Not that I recall.**

19 Q. Was there an opportunity to do so?

20 A. **I don't -- I don't really remember.**
21 **Around that October 22nd I remember that the**
22 **company, myself included, was very focused on**
23 **getting that October agreement/amendment finalized**
24 **and signed. So there were other distractions at**
25 **that time.**

297

1 Q. The 2015 amendment did not fix owner's
2 costs; is that correct?

3 A. **That's correct.**

4 Q. And isn't it true that if the --

5 A. **Because the amendment was between the**
6 **owners and the EPC counter-party, and the EPC**
7 **counter-party was not in a position to fix owner's**
8 **costs.**

9 Q. Owner's costs by definition are not EPC
10 costs with the contract; correct?

11 A. **They're the owner. That's correct.**

12 Q. And isn't it true that if the schedule
13 gets extended then that will increase owner's cost
14 on the project?

15 A. **That's correct. If the schedule is**
16 **extended largely because of the number of people**
17 **that are on the project, that would stay in the**
18 **same capital while the project is under**
19 **construction. It would roll over to O&M once the**
20 **project is completed. So that would add costs.**

21 Q. And in your 2016 testimony to the PSC
22 you did not reveal to the PSC the fact of the
23 Bechtel assessment, did you?

24 A. **Again, the Bechtel assessment was**
25 **privileged; and I was informed by our attorneys**

299

1 as robust or was more robust? Do you have any
2 memory of that?

3 A. **I don't have any memory.**

4 Q. Isn't it true that if the Bechtel
5 schedule was adopted that that would increase the
6 owner's cost on the project?

7 A. **Had the Bechtel schedule been adopted,**
8 **I'm not sure why either of the owners would have a**
9 **reason to adopt the Bechtel schedule when Bechtel**
10 **themselves said that you shouldn't make any changes**
11 **without a more robust review.**

12 Q. I understand that you feel that the
13 predicate for the question is not realistic, but
14 I'm asking you if the Bechtel schedule was viewed
15 as the schedule for the project, that would result
16 in an increase in owner's costs for the project
17 versus the Consortium's schedule that was in
18 effect.

19 A. **As we discussed owner's costs a minute**
20 **ago, any schedule that would not have -- that would**
21 **have been further out than the Consortium schedule**
22 **would have resulted in an increase in owner's**
23 **costs.**

24 Q. SCE&G retained Bechtel in 2017;
25 correct?

298

1 **that it was privileged, and I did not have the**
2 **authority to release that privilege.**

3 Q. And you did not in your 2016 PSC
4 testimony reveal to the Commission the substantial
5 completion dates that Bechtel had assessed, did
6 you?

7 A. **I didn't talk about anything relative**
8 **to the Bechtel assessment, no.**

9 Q. You presented the construction schedule
10 from the Consortium again; is that correct?

11 A. **Presented the construction schedule**
12 **that the Consortium had presented to the owners**
13 **after the negotiation of the EPC contract --**
14 **amendment to the EPC contract that the New Nuclear**
15 **Development Team had had an opportunity to review.**

16 Q. And is it your testimony that SCE&G did
17 the same schedule review for the Consortium
18 schedule in that docket that it did in the 2015
19 docket?

20 A. **It certainly did a review of the**
21 **schedule. I don't know that it was the same review**
22 **as the 2014 EAC review, which would have been in**
23 **the 2015 docket.**

24 Q. Do you have any belief now that the
25 review of the schedule for the 2016 docket wasn't

300

1 A. **I think there is an Atlanta law firm**
2 **that actually retained Bechtel in 2015. Is that**
3 **what you said?**

4 Q. 2017.

5 A. **Oh, 2017? You're talking about a**
6 **different retention.**

7 **Westinghouse entered into a contract**
8 **for staff augmentation with Bechtel in -- I think**
9 **it was January of 2017. It may have been signed in**
10 **December. I don't know, but I learned about it in**
11 **2017.**

12 **When Westinghouse declared bankruptcy,**
13 **I think it was Ty Troutman gave me a call to say:**
14 **We've given Westinghouse notice of cancellation of**
15 **the contract.**

16 **I think what he said was they had a**
17 **30-day cancellation provision. So as soon as they**
18 **learned about the bankruptcy they gave notice under**
19 **that provision of whatever contract they had with**
20 **Westinghouse to provide for staff augmentation. He**
21 **was very concerned about the folks that Bechtel had**
22 **that were working the project and coming to work**
23 **the project and wanted to enter into a specific**
24 **agreement with SCE&G for when the cancellation**
25 **happened with Westinghouse.**

301

1 Q. And the end result is SCE&G entered
2 into an agreement with Bechtel for Bechtel to
3 perform services on the project?
4 A. SCE&G based on that request did enter
5 into an agreement. I don't recall if -- about the
6 time that that agreement was -- that SCANA legal
7 had approved that agreement Mr. Troutman gave me a
8 call and said basically: We're done. We're out of
9 here.
10 So I don't recall off the top of my
11 head whether the agreement had been signed at that
12 point or not.
13 Q. It's true, though, that SCE&G was at
14 least prepared to enter into an agreement with
15 Bechtel for Bechtel to perform services on the
16 project?
17 A. Staff augmentation, yes.
18 Q. You were aware at the time of the 2015
19 amendment to the EPC that Westinghouse could use
20 the bankruptcy code to invalidate the price and
21 performance guarantees that SCE&G had built into
22 the 2015 amendment; correct?
23 A. Say that again, at least the first
24 part. When was your time frame?
25 Q. You were aware at the time of the 2015

302

1 EPC amendment that Westinghouse could use the
2 bankruptcy code to invalidate the pricing and
3 performance guarantees that SCE&G had built into
4 the 2015 amendment?
5 A. Well, I'm not an attorney. Certainly
6 not a bankruptcy expert. So I would have to say I
7 was not necessarily aware of that.
8 Q. The initial payments to SCE&G -- I'm
9 sorry -- to Westinghouse after the 2015 amendment
10 was executed, those were a hundred million dollars
11 a month; correct?
12 A. The payments to Westinghouse -- I think
13 it was starting in January -- were a hundred
14 million dollars.
15 Q. And that was an increase from the
16 amount that Westinghouse had previously been
17 receiving under the prior version of the EPC;
18 correct?
19 A. The amounts that Westinghouse was
20 receiving under the prior version of the EPC would
21 vary based on a number of factors, including
22 hitting milestones. So what Westinghouse asked for
23 was consideration for their ramp-up in costs that
24 they were going to have to do mitigations.
25 One of the things that they were very

303

1 concerned about was Fluor now coming in as a
2 subcontractor construction manager, and Fluor based
3 on their Project Bluefin was looking at
4 significantly ramping up the work force, which the
5 owners agreed with needed to happen.
6 So what Westinghouse was asking for was
7 money to ramp up the Fluor work force, bring Fluor
8 on and do some of these other mitigations that they
9 wanted to do and acknowledging that they had more
10 expenses than they would have been allowed to bill
11 the owners for under the EPC contract. So that was
12 a negotiated amount. So Westinghouse was looking
13 for far more than a hundred million dollars. I
14 think they were looking for like \$140 million a
15 month, and that was negotiated down to a hundred,
16 with the provision that there would be a true-up at
17 the end. At least that's what the owners thought
18 that they had negotiated.
19 Q. But ultimately the DRB found that
20 true-up did not exist; correct?
21 A. Well, I don't know that they found the
22 true-up didn't exist. The language for true-up
23 certainly exists. The DRB, though, ordered that
24 the true-up not take place. So I don't know -- I
25 can't remember what the rationale was for that.

304

1 And again, our legal department really was handling
2 the DRB efforts.
3 Q. You mentioned the term "risk premium"
4 in conjunction with the 2015 amendment, and I think
5 you said that the risk premium that was agreed to
6 was \$500 million; is that correct?
7 A. Roughly, yes.
8 Q. Was that at the time of the execution
9 of the 2015 amendment or at the time the option was
10 executed the following year?
11 A. It was the time the option was
12 executed.
13 Q. Just so I understand the meaning of
14 "risk premium," are you saying that the premium
15 that Westinghouse wanted over its anticipated cost
16 to complete the project was 500 million to cover
17 any risks that it might be undershooting its
18 projections?
19 A. The contractor gave us an Estimate to
20 Complete. So that's what they thought they could
21 do it for. When the company said "will you be
22 willing to fix the total price," they said we would
23 fix it with a risk premium.
24 Now, how they developed the risk
25 premium -- you know, they talk in terms of running

305

1 **Monte Carlo analysis and that kind of thing; and I**
2 **don't know how exactly they do it, but it's**
3 **intended to cover their risk that they're now**
4 **taking on for a variety of different factors, which**
5 **could include, you know, labor shortages, hard**
6 **labor rates, second shifts, work stoppages.**
7 **Whatever it is, they would have to factor those**
8 **into their risk analysis.**

9 **So their answer back to us was roughly**
10 **\$500 million was their risk premium to fix the**
11 **price.**

12 Q. But that conversation had to occur in
13 October of 2015 because Westinghouse didn't have a
14 choice the following year on whether the option was
15 exercised.

16 A. Correct. The option was a part of this
17 agreement.

18 Q. So that risk premium is the premium
19 that Westinghouse believed existed in October 2015;
20 correct?

21 A. That's correct.

22 Q. Because --

23 A. Well, it's a risk premium that the
24 contractor in October of 2015 was going to apply to
25 the project over what is the duration of the

307

1 **what your assumptions were in the vast majority of**
2 **cases it was better -- SCE&G was better off to take**
3 **advantage of a fixed price option than not taking**
4 **advantage of the fixed price option.**

5 Q. Mr. Balsler asked you earlier about any
6 planning that the company did in October of 2015 to
7 take into account the possibility of a Westinghouse
8 bankruptcy, and I think you referred to that as
9 contingency planning. And you mentioned that you
10 had received representations from Westinghouse that
11 they were committed to the project.

12 Was there any other contingency
13 planning that SCE&G did aside from accepting those
14 representations?

15 A. The owners did retain bankruptcy
16 counsel. There was a provision in the contract
17 that if the parent company bond -- if the bond
18 ratings dropped below a certain amount that that
19 would trigger a performance bond.

20 So that clause was triggered. And
21 there was a provision in the contract stemming from
22 2008 to escrow intellectual property, and that
23 intellectual property escrowing was kicked off.

24 Q. SCE&G did not hire a bankruptcy
25 attorney at the time of the October 2015 amendment,

306

1 **project.**

2 Q. And that's not necessarily the risk
3 premium that SCE&G viewed; correct? Because you
4 might have had -- your company might have had a
5 different assessment of what the anticipated costs
6 were for the project; correct?

7 A. Well, I think in the evaluation that
8 SCE&G did of the costs, if you assume different PFs
9 and different labor rates you come to an assessment
10 as to where those costs are going to factor out.
11 And so SCE&G through Dr. Lynch did do an assessment
12 that pointed out that the \$500 million was only in
13 four of 24 scenarios higher than what the model was
14 saying the costs are.

15 My understanding also is Santee Cooper
16 ran a separate analysis that justified the fixed
17 price option being -- the \$500 million risk premium
18 being a good deal for its customers.

19 Q. I guess that's what is confusing me. I
20 thought Dr. Lynch's analysis showed that there was
21 really no risk premium. This was just a good deal
22 for SCE&G in 2016 and there was no premium that
23 SCE&G was going to be paying over the anticipated
24 cost of the project. Is that not right?

25 A. What it showed is that depending on

308

1 did it?

2 A. SCE&G and Santee Cooper certainly hired
3 a bankruptcy attorney. I don't recall what the
4 timing was on it. I don't recall if it was -- I
5 think it was at that time or after that time. It
6 may have been after that time. I don't recall.

7 Q. My understanding is that concerns
8 increased, of course, in 2016 about the possibility
9 of a bankruptcy. And just to be clear, I'm
10 referring here to planning that SCE&G did at the
11 time of execution of the 2015 amendment.

12 You mentioned a performance bond. Was
13 that in the 2015 amendment or the original EPC?

14 A. What was the first part of that
15 question? What is the question again?

16 Q. The question again is: What steps did
17 SCE&G take in October 2015 at the time of the
18 execution of the 2015 amendment to have a
19 contingency plan in case of a Westinghouse
20 bankruptcy?

21 A. I don't know if I can narrow things
22 down to at the time of the October of 2015
23 amendment. I know that somewhere around that time
24 frame there were a number of actions that SCE&G
25 took that were considered contingent planning for

309

1 the eventuality that Westinghouse may not perform
2 under the contract.

3 You know, one of the things that
4 Toshiba did was made a visit to Columbia and
5 presented to the CEOs of the two companies, SCE&G
6 and Santee Cooper, their plan for restructuring and
7 financial health. So I know that was one aspect of
8 evaluating the Toshiba liquidity. And certainly
9 through 2016 their stock price performed basically
10 in accordance with their plan. So it looked like
11 Toshiba was recovering. The amendment did have as
12 a part of it a reaffirmation of the parental
13 guarantee by Toshiba. And again, our legal
14 department handled that, the bankruptcy counsel
15 that was retained. And that, again, was between
16 Santee Cooper and SCANA's counsel. So I wasn't
17 involved in that. I just was aware of the fact
18 that we did retain counsel. The timing on it, I
19 don't know -- I believe it may have been after the
20 October 2015 agreement.

21 Q. The parental guarantee was not
22 increased in the 2015 amendment; correct?

23 A. The parental agreement was not
24 increased. That's correct.

25 Q. In fact, the parental guarantee was

310

1 decreased because CB&I's guarantee was waived to
2 allow it to leave the project; correct?

3 A. No.

4 Q. How is that incorrect?

5 A. You said that the parental guarantee
6 was decreased, and that's not the case.

7 Q. Okay. Let me rephrase the question.

8 The original EPC agreement had a
9 parental guarantee from Toshiba and a guarantee
10 from CB&I; correct?

11 A. It had parental guarantees from those
12 two companies.

13 Q. And the parental guarantee from Toshiba
14 was not increased in the 2015 amendment; correct?

15 A. With -- de facto it was. Not the
16 amount, not the percentage. But they're now
17 covering the whole project. So rather than just
18 covering a portion of it -- but even before that
19 they were -- the term "jointly and severally"
20 liable.

21 So again, I don't know that there was a
22 need for a reaffirmation of the parental guarantee,
23 but the legal department felt strongly about that.

24 Q. Was the dollar amount of the guarantee
25 increased in the 2015 amendment?

311

1 A. The dollar amount was variable because
2 it was a percentage of what had been spent on the
3 project.

4 Q. I would like to turn to your 2016
5 testimony. It's Exhibit 29. You reference on Page
6 9 of your testimony several aspects of the 2015
7 amendment.

8 A. Which --

9 Q. Exhibit 29.

10 A. Got it. 29.

11 Q. Page 9 of that document there is a
12 section starting at Line 12 labeled "EPC Contract
13 Amendment." It says: Please describe the
14 amendment. And you state that the amendment
15 resolves current disputes.

16 It's fair to say, though, Mr. Byrne,
17 that the 2015 amendment created a new dispute
18 regarding whether a true-up payment should occur;
19 right?

20 A. I think the dispute that was taken to
21 the Dispute Resolution Board was really over the
22 cash flow streams for the milestone payment
23 schedule. The true-up issue was just embroiled in
24 that.

25 Q. But that's a new dispute that occurred

312

1 because of the 2015 amendment; correct? That DRB
2 process.

3 A. The DRB process was created by the
4 amendment, yes.

5 Q. But the dispute that was being resolved
6 by the DRB was a dispute that arose as a result of
7 the 2015 amendment; correct?

8 A. The dispute arose out of the milestone
9 payment schedule, which was a part of the
10 agreement.

11 Q. The 2015 --

12 A. The 2015 agreement.

13 Q. And isn't it true, Mr. Byrne, that one
14 of the reasons that SCE&G did not pursue a fixed
15 price EPC in 2008 was because, as you testified
16 earlier, there was a project in Europe that had
17 been embroiled in litigation that involved a fixed
18 price agreement; correct?

19 A. I certainly said that and that's
20 certainly true, and what I said was that the NND
21 negotiation team was aware of that issue and that's
22 why the structure was the way the way the structure
23 was.

24 In 2008 -- and I should say prior to
25 2008. So probably in the 2006 -- 2006 or 2007 time

313

1 frame Westinghouse was asked for -- or the
2 Consortium, I should say, which was Shaw and
3 Westinghouse, was asked for a fixed price. And
4 their risk premium at that point in time was very
5 high. I don't know that Westinghouse gave -- well,
6 I don't know where they came up with the number,
7 but they just gave a number that was too high. I
8 don't recall what the number was. I just remember
9 the team coming back saying this is way too high.

10 Q. And isn't it true, though, that the
11 project in Europe made SCE&G leery about entering
12 into a fixed price agreement because of the risk of
13 embroiling it in litigation?

14 A. I think that the project in Europe, as
15 I pointed out earlier, was helping to define how
16 the project should begin. And that project was
17 fixed price from the start. And so the thought
18 process was, as Ron Clary would describe it to me,
19 who was running the NND negotiation team at the
20 time, as the project gets further along, as the
21 supply chain gets further developed, as labor is
22 sorted out, as the design gets further along you
23 should be able to fix more and more of the project.

24 So that was the concept that SCE&G had
25 going in, and in fact the original EPC contract had

314

1 in it a provision to increase the amount fixed over
2 the first couple of years, which was done.

3 Q. The Point No. 3 on that page,
4 Mr. Byrne, references the increase in liquidated
5 damages provision.

6 Isn't it true that Westinghouse never
7 paid liquidated damages on the project?

8 A. As a result of the bankruptcy they
9 never paid liquidated damages.

10 Q. And that's even the case though they
11 did --

12 A. To the best of my knowledge.

13 Q. And that's the case even though they
14 did not meet the guaranteed substantial completion
15 dates; correct?

16 A. Again, to the best of my knowledge.
17 What the company did with that after my retirement,
18 I really don't know.

19 Q. Did SCE&G ask for any information
20 regarding Westinghouse's financial health as part
21 of the 2015 negotiations?

22 A. I don't recall looking for information
23 on the Westinghouse financial health. I'm not
24 saying it didn't happen; I just don't recall it.
25 But I do know that the two CEOs asked for a

315

1 presentation from -- an audience with Toshiba in
2 order to better understand their financial
3 standpoint.

4 Q. And that was before the 2015 amendment?

5 A. I don't remember the exact time frame
6 on it. So I would have to look at what the time
7 frame was. I don't have it available to me.

8 Q. So that could have been a meeting that
9 occurred after the 2015 amendment was already in
10 effect?

11 A. I don't remember what the time frame
12 was.

13 Q. What information did SCE&G have
14 regarding the schedule for the project in 2017 that
15 it did not have earlier?

16 A. All of that information I don't know.
17 Again, I'm not a schedule expert. I do have
18 scheduling experts that work for me. The team that
19 did the evaluation seemed very pleased with the
20 amount of cooperation that they were now getting
21 from Westinghouse. They seemed also pleased with
22 the unfettered access that they had to Fluor. Some
23 of the things that they had access to were
24 subcontracts, some of the big vendors that were
25 supplying things that they didn't have access to

316

1 previously.

2 Quantities of commodities was something
3 else that the team had access to now that they did
4 not previously have access to. But all of those
5 things you would have to ask one of the folks on
6 that team to say what all of the things were that
7 they had access to now that they didn't have access
8 to before.

9 Q. It's correct that you cannot
10 specifically identify what information SCE&G had in
11 2017 to assist in determining an Estimate to
12 Complete that it didn't have earlier?

13 A. No. I think I've just identified for
14 you a number of things that it had that it didn't
15 have earlier. What I said was there is likely more
16 than that. You would have to ask somebody on that
17 team.

18 Q. So you said quantities?

19 A. Quantities of commodities.

20 Q. Quantities of commodities. What else?

21 A. Subcontracts.

22 Q. What else?

23 A. Access to Fluor.

24 Q. Access to what?

25 A. Fluor. Information from Fluor. Unit

317

1 rates. Those kind of things.

2 Q. And it didn't have all that information
3 before?

4 A. It didn't have all that information
5 before.

6 Q. Had it asked for that information?

7 A. The project, including Westinghouse,
8 regarded some of the things that they considered
9 trade secret to them that they didn't let anybody
10 else have. SCE&G certainly pressed them for
11 information at times in the past that was not
12 forthcoming. So the bankruptcy did seem to change
13 that.

14 Q. Who made those requests from SCE&G?

15 A. The project level folks at SCE&G did.
16 There were times when I asked for some information
17 from leadership at Westinghouse, including their
18 CEO at the time, Danny Rodrick, and they were told
19 that -- I was told that once you go closed book,
20 which is standard in contracts -- I'm accustomed to
21 that even from the non-nuclear side, fossil hydro
22 side and transmission side. Once you go closed
23 book the contractor doesn't want to give you a lot
24 of the information. So that's not unusual.

25 Q. What did you ask for that was rejected?

318

1 A. I can't remember specifically what I
2 asked for. I do recall, though, in meetings with
3 them through the years asking for more information
4 that our team was looking for and was told that
5 that was in the closed book portion.

6 I believe it was in contracts,
7 subcontracts that they had with some of the
8 vendors, but was told that was in the fixed price
9 and it's closed book and you can't have access to
10 that information.

11 (DFT. EXH. 39, email chain, marked for
12 identification.)

13 BY MR. COX:

14 Q. Mr. Byrne, I've handed you an email
15 exchange dated November 21st and 22nd, 2016
16 involving you, Ron Lindsay and Al Bynum and Mike
17 Baxley on the original email. You can take a
18 moment to read it.

19 The question I have to ask you is:
20 Isn't it true that in this email of yours dated
21 November 22nd that you are recommending that the
22 Bechtel report not be provided to the cooperative?

23 A. You're talking about what I'm saying?

24 Q. Correct.

25 A. I don't view that as saying that at

319

1 all.

2 Q. You're saying -- you're saying that you
3 would prefer -- go ahead.

4 A. Here is what I said: I realize it
5 would be inconvenient, but wouldn't it be better to
6 set up an electronic reading room where we can
7 assure that no copies are made and no further
8 dissemination took place.

9 So that would mean that the co-ops
10 would have access to it in an electronic reading
11 room.

12 Q. But you wanted assurances that no
13 copies of it were made; correct?

14 A. I'm trying to balance the needs that
15 Santee Cooper has for their largest customer,
16 co-ops, and that our general counsel has for not
17 wanting to disseminate any information on it, but
18 defer to them. So the attorneys were the ones that
19 made the decisions about the electronic reading
20 room, and the answer was no.

21 Q. And your preference was that the co-ops
22 received that Bechtel report in electronic reading
23 room rather than receiving a physical copy of it;
24 correct?

25 A. It was just a suggestion.

320

1 Q. That was your suggestion, though;
2 correct?

3 A. Just a suggestion.

4 (DFT. EXH. 40, email chain, marked for
5 identification.)

6 BY MR. COX:

7 Q. Exhibit 40, Mr. Byrne, is another email
8 exchange, the same initial email from Mr. Baxley
9 with a different response by Mr. Bynum and to
10 Mr. Baxley and Ron Lindsay, and Mr. Bynum says,
11 quote: I met with Kevin, Steve and Ron late
12 yesterday and this is one of the topics that we
13 discussed. They are adamantly opposed to this
14 release. They suggest that we discuss this at our
15 face-to-face meeting on the 30th, end quote.

16 Do you understand the "Steve" that Al
17 Bynum is referring to is you?

18 A. I don't know if the "Steve" is me.
19 It's possible that it's me.

20 Q. Do you know of any other Steve that
21 would have been involved in these discussions?

22 A. Well, Steve Pelcher is an attorney that
23 works for Santee Cooper. So I don't know, though,
24 that this isn't me, but if it is me I certainly was
25 not adamantly opposed. I think you can see from

321

1 the previous email that I was trying to offer a
2 solution. So I think Mr. Bynum was perhaps taking
3 some liberties. When he said "they are" he didn't
4 include me.

5 Q. What state do you currently reside in,
6 Mr. Byrne?

7 A. South Carolina.

8 Q. Are you planning to be in this state in
9 the month of November?

10 A. I'm not planning on moving, if that's
11 what you're asking.

12 Q. Are you planning any out-of-state
13 travel?

14 A. I may.

15 Q. Do you have any plan right now?

16 A. I do.

17 Q. What trips do you have planned?

18 A. I have a trip to Scotland planned.

19 Q. What dates is that?

20 A. October 30th to November 13th.

21 Q. You already have plane tickets
22 purchased?

23 A. I do.

24 Q. And you're returning November 13th?

25 A. Uh-huh.

323

1 testimony, you told the PSC that it would be a
2 significant challenge for the Consortium to meet
3 the 1.15 performance factor; correct?

4 A. I told them it would be a significant
5 challenge to meet their performance factor. Their
6 performance factor, yes.

7 Q. And the 1.15 performance factor, would
8 that be the average performance factor over the
9 remainder of the project?

10 A. It would be the average from that point
11 on.

12 Q. And there were still four to five years
13 remaining at that point?

14 A. Correct.

15 Q. Could the performance factor change
16 over the four to five years especially when Unit 3
17 was being built?

18 A. It was anticipated that the Unit 3
19 performance factor would significantly improve over
20 the Unit 2 performance factor, and in fact the
21 information that the Consortium had presented to
22 date and that the NND team had validated was that
23 the performance factor on Unit 3, even up to that
24 2015 time frame, was better than the performance
25 factor on Unit 2 and expected to improve even

322

1 Q. You would be available to testify
2 before the Commission after your return?

3 A. I suppose I would. I would have to
4 talk to my attorney about it.

5 MR. COX: No further questions. Thank
6 you.

7 MR. BALSER: Change the tape.

8 THE VIDEOTAPE SPECIALIST: This
9 concludes Video No. 4 in the video deposition of
10 Mr. Steve Byrne. The time is approximately 6:21
11 p.m. We are now off the record.

12 (Short recess taken.)

13 THE VIDEOTAPE SPECIALIST: We are now
14 back on the record. Today's date is October 23rd,
15 2018. The time is approximately 6:26 p.m. This is
16 Video No. 5 in the video deposition of Steve Byrne.

17 EXAMINATION

18 BY MR. BALSER:

19 Q. Mr. Byrne, Mr. Cox was asking you
20 questions about your prefile testimony in 2015. I
21 want to turn your attention back to that and ask
22 you a few questions. I don't think you need to
23 refer to it, but if you would like to, feel free.

24 A. Okay.

25 Q. Regarding your March 2015 PSC

324

1 further.

2 Q. In 2015 was Mr. Ron Jones the head of
3 NND?

4 A. He was.

5 Q. Did Ron Jones also testify in March
6 2015 before the Public Service Commission regarding
7 the schedule?

8 A. Mr. Jones did testify.

9 Q. I want to direct your attention to your
10 2016 testimony. That is Exhibit No. 29.

11 There are some back and forth --
12 actually quite a bit of back and forth about the
13 phrase "unlikely" and whether you said "unlikely"
14 and what you meant, et cetera. I want to direct
15 your attention to Page 28 of Exhibit 29 --

16 A. Page 28?

17 Q. 28.

18 -- in which you're disclosing to the
19 Public Service Commission that the labor
20 productivity factor that was being used is 1.15.
21 You say: We expect construction to become more
22 efficient under Fluor and with the restructure
23 project team, but it is unlikely that productivity
24 will improve fast enough for the remaining work on
25 the project to be completed at a productivity

325

1 factor of 1.15 or below. Our experience with the
2 project to date makes us believe that it is highly
3 unlikely that Fluor and Westinghouse can bring the
4 productivity factor to 1.15 or lower measure
5 between January 1, 2016 and the end of the project.
6 This tells us that all other things being equal,
7 this express option is best for the company.

8 Do you see that?

9 **A. I see that.**

10 **Q.** Was that the testimony that you had
11 remembered giving when you were talking about
12 "unlikely?"

13 **A. That's perhaps the case, and certainly**
14 **we did use the 1.15 factor here. I think that this**
15 **really was the testimony I was getting at when I**
16 **was being asked relative to what factors went into**
17 **selection of the fixed price option. So there was**
18 **an evaluation, but there were also some other**
19 **experience on the project, and this is what I was**
20 **remembering.**

21 **Q.** I want you to get Exhibit 34 before
22 you. That's the Power Point created by the EAC
23 review team, and I want you to turn to the second
24 page of the Power Point. Sorry. We should have
25 put these in order for you.

327

1 **performance factor and a couple of other ratios**
2 **that the Consortium was hoping to meet or that the**
3 **company thought was too high.**

4 **So there was a deduct from the payments**
5 **to the Consortium based on the performance factor.**

6 **Q.** Let's take a look at Exhibit 36, which
7 is one of the documents that Mr. Cox showed you.
8 It's the email exchange with Mike Crosby that has
9 the graphs attached to it, the colored graphs. Do
10 you remember that?

11 **A. Yes.**

12 **Q.** If you could turn your attention to
13 these graphs that are attached to Exhibit 36. Are
14 these linear graphs?

15 **A. Are the graphs linear?**

16 **Q.** Yes.

17 **A. It would appear that the graphs are**
18 **linear.**

19 **Q.** Is a linear graph the appropriate
20 methodology to measure efficiency in performance on
21 a project like this?

22 **A. No, not necessarily. You would expect**
23 **the highest amount of work to be done when the**
24 **majority of the craft are on site. That's**
25 **generally how the stat curves work with regard to**

326

1 **A. They were in order at one point in**
2 **time. This is my fault. 34.**

3 **Q.** Okay. And if you go to the second page
4 that has the heading "CB&I Direct Craft
5 Productivity."

6 **A. Okay.**

7 **Q.** The first bullet point says that CB&I
8 projects the to-go PF will be 1.15. We all know
9 what that means. We talked about that a lot.

10 Now, the second bullet point says that
11 the EAC team recommends holding CB&I accountable to
12 this PF on paying up to this level. Do you see
13 that?

14 **A. I do.**

15 **Q.** So the EAC team never recommended to
16 you or anyone in management that management accept
17 the 1.4 productivity factor, did it?

18 **A. Not that I recall. And again, I**
19 **believe that this to be a fairly early on EAC**
20 **evaluation and I believe that there were probably**
21 **many more iterations of evaluations before the**
22 **testimony was actually generated. But certainly**
23 **this recommends not paying above the 1.15, and in**
24 **fact since 2015 the company had put the Consortium**
25 **on notice that it would be holding them to the 1.15**

328

1 **resources.**

2 **So if you looked in the '16, '17, '18**
3 **years, you would expect a lot of work to be taking**
4 **place during those years. You would expect craft**
5 **hiring to be very high during those years. And in**
6 **the early phases of the project and in the latter**
7 **phases of the project you would expect the craft**
8 **numbers would tail off, and the amount of work that**
9 **would get done in those time periods would be much**
10 **lower.**

11 **Q.** And with respect to completion dates
12 -- like if we look at this -- if we look at the
13 chart on percent complete direct craft work, this
14 graph assumes that the performance factors and the
15 existing craft utilization will be constant, does
16 it not?

17 **A. It does. It's strictly a linear**
18 **extrapolation from historical factors.**

19 **Q.** So it doesn't take into account the
20 fact that, for example, a night shift might be
21 added or additional resources might be brought to
22 bear or that more efficiency might be gained in the
23 work force; correct?

24 **A. Right. And again, as I said, you could**
25 **increase the amount of work that gets done while**

329

1 actually decreasing your productivity factor or PF.
2 So the two don't necessarily follow together.

3 And I can also remember -- and one of
4 the reasons that Mr. Crosby sent this to me was to
5 point out the fact -- and that's what these three
6 graphs on -- I think it's the third page are
7 intended to point out, is that field nonmanual to
8 direct craft ratio really has a big impact and
9 probably a bigger impact than you might think. So
10 that might not be intuitively obvious that it has a
11 much bigger impact than the direct craft
12 productivity or a bigger impact on the direct and
13 indirect craft ratio labor -- labor ratio.

14 So this ratio, field nonmanual to
15 direct, has a bigger overall impact. You can see
16 that its impact was \$31 million, whereas the direct
17 craft productivity was only \$11 million. So that
18 really was -- one of Michael's messages is maybe
19 this is where we should be focused.

20 Q. I want to turn your attention to -- I'm
21 not sure if it's a suggestion that the ORS is
22 making, but it sure sounds like it, that there was
23 some belief or concern at the time that SCE&G
24 executed the October of 2015 amendment -- that
25 there was some belief that Westinghouse might go

331

1 A. I'm not aware of that.

2 Q. Did you believe that Westinghouse was
3 going to file for bankruptcy when the fixed price
4 option was executed?

5 A. No. I don't know why a company like
6 Westinghouse would put themselves in a position to
7 put themselves into bankruptcy. So I certainly had
8 no reason to believe -- and I don't believe that
9 Toshiba had any reason to believe that there was
10 anything amiss. They certainly signed up for the
11 entirety of the parental guarantee for the previous
12 liability that both companies -- now solely with
13 Toshiba, but it's the same. So it's not split with
14 somebody else. So I have no reason to believe that
15 Westinghouse put themselves in bankruptcy.

16 And then going back to the things that
17 the Westinghouse officials told us, that they've
18 never walked away from a project, that they
19 understood that they were going to lose money in
20 this project and that they really were in the U.S.
21 game to make a bigger play worldwide and that they
22 couldn't succeed worldwide without succeeding at
23 V.S. Summer.

24 Q. I want to clear up what I think might
25 have been a misstatement in your testimony when Mr.

330

1 bankrupt.

2 Did you -- at the time that the owners
3 the executed the October 2015 amendment believe
4 that Westinghouse would go bankrupt?

5 A. I did not have any reason to believe
6 that Westinghouse would go bankrupt.

7 Q. Did you ever hear anyone at SCE&G or
8 Santee Cooper at or around the time of the October
9 2015 amendment suggest that Westinghouse might file
10 for bankruptcy rather than perform under the
11 agreement?

12 A. I don't -- I don't recall those
13 discussions. I can tell you that there was not a
14 sense at SCE&G that anything was amiss with
15 Westinghouse or that any bankruptcy was imminent.

16 I can't necessarily speak for Santee
17 Cooper, but there were questions coming from things
18 like analysts and other people. So contingency
19 planning around that seemed to be proven.

20 Q. In 2016 when the owners executed the
21 fixed price option was there any concern at the
22 time that you're aware of at SCE&G that
23 Westinghouse might file for bankruptcy and reject
24 the contract as opposed to continuing to perform
25 under the fixed price option?

332

1 Cox was examining you.

2 I would like for you to get in front of
3 you Exhibit 38 and I would also like for you to get
4 in front of you Exhibit 24. Okay. Do you have
5 Exhibit 24 and Exhibit 38 in front of you?

6 A. I do.

7 Q. Do you realize that these are two
8 different reports?

9 A. No, I did not realize that.

10 Q. So let's start with Exhibit 24, which
11 is the Project Assessment Report dated February
12 5th, 2016.

13 A. Okay.

14 Q. Have you seen this report before, the
15 Project Assessment Report?

16 A. This appears to be the Project
17 Assessment Report that Bechtel gave to the Atlanta
18 attorney that was at some point later forwarded to
19 me.

20 Q. Now I want you to look carefully at
21 Exhibit 38, which is a Schedule Assessment Report.

22 A. Okay.

23 Q. Have you -- did you at or about the
24 time, February 5th, 2016, see the Schedule
25 Assessment Report that's marked as Exhibit 38?

333

1 **A. No, I did not.**
 2 **Q.** So when you testified in response to
 3 questions that Mr. Cox asked you about Exhibit 38
 4 you were under the mistaken impression that Exhibit
 5 38, the Schedule Assessment Report, was in fact the
 6 Project Assessment Report dated the same day?
 7 **A. That's correct.**
 8 MR. BALSER: That's all I have.
 9
 10 EXAMINATION
 11 BY MR. COX:
 12 **Q.** Mr. Byrne, I just wanted to follow up
 13 on that last question.
 14 This Exhibit 38, the Schedule
 15 Assessment Report, when did you first see it?
 16 **A. I don't know that I've ever seen it.**
 17 MR. COX: No further questions.
 18 THE VIDEOTAPE SPECIALIST: This
 19 concludes the video deposition of Steve Byrne for
 20 today, October 23, 2018. The time is approximately
 21 6:42 p.m. We are now off the record.
 22 (Deposition concluded at 6:42 p.m.)
 23 (Signature Waived.)
 24
 25

334

1 CERTIFICATE OF REPORTER
 2
 3 I, Patricia L. Thompson, Registered
 4 Professional Reporter and Notary Public for the
 5 State of South Carolina at Large, do hereby certify
 6 that the foregoing transcript is a true, accurate
 7 and complete record.
 8
 9 I further certify that I am neither related
 10 to nor counsel for any party to the cause pending
 11 or interested in the events thereof.
 12
 13 Witness my hand, I have hereunto affixed by
 14 official seal this 30th day of October 2018 at
 15 Charleston, Charleston County, South Carolina.
 16
 17
 18
 19
 20
 21
 22 _____
 23 Patricia L. Thompson
 24 Registered Professional Reporter
 25 My Commission Expires
 October 15, 2025

335

1 I N D E X
 2
 3 Page Line
 4
 5 STEPHEN A. BYRNE 7 9
 6 EXAMINATION 7 11
 7 BY MR. BALSER
 8 EXAMINATION 192 5
 9 BY MR. COX
 10 EXAMINATION 322 17
 11 BY MR. BALSER
 12 EXAMINATION 333 9
 13 BY MR. COX
 14 CERTIFICATE OF REPORTER 334 1
 15
 16 E X H I B I T S
 17
 18 Page Line
 19 (DFT. EXH. 9, Combined 11 24
 20 Application For Certificate of
 21 Environmental Compatibility,
 22 Public Convenience and
 23 Necessity and For A Base Load
 24 Review Order
 25

336

1 (DFT. EXH. 10, Engineering, 18 2
 2 Procurement and Construction
 3 Agreement
 4 (DFT. EXH. 11, copy of letter, 36 23
 5 5/6/14, to P. Asherman and D.
 6 Roderick from L. Carter and K.
 7 Marsh
 8 (DFT. EXH. 12, copy of letter, 53 15
 9 9/25/14 to J. Lyash from S.
 10 Byrne
 11 (DFT. EXH. 13, email chain 66 24
 12 with attachments
 13 (DFT. EXH. 14, Petition For 71 2
 14 Updates and Revisions to the
 15 Capital Cost Schedule and the
 16 Construction Schedule
 17 (DFT. EXH. 15, copy of Direct 79 13
 18 Testimony of Stephen A. Byrne
 19 (DFT. EXH. 16, one-page 96 13
 20 document, ORS9_SECG01088115
 21 (DFT. EXH. 17, copy of letter, 99 2
 22 5/5/15, to J. Hyde from A.
 23 Smith
 24 (DFT. EXH. 18, one-page 106 15
 25 handwritten notes, 2/16/15

		337	
1	(DFT. EXH. 19, one-page handwritten notes	112	5
2			
3	(DFT. EXH. 20, Professional Services Agreement	117	18
4			
5	(DFT. EXH. 21, copy of Preliminary Results of Bechtel Assessment	121	1
6			
7			
8	(DFT. EXH. 22, copy of handwritten notes, 10/22/15	121	25
9			
10	(DFT. EXH. 23, copy of handwritten notes, 1/14/15	130	20
11			
12	(DFT. EXH. 24, Bechtel Project Assessment Report, 2/5/16	139	4
13			
14	(DFT. EXH. 25, email chain with attachment	141	14
15			
16	(DFT. EXH. 26, Amendment to the Engineering, Procurement and Construction Agreement	145	13
17			
18			
19	(DFT. EXH. 27, copy of Allowable Ex Parte Communication Briefing	155	14
20			
21			
22	(DFT. EXH. 28, copy of Petition of South Carolina Electric & Gas	162	10
23			
24			
25	(DFT. EXH. 29, copy of Direct	163	11
		338	
1	Testimony of Stephen A. Byrne		
2	(DFT. EXH. 30, one-page handwritten notes, 8/5/16	178	14
3			
4	(DFT. EXH. 31, email chain	180	5
5	(DFT. EXH. 32, Interim Assessment Agreement	188	1
6			
7	(DFT. EXH. 33, copy of transcript before Public Service Commission of South Carolina	229	24
8			
9			
10			
11	(DFT. EXH. 34, EAC Review Team Preliminary Update	240	1
12			
13	(DFT. EXH. 35, V.C. Summer Units 2 & 3 2014 EAC Analysis and Discussion of Cost Changes	266	2
14			
15			
16	(DFT. EXH. 36, email chain	268	9
17	(DFT. EXH. 37, email chain	272	14
18	(DFT. EXH. 38, Bechtel Schedule Assessment Report	293	7
19			
20	(DFT. EXH. 39, email chain	318	10
21	(DFT. EXH. 40, email chain	320	3
22			
23	(EXHIBITS 1 through 8 previous marked.)		
24			
25			

A				
a.m 1:14 5:4 63:4 63:8 93:10,15	96:2,2 122:22 126:18 134:13 182:3,6 190:7,9 190:13,19 263:17,21 264:5 264:8,22,25 275:14 276:6 288:11,12,13,17 288:19 291:13 315:22,23,25 316:3,4,7,7,23 316:24 318:9 319:10	267:9,17 achieve 85:6,24 87:17,22 94:16 95:9,10 147:11 261:8,23 262:20 267:12,21 289:7	adding 95:14 287:16 Addison 156:5 195:15 249:9 273:7 addition 10:12 49:15 75:23 77:17 85:15 113:1 127:1 142:7 158:23 159:5 161:8,19 178:3 229:18 additional 64:14 72:18 88:12 189:15 211:19 251:16 252:25 261:16 328:21 address 37:16 54:19 55:21 addressed 37:18 38:13 55:13 134:7 180:25 181:2 adds 51:3 94:18 adept 19:11 20:20 171:17 adjacent 157:20 adjustments 71:16 284:4 admission 81:3 277:1 admonishing 285:20 admonitions 192:18 adopt 299:9 adopted 230:9 232:10,23 233:6 299:5,7 advanced 29:18 advantage 20:7 141:7 307:3,4 advantages 19:25 adverse 49:21 advice 138:2,3 257:12,19 258:8 259:6 262:21 advise 114:7,12 115:23 advised 257:5	258:24 advising 137:24 261:9 affect 49:4 affirm 235:21 affixed 334:13 afterward 247:22 aggressive 69:15 243:4 ago 11:4 33:15 37:10 41:18 74:18 161:23 213:9 231:13 249:17 265:7 299:20 agree 98:6 137:6 146:25 151:8 152:1 202:25 203:3 207:15 243:13 278:20 281:2 283:17,23 agreed 18:25 76:14 150:21,23 151:4,5,6 153:6 154:2,22 163:5 187:16 279:8 303:5 304:5 agreeing 253:7 agreement 18:4 18:17 19:4 44:9 44:10,14 53:12 115:8 116:14 117:20,24 118:5 118:9 120:2 130:14,19 132:15,21,25 134:12 136:1,8 140:11 145:16 149:14 152:5,8 152:9,21 153:15 154:8 155:7,9 182:14 185:2 187:20 188:1,3 188:6 190:23 205:6,16 220:10 277:19,24 278:5 279:1 288:1 295:4 300:24 301:2,5,6,7,11 301:14 305:17 309:20,23 310:8
abandon 191:22 abandoned 182:24 197:25 abandoning 182:23 abbreviated 132:7 abbreviations 107:15 ability 20:24 21:6 21:13 22:11 34:17 158:11 210:5 able 14:16,17 41:9 44:8 49:1 92:2 94:16,18 98:16,16 152:9 158:13,19 159:21 182:15 184:12,24 189:21 191:8 217:17 231:11 232:20 242:17 243:4,9 287:2 313:23 absent 291:21 Absolutely 278:6 absolved 146:19 absorb 251:16 AC 13:12 16:24 31:5,7 accelerate 64:9 243:22 accelerated 64:12 66:1 acceleration 64:20,20 65:13 66:5 accept 56:18 97:11 174:23 228:20 326:16 accepted 27:5 accepting 82:15 307:13 access 39:25 40:1	accident 13:12 13:13 16:25 30:7,15 31:18 accommodate 8:11 accompanied 216:22 218:14 accompanies 67:5 accomplish 156:24 accomplished 167:4 account 62:13,17 307:7 328:19 accountable 326:11 accountants 149:25 accounts 199:6 accrue 55:3 261:16 accurate 98:7,8 123:10 127:1 189:14 202:10 219:12,16,18,23 238:17,20 267:19 285:14 288:7,10,21 291:2 296:14 334:6 accurately 123:4 156:11 accustomed 23:11 27:4 36:20,21 317:20 achievable 66:19 266:18,20 267:2	achieved 82:10 105:24 203:14 203:15 achieving 46:16 60:3 62:2 69:8 84:12 88:5 201:4 acknowledged 153:4 204:7 acknowledging 254:12 303:9 acquiesce 247:11 acquiesced 146:7 165:21 acquired 33:21 43:7 acting 20:10 21:8 207:8 action 140:5,14 actions 6:16 21:7 34:12 69:15,21 192:14 308:24 active 13:8,9 32:5 178:4 actively 184:5 activities 22:10 23:23 30:1 31:20 58:20 100:22 104:10 104:15 116:21 131:21 212:7 activity 53:13 97:16 212:5 actual 54:21 81:11 97:4 151:6 244:25 269:10 274:18 adamantly 320:13,25 Adams 108:5,22 113:2 add 100:2 173:9 297:20 added 14:7 256:24 328:21		

312:10,12,18 313:12 330:11 336:3 337:4,18 338:6 agreement/a... 296:23 agreements 144:19 153:1 200:9 ah-ha 135:10 ahead 54:20 93:6 225:10 228:4 268:17 272:22 319:3 ahold 124:9 aim 177:23 aimed 88:17 224:16 air 77:10 aircraft 77:22 78:2 airplane 77:25 78:4 al 1:3 2:3 5:14,14 131:20 318:16 320:16 Alan 60:10,23 66:16 111:6 206:23 210:9 albeit 171:19 Albert 113:2,16 113:17,18 121:18 Alexandra 3:13 6:4 Alignment 129:1 alleviate 35:20 36:10,17 allocate 23:24 allocated 129:24 201:11 202:9,11 allow 8:3 35:23 36:18 44:11 85:16,21 115:13 125:4 147:6 153:14,16,20 167:12 171:24 187:20 190:17 197:24 261:15 310:2 Allowable 155:15	337:20 allowed 35:10 42:5 49:21 50:2 74:13 77:11 85:9 132:21 133:1 146:22 147:3 148:16 167:25 189:25 262:23 303:10 allowing 167:14 alterations 8:14 alternative 10:3 84:5,5 120:21 215:1,3 ameliorate 28:6 ameliorated 288:3 amend 184:24 amended 132:22 amendment 26:20,21 49:16 49:22 52:21,22 74:7 133:4,10 133:15,17 143:23 144:5,6 145:10,14,20,23 147:17 149:1 150:22 151:25 152:21 155:4 156:3,13 161:24 163:3,5,24 167:4 170:13,13 170:14 187:3 280:17 281:2,8 294:17 297:1,5 298:14 301:19 301:22 302:1,4 302:9 304:4,9 307:25 308:11 308:13,18,23 309:11,22 310:14,25 311:7 311:13,14,14,17 312:1,4,7 315:4 315:9 329:24 330:3,9 337:16 amendments 47:24 amiss 330:14 331:10 amorphous	114:11 amount 51:13 78:5 125:10,23 127:24 133:24 153:12,23 158:5 165:10,23 176:3 251:14 256:6 302:16 303:12 307:18 310:16 310:24 311:1 314:1 315:20 327:23 328:8,25 amounts 14:4 174:7 223:6 251:9 252:7 256:10 302:19 analysis 120:21 160:14,25,25 161:2,19 162:6 174:4,10,18 205:1 236:8 238:16,22,25 266:4 290:11 305:1,8 306:16 306:20 338:14 analysts 330:18 anecdotal 161:9 161:20 173:12 239:14 angle 41:5 78:6 angling 114:1,22 124:25 announce 6:22 annually 9:9 72:3 annuity 198:22 199:4,9,10 annular 77:10,15 answer 8:6 38:1 100:16 102:18 114:20 126:4 141:4 151:19,22 166:23 179:17 182:5 192:22 196:4 212:4 233:2 251:11 253:4 260:6 265:21 287:4 289:15 305:9 319:20 answered 140:12 answering 195:9	answers 8:4 229:22 258:13 anticipate 242:16 243:8 289:10 anticipated 32:9 90:7,12,13,20 90:20 129:22 188:22,23 235:23 241:9,15 241:16 251:12 253:8 254:10,18 257:7 264:9 304:15 306:5,23 323:18 anticipating 261:25 anticipation 120:10 283:11 anybody 7:2 117:4 127:11 279:22 317:9 anyway 288:4 AP1000 12:16,17 12:19,25 13:4 17:5 178:5,6 202:23 203:2,10 203:13,16,19,20 204:8,12,13,23 204:25 205:3 AP1000s 33:5 177:24 184:13 apologize 15:3 apparent 43:15 appear 130:25 266:18 327:17 APPEARANCES 2:1 3:1 4:1 appeared 114:1 130:15 appearing 6:14 appears 67:12 107:24 113:8 132:2 226:16 241:21 242:11 332:16 applicable 134:11 application 11:25 12:9 28:10,15 28:20 44:22 49:19 74:20	87:11 202:21 203:10 204:1,6 204:10 335:21 applied 15:23 apply 26:15 27:9 48:22 60:4 98:21 305:24 applying 47:10 73:19 74:3 appreciate 181:21 285:22 approach 120:4 136:19 285:16 291:6 approached 130:12 197:7,16 appropriate 261:6 285:4 327:19 approval 48:16 49:17 70:15 71:2 72:9 83:19 84:24 88:5 163:7 205:11,20 205:24 213:20 213:24 214:3,12 approve 72:3,5 74:21 184:16 204:11 213:16 approved 55:16 65:19 70:25 87:24 185:22 186:1 214:6 253:18 301:7 approving 204:15 approximate 241:14 approximately 5:3 58:7 63:3,7 93:10,15 138:8 138:12 151:11 151:14 177:5,9 239:24 240:6 241:20 294:21 294:25 295:11 295:15 322:10 322:15 333:20 April 125:22 195:13 271:6 arbitrarily 285:2 Archie 111:6,11
---	--	---	---	--

112:3 131:19 142:22,24,25 143:7,8,13 195:24 211:8,9 211:12 212:1,6 212:13,14,16 213:1 276:18 Archie's 213:6 architect 23:18 area 39:2 105:1 135:11 228:25 areas 53:8 175:2 201:18 248:5 arena 210:11,12 Areva 12:22 14:11 17:6,8,11 17:21 Argumentative 231:18 arguments 175:12 arising 104:4 arose 28:4 312:6 312:8 arrangement 27:22 157:3 158:6,7 159:7 171:19 279:9 arrangements 159:1 as-build 48:21 Asherman 36:25 37:6 42:19 219:7 336:5 Asia 223:9 aside 215:2 272:2 307:13 asked 34:21,25 36:7 68:24 74:19 76:2,17 100:8 110:22 120:14,20,23 125:8 127:18 128:5 130:6 144:16 153:11 153:19,23 154:21 163:23 172:3,7 181:5 183:9 197:13 202:2 215:7 249:22 292:17	292:21 296:4 302:22 307:5 313:1,3 314:25 317:6,16 318:2 325:16 333:3 asking 63:17 72:2 72:4,9 113:12 130:8,8 135:2 170:15 248:9 299:14 303:6 318:3 321:11 322:19 asks 96:24 aspect 147:17 148:5 166:24 309:7 aspects 22:2 58:17,18 145:22 244:18 246:19 311:6 aspiration 261:7 Assembly 197:23 assess 236:14 assessed 298:5 assessing 23:21 assessment 81:24 84:8 106:13,15 107:9 108:2,8,19 109:2,3,5,7 110:11,17,23,24 111:3 113:25 119:7 120:3,7 121:3 123:20 126:9,11 127:2 127:14,19,22 128:6,17,23 129:9,13,14 131:6 132:4 138:18 139:6,13 140:2,7 142:1,2 142:9 143:2,5 143:16 156:17 157:9 187:19 188:1,2,6,18 189:25 190:22 190:24 236:21 237:18 238:13 272:1 273:10,12 278:19,21 279:1 279:3,13,21,23	280:6,10 282:10 282:16,19 285:19,21,25 288:6 293:9,12 295:20,24 297:23,24 298:8 306:5,9,11 332:11,15,17,21 332:25 333:5,6 333:15 337:7,13 338:6,19 assessments 291:18 assist 106:7 120:7 316:11 assistance 39:6 assisting 235:7 associated 58:13 60:19 62:2 69:25 74:7 152:9,12 159:15 160:1 172:16 175:1 214:19 241:8,14 246:20 assume 210:21 245:13 306:8 assumed 79:5 81:8 83:25 84:22 87:12 266:16,19 assumes 328:14 assuming 23:2 94:10 159:20 assumption 75:19 87:23 105:23 245:13 283:22 284:14 284:17,23 285:23 assumptions 83:5 91:16 95:4 124:23 125:8 126:13 229:13 235:8 282:17,20 282:21,23 283:10,15,21 285:3,6,6,25 286:1 290:18 291:7,8,12 307:1 assurance 231:15	assurance/qu... 61:1 assurances 220:11 231:17 319:12 assure 120:11 319:7 assured 220:5 athlete 58:23 62:18 Atkins 110:8,8,9 110:13 272:6 273:14 Atlanta 2:13 118:8 131:8,22 292:23 300:1 332:17 attached 180:21 327:9,13 attachment 120:1,6 141:16 141:21 142:5 148:2 294:10 337:15 attachments 67:1 268:16,19 271:22 336:12 attain 92:7 231:3 231:11 attained 231:9 attempt 47:15 101:11 125:13 attempted 191:13 attend 120:24 attendance 112:21 attended 129:1 131:7,12 225:20 attention 12:14 16:14 28:11 38:17 42:17,20 80:1 86:12 93:20 107:1 136:7 141:20 156:8 159:12 168:5 169:24 322:21 324:9,15 327:12 329:20 attorney 131:8 131:16,20	192:12 258:23 278:25 281:25 302:5 307:25 308:3 320:22 322:4 332:18 attorneys 2:2,9 3:2,7,12,16 70:18 98:10 154:20 193:22 193:23 194:2,7 194:23,24 195:9 229:22 257:14 257:16,25 258:8 258:20,25 261:9 262:21 265:2 279:23 281:10 281:13,19 297:25 319:18 attrition 185:21 attune 218:2,7 audience 37:21 38:14 39:16 315:1 audit 263:12 augmentation 300:8,20 301:17 augmented 190:3 250:21 August 57:5,12 57:16 58:1 64:25 65:9 67:7 67:14 68:11 70:3 75:2 86:9 86:21 87:2 133:8 144:2,7 152:17 162:1,1 163:2,2 178:24 179:1 180:20 181:2 183:13,16 193:17,20 225:7 225:18 231:23 232:5 256:14 Austin 2:17 3:13 6:4,4 authority 4:2 6:10 50:15 265:4 279:25 298:2 authorized 187:3 278:25 availability 30:4
--	---	---	---	---

available 91:13 190:4,5,15,17 204:21 235:25 315:7 322:1	149:9 151:14,17 151:18 153:25 155:11 157:21 159:12 162:1 169:20 170:15 177:8 179:23,24 183:12 210:13 230:14 233:1 240:5 245:25 253:2 283:1,2,3 283:4,4,5,7,8 287:15,16 294:25 295:15 305:9 313:9 322:14,21 324:11,12 331:16	307:5 322:7,18 333:8 335:7,11 bankrupt 330:1,4 330:6 bankruptcy 187:7,10,12,13 187:14,17,21 188:11,16 189:3 190:4,12 191:25 203:5 289:10,14 290:11 300:12 300:18 301:20 302:2,6 307:8 307:15,24 308:3 308:9,20 309:14 314:8 317:12 330:10,15,23 331:3,7,15	301:4 302:21 303:2 327:5 baseline 127:3 basic 103:8 basically 52:9 301:8 309:9 basing 95:4 basis 14:5 21:7 45:8 73:9 78:4 79:4 81:22 84:24 90:17,23 91:11 92:6,15 93:2 97:3,12 149:13 164:17 173:9 189:17 229:11 235:6 263:16 268:24 Bates 240:12 242:5,12 266:8 280:3 Baxley 131:14 281:22 318:17 320:8,10 BCS 268:14 bear 328:22 Bechtel 106:7,11 106:14 107:9,22 108:1,4,6,10,11 108:14,17,18,22 109:1,4,14,14 109:21 110:16 110:20,23 111:2 111:4,8,9,12,16 111:20,22 112:4 112:15 113:1,9 113:13,18,25 114:14 115:15 116:20,21 117:10,13,14 118:6 119:4,7 119:23 120:14 120:18,20 121:3 121:12,15 122:10,20 123:3 123:12,20 124:1 124:8 125:22 126:3 127:6,11 127:23 129:3,13 129:15 130:2 132:4,11,15,25 133:20 134:15	134:18,22,23 136:8,13 138:17 138:20 139:5,13 140:7,9 142:2,7 142:12 143:2,24 207:11,18,22 212:20 272:2 274:6,14,22 275:14,16 276:1 276:5,14,22 277:4,6 278:3 278:19,20 279:1 279:13,14,21,23 281:7,14 282:16 282:17 283:1,2 283:16,22,24 285:4,24 286:7 286:8,12 288:12 288:15,19 290:13,25 291:2 291:5,5,18,21 292:9,13,22 293:2,6,8,12 295:19,23 296:9 297:23,24 298:5 298:8 299:4,7,9 299:9,14,24 300:2,8,21 301:2,2,15,15 318:22 319:22 332:17 337:6,12 338:18 Bechtel's 120:6 120:24 122:14 124:19 126:9 128:23 136:21 139:1 274:1,3 280:5,9 282:10 285:19 288:5 becoming 82:22 146:9 began 8:25 132:9 192:11 beginning 8:21 28:24 72:14 80:1 81:17 82:7 82:11 83:2 89:7 89:20 92:10 170:5 185:16 193:10,11 228:13
Avenue 3:23 average 323:8,10 avoid 85:11,25 256:3 awaiting 280:23 awarded 164:15 awards 158:18,20 aware 27:17 39:24 43:17,18 43:25 81:11 84:4 88:4 95:23 108:9 116:10 117:2 134:15,19 134:21 209:13 209:14 240:25 248:3 249:6,21 250:1,12,18 261:2 262:7 263:4,6 274:9 274:25 275:13 275:16,18 276:1 280:9,13 281:7 301:18,25 302:7 309:17 312:21 330:22 331:1	backed 36:12 background 89:8 159:10 162:22 208:7 212:25 244:9 backlog 158:17 backup 31:5 baked 75:19 81:23 balance 199:5,6 199:20,21,22 243:20 319:14 balancing 10:14 Balser 2:12 5:18 5:18 7:12,15 12:4 13:18,21 14:13,15,25 15:4,9,10 37:2 53:19 62:24 63:9,20 64:2 71:6 86:5,6 93:3,6,18 96:16 99:6 106:18 112:8 117:21 121:5 130:23 138:5,14 141:17 145:17 151:9,16 151:23 155:18 162:14 163:14 174:17 177:2,11 178:17 180:8 188:4 192:3,18 231:18 237:9,14 278:22 294:18	Banner 257:16 Barrett 2:16 5:24 5:24 base 9:16 10:23 11:16 12:2 90:16 170:7 335:24 based 9:5,25 48:23 52:7 55:24 61:20 67:23 68:19 70:23 74:25 75:3,15 80:19 80:25 81:20 82:4,15 84:13 87:12 91:1,16 91:22 92:11 94:3 95:7 101:16 102:9 103:3 111:3 118:7 126:12 127:3 132:9 134:11 137:14 140:14 146:22 174:18,24 201:4 201:23,25 202:11 203:5 228:15 229:5 238:6,13,25 239:1,14 241:18 246:4 262:21 285:6,17,20 286:6 290:18	Basel 106:7,11 106:14 107:9,22 108:1,4,6,10,11 108:14,17,18,22 109:1,4,14,14 109:21 110:16 110:20,23 111:2 111:4,8,9,12,16 111:20,22 112:4 112:15 113:1,9 113:13,18,25 114:14 115:15 116:20,21 117:10,13,14 118:6 119:4,7 119:23 120:14 120:18,20 121:3 121:12,15 122:10,20 123:3 123:12,20 124:1 124:8 125:22 126:3 127:6,11 127:23 129:3,13 129:15 130:2 132:4,11,15,25 133:20 134:15	
B B 2:19,23,23 25:4 116:13 335:17 back 8:20 9:14 10:7 16:14 17:22 27:7 28:9 35:3 42:17 48:18 50:1,13 63:7 65:20 67:23 70:23 71:1 78:25 83:19,21 86:7 86:14,21 87:13 87:23 89:1 93:14 95:11 100:4 103:15,17 103:20 109:12 110:25 111:2 118:23 125:22 136:3 138:12 144:1 148:3				

begun 14:25	Belton 257:17	bigger 60:9	bonuses 166:4	2:22
behalf 1:3 2:3 6:7 6:9,14 79:20 118:10 230:7	beneficial 39:13 135:8 149:19 161:6,7 185:1	222:20 329:9,11 329:12,15 331:21	book 317:19,23 318:5,9	bucket 25:14,19 25:20
belief 298:24 329:23,25	benefit 35:6 42:4 92:3 94:11,17 229:9 235:5	biggest 14:2 42:4 77:24 146:3 175:23 176:9	borrow 135:2	buckets 24:18 25:21 27:2,3
believe 60:11,14 62:11 64:16 65:7 66:9 67:14 69:10,19 73:3 84:3,19 88:2 95:24,25 98:2 106:9 108:5,23 112:18 114:22 118:22 121:17 126:19,25 127:2 128:25 142:3 177:17,18 199:19,24 200:24 213:12 214:14 215:11 216:15,21,22 219:11,17,24 220:7 221:1,17 226:21 229:1,16 232:3 236:3 249:14 252:8 258:9,22 259:9 263:6,8,17 264:4,24 265:17 266:19 267:8,10 267:12,18,18 270:12 275:8 277:16 279:14 281:21 285:8 289:3 291:1 294:13 309:19 318:6 325:2 326:19,20 330:3 330:5 331:2,8,8 331:9,14	benefits 19:7 29:20 175:3,5,6 175:15 176:17 188:24	bill 55:24 101:11 101:24 150:1,2 216:22 303:10	bottom 12:15 123:15 220:17 280:5 282:1,2	build 9:4 10:17 16:18 19:18 23:4,23 28:7 29:10 31:13 33:16 39:15 115:20 178:4 184:4,6 203:10 203:12 204:12 204:23 205:3
Benjamin 178:13 180:16 181:8 183:20,21 212:10	Bernie 60:11 61:10 66:17	billed 245:14 253:23	Boyd 1:15	building 30:2 43:2 48:17 72:20 76:5,22 76:25 77:1,16 77:17,25 78:3,8 78:14,19,24 88:19 114:8 122:13 186:12 195:8 214:3 217:21 242:6,9 286:13,14
best 11:8 13:1 23:1 58:23 62:18 90:11,19 91:12 129:7 169:15 204:22 205:2 235:22 251:2,6 260:7 262:6 287:9 314:12,16 325:7	better 19:13 23:20,21 36:22 61:16 110:4 120:8 135:14 164:11,19 184:22 254:24 282:3 287:25 289:8 307:2,2 315:2 319:5 323:24	billion 62:12 146:15 166:5 189:9,12,15 290:7	Brad 61:12 66:17	buildings 40:21
Blake 3:18	BLRA 90:9 214:3 251:11	bit 21:21 28:3 41:18 49:11 51:5 54:24 59:5 62:9 65:14 114:3 130:7 185:16 257:23 276:17 280:21 289:22 293:18 324:12	brand 171:4	built 41:9 42:7 78:13 105:23 159:3 178:6 215:16 301:21 302:3 323:17
BLAKE 3:18	Bluefin 52:23 53:1,3 168:20 168:21 303:3	board 108:3,16 108:25 115:19 115:20 140:17 140:19 141:1 148:17,18 197:7 197:19 228:18 230:23 233:7 311:21	breach 102:21,23 103:9 255:9	bullet 67:19 68:6 68:13,14 69:13 86:15 159:14 182:21 225:25 241:6 242:13 285:15 326:7,10
BLRA 90:9 214:3 251:11	board 108:3,16 108:25 115:19 115:20 140:17 140:19 141:1 148:17,18 197:7 197:19 228:18 230:23 233:7 311:21	boards 143:20 280:25	break 8:10 48:6 63:1 138:4 192:7,20,21,23 192:25 237:11	Burgess 257:15
Bluefin 52:23 53:1,3 168:20 168:21 303:3	beyond 58:4 65:21 75:17 76:12 85:5	boiling 13:25 14:2 31:12	breakup 134:4	business 158:21 210:11 270:19 270:20
board 108:3,16 108:25 115:19 115:20 140:17 140:19 141:1 148:17,18 197:7 197:19 228:18 230:23 233:7 311:21	big 33:17 36:3 41:2 43:23 50:10 62:20 69:24 77:9 95:20 109:25 126:22 135:10 135:20 136:2 147:22 148:5 159:4,6 186:18 186:20 207:14 262:2 283:16 315:24 329:8	bolting 41:10 74:6	bridge 60:14 113:14	buttoned 280:23
boards 143:20 280:25	big 33:17 36:3 41:2 43:23 50:10 62:20 69:24 77:9 95:20 109:25 126:22 135:10 135:20 136:2 147:22 148:5 159:4,6 186:18 186:20 207:14 262:2 283:16 315:24 329:8	bond 307:17,17 307:19 308:12	brief 151:16	buy 20:11 168:8
boiling 13:25 14:2 31:12	big 33:17 36:3 41:2 43:23 50:10 62:20 69:24 77:9 95:20 109:25 126:22 135:10 135:20 136:2 147:22 148:5 159:4,6 186:18 186:20 207:14 262:2 283:16 315:24 329:8	bonus 146:14 147:9,11,14 166:11 201:1,3 201:13,24	briefing 155:5,16 155:25 156:5 225:20 240:14 282:12 337:21	buying 18:24 175:10
board 108:3,16 108:25 115:19 115:20 140:17 140:19 141:1 148:17,18 197:7 197:19 228:18 230:23 233:7 311:21	big 33:17 36:3 41:2 43:23 50:10 62:20 69:24 77:9 95:20 109:25 126:22 135:10 135:20 136:2 147:22 148:5 159:4,6 186:18 186:20 207:14 262:2 283:16 315:24 329:8	boards 143:20 280:25	briefly 24:15 30:20 172:4	Bynum 131:20 318:16 320:9,10 320:17 321:2
boards 143:20 280:25	big 33:17 36:3 41:2 43:23 50:10 62:20 69:24 77:9 95:20 109:25 126:22 135:10 135:20 136:2 147:22 148:5 159:4,6 186:18 186:20 207:14 262:2 283:16 315:24 329:8	boiling 13:25 14:2 31:12	bring 94:19 114:6 119:23 148:19 153:16 167:25 285:1 303:7 325:3	Byrne 1:12 3:17 5:6 6:18,20 7:9 7:13 8:19 11:18
boards 143:20 280:25	big 33:17 36:3 41:2 43:23 50:10 62:20 69:24 77:9 95:20 109:25 126:22 135:10 135:20 136:2 147:22 148:5 159:4,6 186:18 186:20 207:14 262:2 283:16 315:24 329:8	bolting 41:10 74:6	bringing 88:13 116:8 134:12 157:12 188:16	
boards 143:20 280:25	big 33:17 36:3 41:2 43:23 50:10 62:20 69:24 77:9 95:20 109:25 126:22 135:10 135:20 136:2 147:22 148:5 159:4,6 186:18 186:20 207:14 262:2 283:16 315:24 329:8	bond 307:17,17 307:19 308:12	broader 248:18	
boards 143:20 280:25	big 33:17 36:3 41:2 43:23 50:10 62:20 69:24 77:9 95:20 109:25 126:22 135:10 135:20 136:2 147:22 148:5 159:4,6 186:18 186:20 207:14 262:2 283:16 315:24 329:8	bonus 146:14 147:9,11,14 166:11 201:1,3 201:13,24	broke 138:15	
boards 143:20 280:25	big 33:17 36:3 41:2 43:23 50:10 62:20 69:24 77:9 95:20 109:25 126:22 135:10 135:20 136:2 147:22 148:5 159:4,6 186:18 186:20 207:14 262:2 283:16 315:24 329:8	bonus 146:14 147:9,11,14 166:11 201:1,3 201:13,24	broken 13:24 165:20	
boards 143:20 280:25	big 33:17 36:3 41:2 43:23 50:10 62:20 69:24 77:9 95:20 109:25 126:22 135:10 135:20 136:2 147:22 148:5 159:4,6 186:18 186:20 207:14 262:2 283:16 315:24 329:8	boiling 13:25 14:2 31:12	brought 60:22 61:15 106:14 108:1 265:6 276:16 328:21	
boards 143:20 280:25	big 33:17 36:3 41:2 43:23 50:10 62:20 69:24 77:9 95:20 109:25 126:22 135:10 135:20 136:2 147:22 148:5 159:4,6 186:18 186:20 207:14 262:2 283:16 315:24 329:8	bolting 41:10 74:6	Brown 240:17 244:14 247:4	
boards 143:20 280:25	big 33:17 36:3 41:2 43:23 50:10 62:20 69:24 77:9 95:20 109:25 126:22 135:10 135:20 136:2 147:22 148:5 159:4,6 186:18 186:20 207:14 262:2 283:16 315:24 329:8	bond 307:17,17 307:19 308:12	Browne 4:9 5:9	
boards 143:20 280:25	big 33:17 36:3 41:2 43:23 50:10 62:20 69:24 77:9 95:20 109:25 126:22 135:10 135:20 136:2 147:22 148:5 159:4,6 186:18 186:20 207:14 262:2 283:16 315:24 329:8	bonus 146:14 147:9,11,14 166:11 201:1,3 201:13,24	Bryony 2:19 6:1	
boards 143:20 280:25	big 33:17 36:3 41:2 43:23 50:10 62:20 69:24 77:9 95:20 109:25 126:22 135:10 135:20 136:2 147:22 148:5 159:4,6 186:18 186:20 207:14 262:2 283:16 315:24 329:8	boiling 13:25 14:2 31:12	bryony.hodges...	

11:22 12:5	call 2:2 24:18	123:8 127:1	199:5,6,20	245:17,20
13:22 15:11	34:19 37:10	129:17 130:8	311:22	266:20 275:20
18:7 53:17,20	45:5 49:18 54:8	186:23 210:9	catastrophic	286:19 288:16
63:17 64:3 71:7	58:22 62:16	277:7,9 285:10	31:9	310:10 326:4,7
79:15 86:8	127:17 129:1	Carlette 225:11	categories 24:21	326:11
93:10,17,19	133:21,21	225:15 241:1	25:7,10,12	CB&I's 310:1
96:17 99:7	145:10 146:4	246:23 249:9,11	101:6 103:7	CD 126:21,23
103:18 106:19	166:3,4 300:13	259:22	categorize	celebrate 135:14
112:9 117:22	301:8	Carlo 305:1	276:12	celebrating
130:24 138:15	called 13:8 15:19	Carlotte's 249:13	categorizing	135:16
141:18 145:18	16:7 17:6,7	Carmen 4:4 6:9	112:3	Central 3:2 6:8
155:19 163:13	25:1,9,14 27:19	carmen.thoma...	category 24:20	179:7 181:20
163:15 177:5,10	33:18,19 40:6	4:6	26:5,8 101:14	182:9 185:10
177:12 178:18	40:13,18 44:8	Carolina 1:1,7,8,9	245:18	CEO 131:14 158:1
180:9 192:4,7	49:17 52:23	2:9,11 3:7 4:2	cause 334:10	178:12 196:24
202:20 205:5	54:4,23 55:23	5:8 6:10,14,24	caused 52:18	197:3 211:5
213:15 214:25	59:11,21 76:3,5	7:21 24:10	89:16 101:22	317:18
225:4 227:14	76:9 77:7,16	79:20 157:25	103:5 148:11	CEO's 141:14
230:4,8 231:12	78:2,20 101:4	158:2,5 162:12	causes 47:4	CEOs 37:17,18,25
232:22 233:25	119:9 141:25	179:8 181:19,21	causing 50:9	38:11,13 210:17
234:8 235:20	154:8 157:21	192:12 230:1	caveat 49:24	223:17 309:5
236:6 237:17	230:7 269:20	321:7 334:5,15	Cayce 2:21	314:25
239:24 240:7,9	272:6 288:25	337:23 338:10	122:13	certain 74:4 78:4
260:18 261:12	calls 48:8	carries 193:13	CB&I 33:21,22,23	78:5,5,6 88:5
266:7,25 268:13	Camperdown 3:9	carrot 146:4	35:15 42:5,23	91:16 142:11
271:25 272:18	cancel 191:5,20	166:4,5 176:14	43:8,9,20 44:11	172:11 202:8
273:24 293:11	cancellation	carry 177:13	44:13,16,18	252:11 307:18
295:18 311:16	206:10 292:3	Carter 36:25	50:12 53:22	certainly 9:20
312:13 314:4	300:14,17,24	107:11,16,25	54:14 56:1	14:22 19:5
318:14 320:7	Canning 273:7	131:14 219:7	59:21,24,25	21:19 23:14
321:6 322:10,16	capabilities 39:1	225:2 336:6	72:15 74:10	24:12 29:22
322:19 333:12	39:4 109:15,19	carved 172:18	84:11 91:24	30:12,18 32:16
333:19 335:5	110:10 219:1	case 1:6 5:15,22	92:16 94:4	34:6,18 39:23
336:10,18 338:1	Capability 12:10	46:4 95:13	109:18 113:8	45:2,7 47:22
Byrne's 63:19	capacity 10:22	146:18 150:4	115:6,13 125:12	56:7 60:10 84:7
	11:16	156:22 174:14	130:12 132:21	84:9 89:23
C	capital 71:4,10	178:22 182:17	133:2 144:16,23	98:13 100:10
C 2:16 116:14	71:17 201:12,14	186:16 194:18	144:24 145:2,3	103:1 104:22
C222 2:20	201:23 297:18	200:13 245:6	145:11 147:6	109:18 112:3
CA 113:15	336:15	246:21 247:9	158:15 167:14	125:12 133:7
CA-01 221:15	captured 229:17	249:24 256:16	167:15,18,22	143:7 147:21
CA-20 221:3,9,11	267:24	258:10 259:9	168:12 207:11	149:20 150:5
calculate 241:17	car 46:25,25 47:4	263:2,7 269:8	210:19 220:18	154:7 161:10
calculated 241:8	care 140:12 147:2	308:19 310:6	220:24 221:2,8	181:4,6 193:1
241:14 242:8	career 213:14	314:10,13	228:23 229:6,8	198:2 203:12
260:20,21,25	careful 40:11	325:13	229:14 235:4	206:15 210:7,14
261:1,14 262:25	247:1	cases 5:20 6:6,24	238:2 239:16	213:17,21 214:1
calculation 69:4	carefully 246:6	6:25 35:13	241:5,23 242:6	214:7,18 217:25
calculations	249:2 332:20	49:11 253:22	242:13,15,16	220:14 224:2,8
263:4 264:8,23	Carl 113:2,16	307:2	243:3,4,8	237:25 241:17
265:23	121:18 123:2,3	cash 152:9,11	244:21,22 245:2	243:14 251:5

253:15 259:18 270:4 279:22 281:9 287:16 293:18 298:20 302:5 303:23 308:2 309:8 312:19,20 317:10 320:24 325:13 326:22 331:7,10 Certificate 12:1 12:10 214:21 334:1 335:14,21 certification 16:8 16:10 148:6,10 certified 61:1,5 certify 73:7 100:18 334:5,9 cetera 72:20 324:14 CFO 108:4 249:9 249:10 CFO's 249:8 CFR 286:13 Chad 257:15 chain 26:13 32:25 42:6 61:14 66:25 141:15 180:6 211:4 268:10 272:15 272:19 313:21 318:11 320:4 336:11 337:14 338:4,16,17,20 338:21 chairman 197:18 chairperson 31:25 challenge 92:2 92:23 93:22 94:3,24 95:5,9 95:20 101:9 104:1 229:8,15 230:17 233:15 234:11 235:4,10 262:2 267:13 323:2,5 challenged 85:12 230:24 challenges 80:3 80:8,9 89:25	90:2 103:21 120:9 challenging 82:15 95:7 101:5 103:12 171:8 229:12 233:23 235:8 chance 255:13 change 20:5,9 22:12,13 23:2,3 26:9,16 28:3 35:24 48:12 49:3,8,10,14 50:1 62:16 73:4 73:5,12 74:5 76:1 93:7 100:9 100:11,19,24 116:23 136:23 136:24,25 137:7 141:9,11 146:21 146:22,23 147:1 147:4,5 148:5 158:9,10 164:15 167:1 177:2 209:20 257:3 292:4 317:12 322:7 323:15 changed 26:20 33:22 159:21 changes 34:7,18 34:20 48:1,5 49:5 50:8,15 59:25 83:20 127:3 143:15,18 145:9 167:21 172:14 222:18 225:14 246:17 256:22 266:4 285:17,20 291:7 299:10 338:15 changing 73:6 146:24 161:1 characterization 296:12 characterize 136:2 270:5,8 characterized 224:22,24 296:11 charge 145:7 196:21,25 197:2	255:20 charges 54:6 55:3 62:12 101:22 102:11 252:2,12,15,19 252:22,25 253:19 256:18 256:19 Charles 22:16,20 33:15,22,25 34:2,14 35:4,8 35:12,17,21 36:5,11,12 38:20 39:19 41:1,22,24 42:7 52:11 76:8 89:16,19,25 90:2 186:10 209:15,16,18 215:5,21 216:1 216:11,12,16 218:4,10,12 224:11 Charleston 1:16 3:14 5:7 334:15 334:15 Charlotte 3:19 50:12,13 chart 59:18 269:5 269:9,9 280:4 328:13 charts 59:16 270:10,13,17 cheapest 174:20 Cherry 131:16 142:22,22 143:7 270:22 Chicago 43:7 113:14 chief 84:17 143:1 189:5 196:17,19 211:8 216:23 China 82:21 178:4,5 choice 16:16 305:14 choose 27:1 199:10 chose 32:5 262:18 chosen 97:2	209:22 Churchman 186:23 circumstances 70:14 290:24 civil 283:12 286:4 claim 252:25 253:1 claimed 95:10 127:25 189:7 claiming 52:2 103:4 claims 146:24 clarification 5:21 Clary 206:20 313:18 clause 307:20 clear 64:4,24 65:4 142:6 148:13 225:9 227:3 240:22 256:8 308:9 331:24 CLECKLEY 1:3 2:3 clock 165:5 close 10:8 17:10 137:15 168:9 closed 168:9 317:19,22 318:5 318:9 closely 175:7 closer 212:7 Co-op 181:20 co-ops 179:7 181:16 182:8 319:9,16,21 co-owners 22:25 coal 9:22,24 10:2 159:6 code 15:19 16:5 301:20 302:2 collaborative 53:4 colored 327:9 Columbia 3:5 4:5 39:2 110:8 223:7 309:4 column 142:15 142:19 combined 10:6	10:13 11:25 16:1 21:25 23:17 28:10,15 32:8,13 44:21 53:8 159:3 168:21 176:20 176:23 335:20 come 14:22 40:25 50:5,18 51:14 64:22 76:7 77:13 80:25 84:12 87:23 91:2 95:10 100:24 107:9 110:8 114:12 117:4 125:4 127:4 136:18 137:8 149:6 150:25 155:11 158:12 159:22 168:17 174:6 189:21 191:15 211:25 223:7 234:17 238:3 239:3 245:23 262:10 288:23 289:3,7 290:18 290:20 292:5,24 306:9 comes 51:7 156:23 239:18 comfortable 82:22 95:5 187:1 coming 23:22 34:7 36:15 37:13 52:11 83:19,21 108:11 157:7 161:9,20 171:1 173:13,20 186:12 246:17 252:25 253:2 290:25 300:22 303:1 313:9 330:17 command 211:5 commence 63:9 comment 136:7 143:23 277:25 278:1 commented
---	---	--	--	--

294:14 comments 128:14 132:13 136:4 142:16,16 142:23 267:25 commercial 29:22 43:11,13 43:14,24 104:3 104:19 144:10 147:23 148:11 148:19 164:8 175:12 280:7,10 284:19 commercially 76:12 commission 6:11 9:9 12:12 15:15 22:1,8 24:9,13 28:21 29:8 31:17 32:15,18 34:9 39:21 40:3 47:25 56:5 70:10,22 71:2 71:11,21 72:2,4 73:1 74:19 78:2 79:2,3,8 81:7,11 81:21 83:11,17 84:2 88:3 89:8 89:22,24 90:18 91:15,22 93:1 94:1,6 96:9 105:5 155:3,6,7 155:8,25 162:8 184:15 185:22 204:11,18 214:16,24 226:18,21,22 229:20 230:1 231:2 232:11 233:3 234:22 251:22 252:21 253:4,6 254:11 254:20 255:10 256:15 260:20 260:24 261:13 261:22 262:3,24 267:16 268:1 298:4 322:2 324:6,19 334:22 338:9 commissioned	268:7 commissioners 229:23 committed 189:10 307:11 Committee 179:8 181:20 269:21 committing 69:8 85:19 commodities 20:8,12 288:14 316:2,19,20 common 1:1 19:3 19:5 271:18 Communication 155:16 337:21 communications 108:10 109:10 companies 12:22 12:24 16:9 37:18 39:18 53:8 61:8 109:6 109:18 144:20 147:24 150:7 158:15 164:9 165:25 171:17 176:7 209:19 210:17,18 212:9 272:1,5,7,13 273:11,14 278:11 280:24 281:25 309:5 310:12 331:12 company 1:7 2:9 9:2,8,18,23 10:5 10:13,16,18 11:7,13,14 12:9 12:17,19,20 13:1,5,15 16:6 17:1 19:18 20:10 22:23 23:15,18 26:25 27:3,6 28:15,20 29:1 30:9,13 35:13 38:24 40:5 53:7 61:9 70:5,22,25 75:1 76:14 85:16 92:6 95:8 97:19 98:16,24 101:12 101:12,17,18	102:20,23 103:5 103:9,14 109:15 110:2 111:13 127:23 130:2 137:22 140:16 140:18 144:9 149:23,25 152:15 155:2,5 155:11 158:3,21 159:5 160:13,21 160:24 162:7,7 162:18 166:12 168:22 172:5,7 172:18 173:22 177:20 183:10 188:9 195:17,22 195:25 196:5 197:13 202:6 203:6 205:10 209:17 223:5,15 227:8 231:10,16 231:22 232:18 233:2,12,18,19 233:19,22,25 234:5,7,13,22 234:25 235:12 235:16 238:10 247:24 248:4,7 248:13,16,21,24 249:4,7,19,22 250:2,7,13,15 251:3,21,23,25 252:1,6,8,11,12 252:14,20,24 253:1,6,9,10,17 253:23 254:1,8 254:10,12,14,19 254:20,25 255:2 255:3,8,13,25 256:1,4,6,10,19 256:20 257:5,17 259:1 261:4,5 261:13,18,21 262:9,12,19,25 270:10 278:19 278:25 279:8 290:2 292:6 296:22 304:21 306:4 307:6,17 314:17 325:7 326:24 327:3	331:5 company's 9:4 14:7 98:4 257:14 259:7 260:7 compared 204:19 Compatibility 12:1 335:22 compensate 55:1 73:20 compensation 198:9 200:16,17 200:20,23 201:10 compete 109:20 competitor 109:17,22 110:3 115:16 117:8 207:10,12,13 competitors 207:17 complain 154:20 complained 126:17 128:1 complaining 128:14 222:24 224:12 complaint 124:14 223:1 complete 15:23 29:11 54:8 68:1 74:15 76:20 90:13,21,25 91:5,8 146:19 155:10 165:17 166:1 172:9 191:4,7 222:3,6 222:10,17,21 226:8,10 235:24 240:20 251:12 251:15 254:11 254:18 289:11 304:16,20 316:12 328:13 334:7 completed 46:19 55:8 57:1 203:23 297:20 324:25 completely 36:5 103:3	completeness 34:5 227:20 completing 90:8 90:10 178:4 completion 54:5 65:7,18,22,25 66:2,19 69:3,6 70:3,7 71:24 72:8 73:11 74:25 75:12,14 75:17 120:12 146:14 148:3 153:18 161:25 163:1 165:1,2,5 166:12 170:1,4 170:6,8,11 171:13 187:1 222:13,24 226:14 227:6 236:10 237:19 243:22 284:7 290:12,23 298:5 314:14 328:11 complex 100:16 118:24 171:8 complicated 100:20 complies 97:24 180:14 265:12 268:21 273:2 comply 242:17 243:9 component 24:23 25:4 41:6 41:7 212:22 components 25:8 33:1 36:4,18 40:24 58:14 61:17 77:3,4 78:15 170:20 composite 78:10 compromised 210:5 concept 113:19 117:4 149:4 151:5 313:24 concern 109:21 109:25 136:13 209:1 277:21,22 329:23 330:21 concerned
--	---	--	---	--

136:20 270:2,6 300:21 303:1 concerns 89:19 96:10 208:22 209:18 276:8,10 278:18 285:24 308:7 conclude 19:7 65:24 concluded 58:10 63:16 66:17 333:22 concludes 93:9 177:4 239:23 322:9 333:19 conclusion 61:19 61:22 121:13 122:15 170:7 189:21 190:20 237:23 238:3 239:4 284:15 conclusions 90:23 238:16 280:9 concrete 73:24 78:10,12,16,18 conditions 31:19 conference 2:2 230:9 confidence 287:12 confident 82:9 confines 35:9 confirm 219:19 confirms 239:19 confusing 193:3 202:3 250:9 306:19 confusion 256:3 congestion 36:11 36:17 conjunction 217:20 304:4 connection 5:22 79:8,21 108:5 129:13 163:10 163:18 242:9 connections 74:5 74:6 consensus 258:9 258:22 261:5	consequences 13:11,13 16:25 137:1,9 consider 9:18 17:14 104:23 175:18 177:12 197:14,14 208:1 208:13 consideration 8:25 70:7 73:13 80:2 175:17 302:23 considerations 76:19 considered 10:5 10:18,21 11:16 85:7 197:1 207:24 272:1 308:25 317:8 considering 8:23 9:24 12:20 273:12,14,17 consisted 18:13 43:3 247:3 consistent 75:11 98:9 120:13 206:8 232:21 246:7 consistently 89:20 consisting 202:22 Consolidated 5:23 consortium 18:13 27:6 34:19 37:19,23 38:1,3,4,25 43:2 43:8,11,16 44:1 44:9 45:1,2,4,21 45:22 47:20 52:8 54:2,7 55:2,22 56:21 57:5,6,18,22 58:3,6,19 59:3,9 62:4,10 64:21 65:9 66:10,11 67:13 68:4,11 68:18 69:20 71:22 73:7 74:14 75:9,20	81:8,25 82:1,17 83:13,22 87:7 87:16 88:11,13 88:15,23 90:24 92:18 94:7 95:9 95:18 97:2 98:12 99:1,14 99:17 100:3,17 100:23 101:11 101:15,23 102:10 103:24 104:20,24 105:3 109:24 110:3 115:5,8 118:25 124:11 126:14 130:10,11 134:2 134:3,3,5 135:5 144:8,10,11 145:6 146:5,6 146:18,23 147:3 147:10 150:1 157:7 158:7 164:2,7,14 165:21 167:5,7 167:10,24 171:20 185:2 205:6,20,24 207:6,17,20 209:12 210:1,14 211:1 215:7 219:10 220:5,16 220:19 221:13 224:2,13 225:7 226:12 227:4,11 227:19,25 230:17,20 231:2 231:6,14,16,21 232:1,4,12,24 233:6,13,20,23 234:1,14,18,22 235:13,17 238:7 239:1,8 241:16 242:10 244:2 251:22 252:9,11 253:6,15,23 254:6,25 255:24 256:7,13,20 257:9 260:21 261:1,15,20,22 261:25 262:2 263:1 266:16	267:9,11,20 269:1,23 275:15 275:17 278:10 283:18 287:1 288:10,11 298:10,12,17 299:21 313:2 323:2,21 326:24 327:2,5 consortium's 37:16 55:15 75:16 103:2 134:25 220:11 232:6 236:7,15 236:18 247:2 250:2,13 251:4 256:5 260:8 261:7 262:5,11 267:1,16 269:2 269:12 288:7 299:17 constant 328:15 constituted 146:22 construct 29:21 34:16 186:6 202:22 constructability 50:8 constructed 9:13 10:13 15:18 23:9 33:16 36:5 55:8 203:21 208:2 constructing 15:16 18:21 114:8 203:1 204:8 construction 8:24 9:1 15:22 15:22 16:2,4 18:4,11 19:4,11 19:13,14,17,24 21:21,22,23 22:2,24 23:12 23:18 24:5 27:5 28:5,13 29:2,5 29:12,14,17,18 29:19,23 30:11 30:16 31:16 34:16 35:25	36:9,21 39:5,8 44:22,24 45:2 46:17 48:20,24 49:7 50:3,4,19 53:6 54:15,21 56:6 60:25 61:6 61:8,9 70:11 71:5,10,16,23 72:16,17,24 73:18 76:6 82:23 83:7 85:5 90:13,21 91:6 97:16 100:16 114:6 115:22,24 116:2,4 118:7 119:2 137:12 140:16,19 141:1 143:12 145:15 150:8,11,13,20 150:25 151:3 152:2,5,22 153:5,13,22 157:8,19 170:3 171:10 176:20 185:3 186:15,22 200:25 201:2,7 201:11 203:4,8 203:23,24 204:1 204:4,15 206:22 210:11 211:1,11 211:14 212:2,5 212:15,17,25 213:7,11 214:15 215:2,4 222:6 222:16 223:9 226:9 228:16 235:23 237:2,4 246:4 260:14 263:15 264:16 286:11,11,16 289:25 297:19 298:9,11 303:2 324:21 336:2,16 337:18 constructor 35:23 43:4,5,5 156:23 159:2,7 170:25 constructors 29:7 construed 85:8
---	--	---	---	--

consultant 216:4 consumer 103:16 contained 91:4 105:20 126:10 248:15 containment 40:16,17 77:7,9 77:12,13 contemplate 105:2 contemplated 152:1 153:9,15 206:13 contemplating 94:20,21 contentious 164:16 contest 137:6 contested 51:25 101:17 102:9,9 256:19 contesting 99:17 102:22 contingency 70:20 85:10,12 87:18,18 95:15 177:16 260:17 261:11 262:23 307:9,12 308:19 330:18 contingent 308:25 continue 13:22 49:22 50:2 93:16 98:11 153:21 187:21 187:22,23 190:1 continued 3:1 4:1 18:6 32:6 67:2 79:16 81:15 122:3 124:15 139:8 231:20 278:24 Continues 223:22 continuing 32:3 50:7 71:20 72:15 170:23 188:24 191:1 203:7 224:20 235:6 330:24 continuous 14:5	continuously 11:24 contract 18:11,16 18:24 19:2,8,9 19:20,23 20:24 21:2,3 22:10 24:11,14,20 25:16,25 26:4,6 26:10,21 27:7 32:10 34:17 47:12 51:3 55:6 73:9 98:17,19 99:25 102:21,21 103:25 104:7 116:5,22 132:23 145:9,13 146:1 148:8 157:8 174:24 175:2 184:24 188:25 189:2 191:18,25 192:1 205:9,23 209:20 213:16 213:17,24 214:6 214:15,17,23 245:12 252:20 253:18 254:16 255:3,9,10 278:20 286:15 290:20 297:10 298:13,14 300:7 300:15,19 303:11 307:16 307:21 309:2 311:12 313:25 330:24 contracted 39:15 90:24 contracting 19:3 19:25 21:9 contractor 16:18 19:1 20:11,13 20:14,14,25 21:3,8,11 22:15 24:3 26:14 27:9 27:13,21,23 36:7 46:10,15 85:6,12,16,18 85:20,24 96:12 96:13 104:9,16 104:17 111:23 114:7 115:23	116:13 159:19 159:22,23 160:11 165:17 166:1 170:12,14 172:8 173:23 175:8,24 176:8 176:10,25 182:19 185:3,24 186:21 187:24 187:25 205:12 209:22 210:6 245:5 289:24 304:19 305:24 317:23 contractor's 21:6 87:20 210:9,15 contractors 17:14 22:6 24:2 25:15 47:21 50:22 91:24 207:14 210:22 287:11 contracts 19:18 27:4 158:16 178:1,2 184:4 206:16 214:9,12 215:2,4 317:20 318:6 contractual 75:14 198:12,17 198:19 contractually 165:2 control 20:3 33:7 61:1 185:2 Convenience 12:2,11 214:21 335:23 convention 107:13 conversation 108:14 127:5,12 127:13,16 128:18 130:4 264:20 267:5 292:17 305:12 conversations 116:20 128:22 convey 94:13 conveying 137:17,19	convinced 217:25 245:17 convincing 209:11 cool 77:11 cooling 77:8,14 77:14,18 Cooper 1:3 2:3 18:12 23:25 35:11 37:5 39:11 54:7 58:18 74:13 104:14 106:12 107:3,14,22 108:7,10,21,23 112:24 115:25 116:11,19 117:2 126:6 131:12,13 137:25 142:15 142:17,23 166:9 170:18 182:10 182:16 185:8 187:16 191:7 210:18 216:21 216:24 218:14 236:25 269:6 270:16,22 279:17 281:11 281:19 294:11 294:15 306:15 308:2 309:6,16 319:15 320:23 330:8,17 Cooper's 142:4 cooperation 109:23 315:20 cooperative 318:22 cooperatives 181:15,21 Coopers 38:10 coordinating 23:22 coordination 280:24 coordinator 143:3 copied 180:11 copies 319:7,13 copy 7:1 36:24 53:16 79:14	99:3 121:2 122:1 130:21 138:19 139:15 155:15 162:11 163:12 225:7,9 229:25 275:4,6 319:23 336:4,8 336:17,21 337:5 337:8,10,19,22 337:25 338:7 CORB 140:22,25 141:3,4,11,12 294:1 corner 123:15 124:6 125:16 282:2 corporation 1:7 2:10 39:1 119:5 147:8 223:4 correct 17:16 28:16 66:20 70:12,13 72:1 72:12 74:23 80:10,11 86:23 87:4 101:7 105:7,10,14 106:4 123:14 132:8,12 136:24 137:16 140:20 142:14,20 152:3 152:6 155:1 160:16 179:4,10 194:15 196:21 197:5 201:2,8,9 202:13,23 203:2 203:11,17,19,22 204:8,9,12,14 204:16,23 205:3 205:4,5,8,21,25 206:1,2 207:1,2 207:6 208:4,12 208:15 209:5,12 211:5 213:15 214:25 220:2,22 220:23,24 221:2 221:12,19 222:3 222:8,14 224:25 225:8,18,21 226:4,5,15 227:7 230:8,12 230:13 231:23
---	---	---	---	---

231:25 232:2,8 233:17 234:4,24 236:2,11,22 237:20,21,24 238:18,23 240:24 241:20 242:7 243:10 244:15 245:1 246:11 247:5 249:25 251:1,20 253:21 254:22 256:25 257:9,10 261:12 262:7,8 264:3,6 265:24 268:3,6,8,9 269:12 270:24 272:2,3 273:4 273:15,16,18,20 273:22 274:4,10 274:11 275:2,3 275:8 276:9,24 277:4,6,8 278:21 279:9,21 280:14,15,18 281:4,5,6 282:12,17 284:1 284:2 288:8 290:10,14,25 291:20 292:10 292:11 293:2,3 293:21 297:2,3 297:10,11,15 298:10 299:25 301:22 302:11 302:18 303:20 304:6 305:16,20 305:21 306:3,6 309:22,24 310:2 310:10,14 312:1 312:7,18 314:15 316:9 318:24 319:13,24 320:2 323:3,14 328:23 333:7 corrections 8:14 33:10 correctly 64:10 207:8 cost 10:10 11:11 14:10 17:8 20:5 20:6,8 30:5	46:14 47:7,8 57:24 58:2,4,24 62:5,23 64:22 69:15,22,24 70:6,11 71:4,10 71:17 72:6 74:21,24 75:25 79:4 80:18 81:19 83:6,16 83:24 87:11 92:4 94:12,19 95:6 98:22 102:17 105:19 116:23 120:11 147:14 161:21 162:19 163:4,4 172:10,13 173:16,21 174:5 174:23 176:13 188:23 189:15 189:17 190:25 191:3,11 197:25 201:12,14,23 202:9 225:7 228:15 229:4,10 240:20,23 241:8 241:14,18,19 242:8,10 243:15 245:17 246:4,9 247:2 248:21 249:2 250:2,13 251:4,10,12,20 251:24 252:1,5 253:5 254:18 256:5,13,24 257:1 262:6,6 262:10 263:1 264:9,22 266:4 268:23 288:2,3 297:13 299:6 304:15 306:24 336:15 338:15 costing 94:15 161:18 costs 26:1,2 27:12,24 54:10 54:11 58:5 70:8 70:24,25 75:23 84:13 90:12,20 91:17 92:11 101:4,6,9 102:5	102:6,16 103:12 188:18 189:22 191:18 198:2,3 235:23 243:18 244:10,25 245:3 245:22,23 251:17 253:8,21 253:21 254:4,5 254:6,7,10,13 254:15,22 255:2 255:16,17,17,21 255:23 261:16 261:24 262:4 266:22 268:15 268:25 297:2,8 297:9,10,20 299:16,19,23 302:23 306:5,8 306:10,14 counsel 1:17 2:1 5:6,16 6:2,18 86:4 131:15,20 132:14 187:15 187:15,16,17 210:24 258:2 260:1 281:23,24 307:16 309:14 309:16,18 319:16 334:10 counselor 174:16 count 123:22 counter-parties 209:12 counter-party 18:19 20:4 157:5 297:6,7 counterintuitive 51:1 counterpart 269:19 countries 184:7 country 23:9 29:3,15,22 32:25 186:20 County 1:2 334:15 couple 12:20 24:17 38:23 41:17 51:20 52:15 85:1 101:10 103:7	110:21 115:2 121:20 159:2,4 167:9 175:22 178:10 201:21 201:23 211:23 218:15 237:12 283:20 286:9 289:1 314:2 327:1 course 7:21 8:9 15:15 16:17 26:19 38:2 74:6 116:14 133:19 147:16 166:6 167:13 269:15 270:2 308:8 court 1:1 6:16 7:7,24 85:8 87:20 151:18,21 192:14 228:10 courtroom 5:10 193:13 covenants 277:24 cover 65:14 110:10 141:20 189:16 304:16 305:3 covered 25:7 79:24 272:6 277:19 covering 310:17 310:18 Cox 3:9 6:13,13 63:23 81:14 91:20 138:4 147:19 189:24 192:6,11 228:8 230:3 237:12,15 239:20 240:8 266:6 268:12 272:17 278:23 293:10 295:2,8 295:17 318:13 320:6 322:5,19 327:7 332:1 333:3,11,17 335:9,13 CR 123:1 craft 48:9 49:2,6 52:12 59:22	169:4 185:19 218:5 241:5 242:21,22,22,23 266:24 269:10 283:5,6,8,9,23 286:18 326:4 327:24 328:4,7 328:13,15 329:8 329:11,13,17 Craig 113:2,17,18 121:18 Cranberry 50:11 create 164:19 created 294:11 311:17 312:3 325:22 creating 143:5 creation 150:19 credit 166:13 283:24 291:22 credits 146:12,20 166:14 291:16 291:19 critical 34:10 78:21 criticism 285:13 Crosby 107:17 112:22,23 126:7 131:15 268:14 269:15,17,21 271:6,15,19 272:21 273:7 327:8 329:4 Crosby's 270:18 Cross 272:9 273:18 crowded 14:23 curious 59:1 current 55:15 65:21 67:19 68:3 82:18 83:4 90:7,11,19 91:12 92:13 96:6 120:9 126:14 148:15 153:5 163:25 171:9 226:1 229:6 242:15 266:20 283:11 311:15 currently 65:19
--	--	---	--	--

196:9,10 198:12 198:17,21 200:2 226:8 321:5 Currie 118:6,10 120:7 curves 327:25 custodian 171:2 customer 319:15 customers 174:21 306:18 cut 31:5 244:22 245:3,17 CUTLER 3:21 cuts 244:22,23 cycle 10:6,13 159:3 cylinder 77:6	325:2 dated 67:7 99:8 138:24 219:6 230:6 293:13 318:15,20 332:11 333:6 dates 47:13 56:23 58:2 61:24,25 62:1 64:10,17 65:2,7 65:14,18,22,25 66:7,9,14,14,19 71:24 72:9 73:11 75:10,12 75:14,18 91:3 98:21 148:3 153:18 161:25 162:4,4 163:1,2 165:1,3 170:1,4 170:6,8,11,15 170:16 171:14 186:15 237:20 238:4 239:4 280:7,11 284:20 290:23,24 291:22 292:1 298:5 314:15 321:19 328:11 daughter 223:14 David 2:12 5:18 7:15 14:17 63:13 day 8:10 51:3 125:5 168:15 193:11 225:14 231:8 232:18 333:6 334:14 day-to-day 212:5 days 212:23 dbalser@ksla... 2:14 DC 3:23 DCD 148:7,10,14 148:15 de 206:12 310:15 deal 34:6 99:24 158:3 168:8,9 171:10 197:10 197:23,24 210:5 210:6 212:12 306:18,21	dealing 114:7 144:8,9,10 209:25 211:1 212:2 dealt 29:4 34:3,3 34:4 58:6 154:16 212:8 decade 30:3 decades 23:10 December 53:14 127:18 128:19 168:10 195:3,17 195:22 196:1,4 292:17 300:10 decide 20:11 23:6 decided 51:15 74:10 86:1 172:23 261:5 decides 21:11 decision 15:12 22:11 84:21 155:11 173:3,9 191:19 258:22 259:7,10,11,12 259:15,20,22,23 decisions 9:4 319:19 deck 67:4,11,12 67:18 69:12 159:13 deck's 67:6 declare 187:6 declared 187:9 289:9,13 300:12 decrease 50:25 51:12 287:14 decreased 310:1 310:6 decreasing 329:1 dedicated 116:4 206:11 deduct 327:4 deducting 52:13 deemed 11:8 deeper 123:4,10 123:13 defendant 2:9 5:6 Defendants 1:9 1:17 defer 319:18	deferred 255:9 deficiencies 53:9 deficiency 52:7 75:7 deficient 51:22 51:23 52:2,16 103:4 define 313:15 definition 167:1 205:9 297:9 definitive 235:22 definitively 266:2 degree 190:14 delay 30:8,12 31:24 32:7,9,12 52:10,18 54:17 62:13 101:22 102:1,7 103:5 delayed 73:21 delays 39:20 45:3 45:3 101:21 221:24 deliver 21:12 90:25 178:1,2 220:19 delivered 18:20 18:21,22 165:4 224:5 delivering 217:17 delivers 21:3 delivery 39:20 64:10 65:2 221:21 delta 57:2 136:23 denominator 222:20 department 51:24 52:3 87:15 117:16 118:20 139:20 258:13,20 304:1 309:14 310:23 depend 160:7 dependent 88:5 91:17,18 depending 48:15 306:25 depends 212:4 Deployment 58:16 96:5	DEPONENT 3:16 deposition 1:12 5:5,13,21 7:5,20 8:1,14 14:18 46:23,24 63:14 63:19 93:9,16 98:15 177:4,10 192:11,15 193:11,16,19,24 193:25 194:11 194:12,14,20,23 200:11 227:18 239:23 240:7,10 266:8 293:12 294:8 322:9,16 333:19,22 depositions 5:12 200:13 describe 24:15 28:22 30:20 88:8 89:15 101:5,8 163:24 164:23 167:4 172:3,4 173:11 184:19 194:4 311:13 313:18 described 61:21 66:16 128:19 162:7 168:20 169:14 173:6 174:19 178:9 296:14 describes 120:3 162:22 description 16:16 156:16 design 12:18,19 14:8 16:7,8,9,23 17:25 23:17 29:6,10 31:11 31:12,12 32:4,5 32:5 33:2 34:7 34:25 35:2 47:22 48:1,5,8 48:11,12 50:7,8 50:15 77:4 78:4 82:23 100:22,25 148:6,10 221:24 222:2,5,18 313:22 designate 205:19
---	---	--	--	--

206:4 designation 205:25 designed 23:15 designer 23:13 34:7 50:16 designs 13:9,9 72:17 desire 214:5 288:23 desired 167:10 desires 14:7 215:14 despite 220:11 278:18 287:2 detail 124:19 144:4 detailed 11:2 56:22 130:4 140:14 212:24 238:25 248:14 249:22 details 128:15 129:19 130:9,15 130:17 133:25 216:6 277:18 278:9 deterioration 42:22 determination 16:3 160:21 determinations 60:20 determine 160:14 174:19 203:7 determined 191:3 244:24 245:24 267:1 determining 91:11 316:11 detrimental 88:1 developed 71:22 141:9 304:24 313:21 developing 237:2 development 8:21 16:11 17:19 21:15 57:20,23 66:5 66:13 84:7 91:6	110:22 169:14 170:17 201:7,25 211:17 247:8 298:15 DFT 11:25 18:3 36:24 53:16 66:25 71:3 79:14 96:14 99:3 106:16 112:6 117:19 121:2 122:1 130:21 139:5 141:15 145:14 155:15 162:11 163:12 178:15 180:6 188:2 229:25 240:2 266:3 268:10 272:15 293:8 318:11 320:4 335:20 336:1,4 336:8,11,13,17 336:19,21,24 337:1,3,5,8,10 337:12,14,16,19 337:22,25 338:2 338:4,5,7,11,13 338:16,17,18,20 338:21 Dick 129:18 277:9 diesel 31:6 difference 14:2 57:3 116:18 227:2 231:5 232:16 differences 20:23 22:9 different 11:3 13:24 21:9,21 24:18,21 25:2 37:14,20 40:11 41:12 51:20 58:13,20 59:20 60:23 61:15 62:21 103:7 106:25 110:7 125:11 141:10 145:25 158:6 161:1,2 171:19 204:20 206:19 206:19 211:22	262:10 263:1 265:14 286:10 289:20 290:3,4 290:15,16,20,23 300:6 305:4 306:5,8,9 320:9 332:8 differently 116:11 284:21 284:22 difficult 30:3 33:1 111:25 112:5 144:11 181:11 209:9,11 212:22 267:11 267:20 difficulties 45:1 111:20 116:25 117:1 209:4,8,9 difficulty 275:19 275:21 digress 76:21 dire 137:14,20 direct 21:6,17 23:1 42:17,20 79:14,19,25 86:12 116:21 141:19 156:8 163:12 168:5 169:24 196:24 211:7,12,19,22 226:8 228:22 241:5 242:22 245:10 266:24 269:10 324:9,14 326:4 328:13 329:8,11,12,15 329:16 336:17 337:25 directed 136:6 directing 22:10 104:7,9 116:12 157:2 159:12 direction 115:18 222:25 292:24 directly 111:11 171:21 181:25 197:3 258:16 director 211:15 directors 143:20 197:7,19	disadvantage 20:2 disadvantages 20:1 disagreed 135:24 disagreement 296:16 disappointed 127:21 296:5 disclose 56:4 disclosed 32:14 32:16 39:20 44:21 disclosing 324:18 Disclosure 137:11 discovery 183:4 discretion 149:16 discuss 43:13 128:3,17 129:9 168:23 279:25 320:14 discussed 46:24 63:24 67:22 96:5 99:22 107:21 149:5,7 179:13 192:18 215:5 248:23 258:5 299:19 320:13 discussing 122:9 128:20 138:17 249:1 273:9 discussion 80:13 151:12 226:24 228:22 266:4 294:23 338:15 discussions 98:9 110:6 128:10 144:5 152:18 153:1 187:18,19 258:25 320:21 330:13 disposition 210:4 dispute 148:16 148:17,18,21 191:11 252:17 253:10,14 255:2 255:5,16 311:17 311:20,21,25 312:5,6,8	disputed 101:4 102:16 103:8 148:21 251:9,16 252:3,19,22 255:4,12 disputes 104:19 106:2 148:12,22 163:25 164:1,3 164:19 175:13 251:13 311:15 disputing 252:14 255:17 dissatisfaction 210:22 disseminate 319:17 dissemination 319:8 dissolve 44:9 distance 47:1 distractions 296:24 distributors 245:9 diversification 186:9 diversified 42:6 division 54:15 divorce 44:8 docket 4:3 5:23 6:12 79:13,21 179:1 293:21 298:18,19,23,25 docs 124:6 document 12:6 67:3,4,10,11 96:14,19,24 117:23 148:6,10 155:21 169:22 180:11,13 220:3 225:17 230:5 240:17 241:4,22 247:21 250:9,10 255:21 265:2,3 266:7,11,13,15 267:4,6 269:6 272:25 273:1 293:14,16,18,19 311:11 336:20 documentation 36:22 276:2
---	--	---	--	--

285:14,15	207:3	326:11,15,19	167:21 172:19	147:11,15
documents 40:1	drawbacks 19:22	338:11,14	efficiencies	148:20
124:10,12	20:23	EACs 84:5	176:25 287:6	email 66:25 67:5
126:19 194:10	drawings 48:21	earlier 16:21 21:1	efficiency 46:21	141:15,20 180:6
222:9,13 275:19	222:6,16,17	32:24 34:15	88:24 96:13	180:16 181:7
275:21 276:6	DRB 148:17,18,23	56:25 61:24	327:20 328:22	212:12 268:10
327:7	150:19 152:13	67:22 75:4 81:2	efficient 14:3	268:13,19
doing 13:6 20:15	152:14,16,16	87:14 98:20	46:9,17 47:5,13	270:18 271:6,8
20:25 94:10,15	154:16,21,22,25	115:5 131:9	49:2,4 82:1	271:15,17,22,23
101:8,10 109:1	303:19,23 304:2	159:18 173:11	88:18 120:12	272:15,18,19,23
109:5,24 110:10	312:1,3,6	176:15 184:3	287:24 324:22	272:24 273:1,7
114:9 115:23	drive 175:9	206:5 207:3	efficiently 169:5	273:13 294:10
128:2 129:11	275:24	212:12 223:8	effort 53:4 54:1	318:11,14,17,20
133:6 144:22	driving 78:22	225:6 227:1	54:12 58:12	320:4,7,8 321:1
192:2 208:7	191:21	230:14 237:16	60:2 106:7	327:8 336:11
223:15 229:9	drop 20:6	237:19 238:4	124:3 160:17,18	337:14 338:4,16
235:5 239:12	dropped 41:10	239:4 249:23	168:21,21	338:17,20,21
270:10,13 273:9	222:22 307:18	257:4 272:6	169:13,13,15,17	emails 271:19
276:23 287:18	due 39:20 103:14	273:25 276:13	169:19 223:13	embroiled 311:23
287:19	189:8 201:1	277:3,5 287:8	225:1	312:17
dollar 310:24	278:4	287:12 291:16	efforts 28:5 69:9	embroiling
311:1	duly 7:10	292:8 293:1	73:14 88:6	313:13
dollars 62:12	duration 58:19	294:8 307:5	91:18 98:11	emissions 16:22
76:16 146:15	305:25	312:16 313:15	191:16 283:25	emit 14:3
153:25 154:3	duties 246:7	315:15 316:12	286:23 304:2	Emory 6:23
166:6 172:18	dynamic 73:2	316:15	either 25:13	employ 73:15
199:17,23		early 105:12	60:15 63:24	employed 176:2
279:15 302:10	E	106:6 119:20	83:15 122:25	196:9
302:14 303:13	E 3:9,9 221:18	144:2,7 157:21	135:5 144:2	employee 216:1
domestically	335:1,17	213:13 215:23	191:5 217:11	216:3 270:23
33:4,11	E&G 19:10	326:19 328:6	264:15 299:8	271:3
Dominion 3:12	EAC 65:1,10 79:2	earned 45:19	elect 172:23	employees
6:5	82:25 84:1,9,24	earthquake 31:1	173:10 175:19	210:25 216:25
dormant 29:13	88:4 92:18 97:3	31:2,3	elected 172:6	242:24
DORR 3:22	97:12 105:12,20	easier 85:21	205:10	employing 47:11
double 150:2	105:23 225:7	East 2:24 3:19	electing 174:19	employment
doubled 185:19	238:21 240:2,11	easy 111:25	175:3,16,17	198:4
doubt 271:16	241:7,13,17	ebell@edbella...	election 184:16	enable 60:18
doubts 231:10	242:8,14,15,16	2:8	electric 1:7 2:9	encounter 32:22
Douglas 4:9 5:9	243:2,8 244:5	Ed 14:14,15 63:11	3:2 6:8 12:23	44:23
Dr 161:20 174:5	244:22 245:1,16	edit 293:2	17:21 79:20	encountered
174:10,13	245:19 246:10	edited 257:3	162:12 181:14	44:25
306:11,20	246:12 252:19	editing 138:25	181:16,20,20	endeavor 8:6
draft 121:11	262:9 263:1,4	edits 256:15,17	337:24	ended 57:2
122:10 133:21	263:23 264:9,23	256:18,19,21	electrical 286:6	215:18 283:19
133:21,24	265:24 266:4,10	293:6	electronic 275:6	energy 3:12 6:5
138:20,22	266:16,23 267:1	EDWARD 2:6	319:6,10,19,22	9:19 179:8
274:16,23	268:24,24	effect 154:13	eligible 255:25	181:19
281:11	269:12 289:18	171:20 278:2	256:21	enforce 154:22
drafting 38:7	290:17 291:10	299:18 315:10	eliminate 150:12	enforcing 103:25
drawback 21:16	298:22 325:22	effectuate	eliminated 147:8	engage 106:7

130:3 engaged 19:16 106:11 117:10 117:13,15,18 132:10 engineer 113:20 114:4,10,15,18 114:21,25 115:15,22 116:7 116:9,24 117:5 135:23 205:7,10 205:20 206:4,9 206:13,15,25 207:4,9,25 208:2,8,11,14 208:17,23,24 243:24 288:24 295:25 engineering 18:3 18:10,20 19:13 19:14 23:19 24:4 25:23 35:6 50:9 60:15 135:11 145:15 243:23 244:15 244:17 289:23 336:1 337:17 engineers 35:1 50:14,18 59:16 60:13 61:12,13 206:6 244:2,13 enhance 77:14 ensure 39:6 150:1 enter 116:13 278:25 300:23 301:4,14 entered 118:5 133:1 300:7 301:1 entering 280:17 313:11 entire 123:20,23 276:15 entirety 331:11 entities 17:22 109:11 110:7 entitled 28:12 117:23 156:9 221:24 223:21 242:6,13 268:14	entitlement 147:25 entity 19:11 145:7 268:7 enumerated 260:2 environment 14:4 31:14 41:9 environmental 10:1 11:6,9 12:1,10 335:22 envisioned 90:8 141:11 168:11 EPC 18:11,17,18 18:19,24 19:2,7 19:9,20,20,22 20:2,4,13,14,24 20:25 21:2,7,10 22:6 23:7,24 24:14,15,17 25:25 26:4 27:16,16 34:15 55:6 73:8 75:25 99:25 103:25 104:7 111:23 116:5,22 118:23 118:25 132:22 135:21 145:9,13 145:20,23 146:1 156:2 157:4 158:25 159:7 160:6 162:20 184:24 187:24 188:12,13 205:5 205:15 208:17 209:20 213:16 213:17 214:5,13 215:2 254:16 280:18,19 281:3 281:8 289:21 290:4 296:13 297:6,6,9 298:13,14 301:19 302:1,17 302:20 303:11 308:13 310:8 311:12 312:15 313:25 EPR 17:7 equal 325:6 equals 67:19	226:1,1,1,2 equation 244:12 equipment 31:21 72:20 186:4,5 erode 104:4 ESBWR 17:6 escalation 24:22 25:1,2,3,3,5,9 25:11 172:16 175:1 escapes 271:4 escrow 307:22 escrowing 307:23 especially 323:16 essence 229:16 essentially 116:5 153:19 168:16 establish 264:21 estimate 54:5,8 62:5 67:7 69:3 69:6,14 70:2,6 75:16 76:19 80:25 81:24 82:4 91:5 189:4 225:7 236:9 240:19,23 242:10 251:4 256:5,13 262:6 262:6,10 266:23 269:2,3,12 304:19 316:11 estimated 73:11 74:25 222:2 245:3 estimates 45:9 66:12 80:19 81:9,20 91:15 95:6 105:19 228:15 251:24 et 1:3 2:3 5:14,14 72:20 324:14 ethical 158:21 Europe 27:18 312:16 313:11 313:14 eval 123:17 evaluate 31:18 34:23 57:20 59:1 70:6 159:14 160:3	236:17 evaluated 10:7 12:25 45:22 46:6 58:16 75:24 76:1 140:10 145:24 155:9 177:17 evaluating 11:6 16:12,12 19:6 19:12,14 20:21 141:13 309:8 evaluation 12:25 17:23,24 84:18 91:1 109:24 110:4 115:12 121:13 123:25 124:15 134:10 155:10 160:19 187:22 188:9,13 188:13,17,20,21 189:13 190:1,2 190:18,25 191:6 191:10 203:7 204:24 238:19 238:20 244:6 248:10,11 249:12,14 276:7 289:19,19 306:7 315:19 325:18 326:20 evaluations 31:21 326:21 evasive 287:5 events 334:11 eventuality 309:1 eventually 36:2 41:16,25 50:17 151:7 everybody 158:16 164:12 164:16 evidence 39:10 231:15 evident 42:21 evidently 273:9 ex 155:5,15,24 156:5 337:20 exact 64:15 119:20 139:22 199:22 202:17	215:22 315:5 exactly 45:23 55:19 58:9 119:17 131:25 137:20 139:19 153:9 233:10 305:2 examination 7:11 11:22 192:5 322:17 333:10 335:6,8 335:10,12 examining 332:1 example 22:15 25:18 37:11 46:25 60:24 74:9 91:19 101:23 116:16 159:1 169:3 181:13 182:8 209:15 210:10 211:20,21,23 212:10 243:24 245:9 287:15 288:14 328:20 examples 21:14 48:7 excavation 41:10 102:3 exception 265:1 excerpt 230:5 excess 26:7 62:12 189:11 exchange 198:10 318:15 320:8 327:8 executed 281:3 302:10 304:10 304:12 329:24 330:3,20 331:4 execution 120:4 152:21 281:8 304:8 308:11,18 executive 108:17 143:1 144:14 178:14 199:8 210:16 238:2 240:12 269:20 274:19,22,24 executives 39:3 212:9 288:24
--	---	---	--	---

exercise 149:16 155:12 160:1,14 160:23 162:20 163:6	101:3 102:16 103:20 105:9 106:20,21,23 112:9 117:23,25 118:3 120:2 121:7,7,9,25 122:4,5,7 125:16 130:25 131:2 136:3 139:4,8,23 141:19,22 145:19 148:2 155:20 156:9,15 159:13 162:15 163:15,20 169:22 172:2 178:18,20,21 180:11 181:2,17 182:22 183:13 183:15 188:5 194:12 202:20 203:22 205:13 205:14,15 219:3 225:3 228:4 230:5 240:9 245:25 246:11 246:13 247:21 250:4,16 251:7 263:21,22 265:5 265:7 266:8 268:13 272:19 274:13 280:2 281:21 282:1 293:11 294:7 311:5,9 320:7 324:10,15 325:21 327:6,13 332:3,4,5,5,10 332:21,25 333:3 333:4,14	147:6 167:14,15 167:19,23 exited 44:18 expand 76:11 217:23 expansion 76:15 expect 22:8 159:24 324:21 327:22 328:3,4 328:7 expected 127:23 226:6 323:25 expenses 303:10 expensive 17:9 experience 14:9 23:20 30:10 60:17,24 61:4 91:2,7 111:4 112:4 115:21 119:2 125:24 127:24 135:21 141:8 157:16 158:6 159:8,10 173:22 208:10 212:15 213:5 223:6,9 237:1 284:25 286:7,8 286:13,14 325:1 325:19	102:16 242:18 explained 99:16 183:2 206:5 223:2 287:12 explaining 123:9 124:8 explosions 31:9 31:10 exposure 274:2,5 expound 208:19 express 295:18 296:8,16 325:7 expressing 295:21 extended 190:24 291:22,25 292:1 297:13,16 extends 28:1 extension 65:17 extent 241:2 244:18 280:22 external 70:18 85:4 257:16 extrapolation 328:18 eyes 171:1,5	33:14 42:3,8,13 96:11 facility 13:5 22:16,17,19 23:4,4 28:13 33:14,16,18,25 34:2,6,9,11,14 34:22,23 35:2,3 35:12 36:6,11 36:13 38:20 41:1,22,22,24 42:8 76:3,9,11 89:16,19 90:3 186:13 202:22 209:18 215:12 215:14 216:8 217:3,6,14,23 218:17 219:1 224:3,5,11 289:2 facing 100:23 fact 19:17 27:17 29:1 30:13 48:23 52:9 54:19 73:21 82:21 95:17 99:21 102:10 108:17 114:17 116:10 126:16 126:17,19,20 146:7 148:13 156:21 158:3 165:21 177:19 186:4 226:22 228:1 243:20 247:12 249:6,21 251:13 255:18 261:9 273:14 286:4,14 287:2 288:24 291:9 297:22 309:17 309:25 313:25 323:20 326:24 328:20 329:5 333:5 facto 206:12 310:15 factor 10:22 25:5 25:9 26:15 44:20 45:11,12 45:16,17,20,24
exercised 27:18 206:3 305:15	121:7,7,9,25	expert 61:10 85:5 237:6,7 302:6 315:17	face 28:24 face-to-face 181:22 182:16 320:15	facto 206:12
exercising 161:5 163:7	122:4,5,7	expertise 137:23 206:7,15,17 208:9 244:15,17 260:14	face-to-face 181:22 182:16 320:15	facto 206:12
EXH 11:25 18:3 36:24 53:16 66:25 71:3 79:14 96:14 99:3 106:16 112:6 117:19 121:2 122:1 130:21 139:5 141:15 145:14 155:15 162:11 163:12 178:15 180:6 188:2 229:25 240:2 266:3 268:10 272:15 293:8 318:11 320:4 335:20 336:1,4 336:8,11,13,17 336:19,21,24 337:1,3,5,8,10 337:12,14,16,19 337:22,25 338:2 338:4,5,7,11,13 338:16,17,18,20 338:21	125:16 130:25 131:2 136:3 139:4,8,23 141:19,22 145:19 148:2 155:20 156:9,15 159:13 162:15 163:15,20 169:22 172:2 178:18,20,21 180:11 181:2,17 182:22 183:13 183:15 188:5 194:12 202:20 203:22 205:13 205:14,15 219:3 225:3 228:4 230:5 240:9 245:25 246:11 246:13 247:21 250:4,16 251:7 263:21,22 265:5 265:7 266:8 268:13 272:19 274:13 280:2 281:21 282:1 293:11 294:7 311:5,9 320:7 324:10,15 325:21 327:6,13 332:3,4,5,5,10 332:21,25 333:3 333:4,14	expert 61:10 85:5 237:6,7 302:6 315:17	face-to-face 181:22 182:16 320:15	facto 206:12
EXHIBIT 11:19 12:5,14 16:14 18:2,6 28:10,11 28:12,12 32:20 32:20 37:4,7 38:5,8 42:18 44:3,21 53:21 53:23,25 54:1 55:12 56:9 66:24 67:6,18 69:13 71:8,12 71:15 72:8,14 72:25 74:21 79:3,12,16 80:1 82:7 86:8,15,25 89:2 93:19 96:18 97:20 99:8,10 100:5,6	EXHIBITS 338:23 exist 303:20,22 existed 104:20 147:23 164:4,8 209:4 288:8 305:19 existing 328:15 exists 199:7 303:23 exit 115:14 132:21 133:2	expertise/exp... 125:18 experts 95:13 188:17 190:3,19 206:18 237:7 260:13 262:19 315:18 Expires 334:22 explain 38:15 76:23 82:8 97:11 100:15	face-to-face 181:22 182:16 320:15	facto 206:12
			faceted 28:7 191:19 faces 80:4 103:21 facets 59:20 facilitate 39:8 48:1 116:1 facilities 33:7,11	facto 206:12
			facilities 33:7,11	facto 206:12

46:1,3,4 50:22 50:25 60:4 68:21,22 69:2 79:5 80:24 81:23 82:3,5 83:25 84:6,10 84:14,22,23 87:7,12 92:8,20 94:17 96:12 97:2,12 99:23 101:16 102:12 105:22 173:24 174:2 191:22 227:10 230:18 233:4,5,7,17,24 234:15 235:14 257:6 259:6 266:22 283:25 286:24 305:7 306:10 323:3,5 323:6,7,8,15,19 323:20,23,25 324:20 325:1,4 325:14 326:17 327:1,5 329:1 factored 15:12 factors 11:16 28:12,14,19 32:19 45:5,13 45:14 46:8,16 47:17,19 59:11 59:23 62:2,21 80:10,14 81:8 81:19 82:10,16 82:18 91:23 92:12,17,23 93:2,22 94:2,11 95:3,21 96:6 161:1 173:24 175:1 228:21 229:5,7 230:21 230:23,25 235:3 287:2 302:21 305:4 325:16 328:14,18 fail 83:4 failed 188:11 220:24 238:6,8 failure 63:16 fair 27:15 133:8 194:15 209:7	213:23 245:15 247:14 248:18 253:3 270:1 271:5,14,21 311:16 fairly 10:22 11:1 22:7 27:9 31:8 33:9 34:10 36:4 56:22 78:9 83:12 123:25 124:23 130:4 149:9 153:24 159:25 178:6 215:23 219:16 232:21 235:15 326:19 fall 70:24 74:16 294:6 familiar 5:11 17:1 38:5 61:11 114:20 far 21:7,13 50:18 84:12 124:3 125:11 128:7 129:5,22 174:12 207:21 286:3 303:13 farthest 16:9 fashion 63:21 78:14 165:18 224:10 fast 324:24 faster 176:11 fault 52:10 326:2 favor 20:6 109:1 109:3,4,13 117:6 favorability 185:11 favorable 17:25 87:19 117:9 174:8 210:4 favorably 11:12 13:14 14:11,12 16:13 150:7 207:21 feasibility 60:20 February 107:25 134:9 139:21 292:9 293:13,15 293:17 332:11	332:24 federal 15:19 16:5 166:13 191:14 291:15 fee 64:14 feedback 34:24 111:7 287:9 feel 54:5 92:25 95:5 209:24 265:20 278:3 282:16 284:14 299:12 322:23 feeling 26:11 39:11 70:19 186:25 feelings 114:23 115:1 295:19,23 296:1,7 feet 48:9,11 77:10 87:21 210:9,15 260:8 Felkel 240:17 247:4 fell 26:4 70:19 felt 52:3 82:17 126:8 147:10 149:21 172:19 187:4 282:21 285:3 296:9 310:23 fewer 45:25 148:22 field 50:14 62:20 211:22 242:13 242:19,20 243:20,24,25 244:2,13 329:7 329:14 fight 175:8 figure 165:13 166:14 199:11 252:3 figures 75:1 95:7 252:4 file 162:8 247:13 252:13 330:9,23 331:3 filed 71:11 79:1 79:21 152:15,16 248:12 filing 75:24	162:18 166:7 235:25 236:1 250:7 259:8,25 260:3 fill 78:15,16,17 filled 206:25 final 55:12 63:18 134:8,10 138:21 139:12,15 140:2 152:22 250:24 292:9 finalization 82:23 285:17 finalized 72:18 280:20 296:23 Finance 270:19 270:20 financial 70:4 84:8,16,17 160:19 189:5 210:11 244:5,8 244:18 246:18 246:20 247:24 248:16,24 249:8 249:18,19 250:3 250:15,19 251:1 251:5 263:15 264:16 309:7 314:20,23 315:2 find 56:15 58:25 124:24 217:24 281:20 295:9 finding 88:16 findings 120:25 fine 192:21 264:19 293:24 finish 8:3,5 146:5 146:6,10,11 147:13 177:1,13 185:5,5 292:2 finished 36:10 41:20,22 176:1 finishing 36:23 176:16,16 Finland 27:18 fire 62:19 87:21 210:9,15 260:8 firm 6:14 23:19 25:12,13 26:4,8 26:17 27:2 101:13 117:18	118:7,7 131:8 131:22 137:24 175:2 216:5 279:5 292:22,25 300:1 firms 19:13 first 7:10 8:23,25 29:4,25 41:20 46:24 51:21 57:19 58:10,22 65:11 67:5 69:13 79:25 89:14 97:7 99:16 101:10 106:6,10 115:4 120:5 125:21 142:21 163:24 168:15,16 170:10 171:6 186:19 187:5 189:20 191:2,4 209:16 216:14 216:15 220:3 240:16 268:22 269:9 273:1 294:5 301:23 308:14 314:2 326:7 333:15 first-of-a-kind 204:7 firsthand 274:2,5 fits 42:13 five 40:15 47:3 174:15 201:17 268:24 269:1 323:12,16 five- 40:21 fix 25:17 151:17 297:1,7 304:22 304:23 305:10 313:23 fixed 24:19,20,21 24:22,25 25:1,2 25:3,5,8,11,11 25:13 26:4,8,17 26:22 27:1,7,18 27:20,22 98:17 98:19,23 101:13 147:18 149:3,4 149:6,16,18,22 150:3,5,20
--	--	---	--	--

155:8,12 156:1	190:19 207:23	224:17 303:4,7	216:12 220:19	Fukushima-rel...
159:15,18,19,24	207:24 208:1,4	328:23	257:25 258:20	31:20
160:1,15,23	208:5,13 210:19	forecast 46:2	294:4 306:13	fulfill 25:24
161:5 162:20	212:11 283:19	83:6 90:19	323:12,16	208:10
163:7,8 172:3,5	287:7,16 288:16	235:23	four-wheel 175:9	fulfilled 223:24
172:12,16,23	289:25 303:1,2	forecasted	fourfold 165:10	224:14
173:10 174:9,20	303:7,7 315:22	228:17	fourth 165:8	full 42:20 49:25
174:23 175:4,11	316:23,25,25	forecasts 9:12	220:21	52:4 161:12,12
175:15,16,17,19	324:22 325:3	90:12 94:2	frame 9:14,17	171:6 188:17
175:25 176:11	Fluor's 156:17	foregoing 334:6	10:8 27:8 28:1	201:24 245:5
177:14 184:16	158:11	foreign 113:21	42:16 43:6	fully 26:22 27:7
187:3 188:24,25	FMN 242:15	form 19:3,20	58:11,22 67:24	27:17,20,21
189:2 191:17,25	FNM 242:19	59:18 73:24	106:5,6 107:25	56:25 71:22
192:1 209:9	243:3,7,11,14	81:14 91:20	111:11,12	72:16 159:24
245:11 288:2	244:3	124:13 140:16	119:15,21,24	173:6 228:16
290:5,19 306:16	focus 12:14 28:3	147:19 189:24	133:9 144:2	function 77:2,18
307:3,4 312:14	92:9 93:20	197:24 278:22	195:13 197:9	functionally
312:17 313:3,12	107:1 124:6	formal 17:17	215:18,19,24	168:14
313:17 314:1	125:17 133:12	155:13	281:1 301:24	fund 76:15
318:8 325:17	136:4 168:4	formally 183:10	308:24 313:1	fundamental
330:21,25 331:3	191:4	format 21:10	315:5,7,11	167:23
fixing 149:13	focused 285:25	261:5 271:12	323:24	funded 76:13
213:3	296:22 329:19	formed 57:19	framing 105:15	funding 153:20
Flooded 31:5	focuses 133:10	former 108:4	frank 180:2	funds 100:3
Floor 1:16 4:5	focusing 285:22	forming 238:16	228:22	Furman 158:4
flow 77:11 152:9	folks 11:19 60:12	forms 204:20	free 179:24	further 17:4
152:11 311:22	104:5 111:4,5	formulate 140:18	322:23	56:24 242:4
Flowers 180:16	112:4 130:2	forth 28:15 35:3	freed 289:1	244:21 299:21
181:7 212:11	144:14 169:15	154:1 179:24	frequent 263:10	313:20,21,22
flowing 179:24	178:10 179:21	324:11,12	frequently 39:25	319:7 322:5
Fluor 53:4,14	179:22,24	forthcoming 57:9	43:13 269:24	324:1 333:17
125:12 126:15	210:10 218:9	191:17 317:12	fresh 171:1,5	334:9
134:12 153:16	239:15 250:22	forums 229:24	frictions 43:15	future 94:24 95:2
153:16 156:21	257:24 300:21	forward 9:11	front 16:4 25:17	229:15 235:10
157:1,6,8,12,14	316:5 317:15	15:17 80:4	32:17 43:5	254:18 255:6
157:19,22 158:1	follow 64:19	149:14,19	49:20 50:7	
158:9,13,19,22	140:6 329:2	156:16 164:13	152:13 154:24	G
158:24,25 159:1	333:12	189:17 191:9	202:20 205:15	GA 2:13
159:7,8 161:9	followed 39:16	233:7 291:11	219:4 246:11	Gadsden 3:4
161:16 168:1,3	223:16	forwarded	285:10 332:2,4	gain 218:25
168:7,11,12,17	following 61:13	110:20 225:12	332:5	288:22
168:18,22 169:6	235:19 268:24	225:15 332:18	fruition 100:24	gained 328:22
169:10,12,18	304:10 305:14	fossil 9:22 201:19	158:12	gallon 47:2,6
170:23 171:3,18	follows 7:10	211:20 317:21	frustration	gallons 47:3
171:21,24	96:24	found 34:10	223:21 224:6,9	game 331:21
173:14 178:23	footing 164:13	49:24 125:14	224:19	gap 77:10,11,15
179:6,17 180:1	force 34:3,17	303:19,21	fuel 10:10 47:3,7	78:12
181:23 182:1,4	35:14 36:19	four 14:23 22:25	47:9 78:6	Garry 180:16
182:7,19 185:3	74:16 82:21	24:21 25:12	fueling 61:3,4	gas 1:7 2:9 10:6,9
185:7,11,11,16	88:14,19 153:17	53:8 77:10	Fukushima 30:19	10:10,14,15
190:8,8,9,12,13	185:19 218:9	153:10 201:17	30:21,23 32:2	46:25 79:21

116:16 159:3 162:12 337:24 gauge 20:15 217:15 GCJ-2 97:1 GE 14:12 17:5,9 204:16 general 10:20 12:22 13:16 17:21 18:17 20:10,13 21:8 21:22 24:3,19 31:1 33:8 40:12 60:15 88:18 116:13 119:15 124:11 131:15 131:19 187:15 187:16,24 197:23 258:2 265:19 281:22 281:23 319:16 generally 13:24 21:10 27:5 41:4 116:15 250:25 257:22 327:25 generate 154:10 generated 9:7 59:12 215:10 326:22 generation 9:16 11:17 19:19 160:19 196:15 201:20 204:20 generator 111:9 212:19,21 generators 31:6 77:5 212:21 gentleman 107:19 108:4 206:20,21,22 George 118:9,14 118:16,19,20,22 118:25 128:2,14 131:7,21 143:22 281:18,24 Georgetown 2:7 Georgia 22:23 118:8 germane 226:24 227:13 233:9 get-acquainted	119:11,14,18 getting 18:15 24:7 32:7,13 43:23 46:10 47:5 49:4 50:9 82:3,13 126:18 134:3 144:11 150:16,17 176:11 185:25 186:9 209:9 273:21 289:20 296:23 315:20 325:15 gist 198:3 267:13 267:25 give 34:24 48:7 58:3 105:11 123:10 138:2 171:4 173:6 179:14 204:15 236:16 260:9 278:15 283:24 287:11 289:6 317:23 given 39:6 55:22 57:4 61:13 70:21 75:10 81:25 91:23 92:13 108:6 110:20 111:7 121:12 172:21 189:5 194:7 198:9 229:6 231:16 260:6 274:19,21 281:12 300:14 giving 62:22 138:3 142:3 144:17 244:9 325:11 Glad 15:4 go 8:20 23:1,6 27:21 40:15 50:1 58:23 62:19 63:2 70:23 71:1 73:25 74:8 86:7 86:21 87:25 90:10,22 92:22 93:6 94:9 100:15 101:2	109:12 111:17 123:4,9,12 124:5 138:6,8 141:10 144:1 148:22 151:9 164:6 167:3 169:5 174:24 175:13 183:12 189:17 191:10 192:8,17 203:6 205:11 210:13 211:25 228:4 229:3 233:1 239:20 267:4 268:17 272:22 277:14 294:18 295:8,11 317:19 317:22 319:3 326:3 329:25 330:4,6 goal 68:21 125:2 146:10 149:2 201:13 202:1 203:9,12,14,15 231:4,14 232:2 232:5,6,12,17 232:20,25 233:14,16,21 234:2,15,19,23 235:14,18 243:10 266:17 267:2 goals 156:9,12 201:17,18,21 202:6 243:5 goes 40:16 87:13 97:10 136:22 137:10 going 11:10,19,23 14:16,17,18 15:17 18:1 24:23 25:16 27:9 29:9,17 30:2,4 32:25 34:25 35:16,24 37:3,3 38:15,21 39:5 41:4 46:13 46:14,19 47:1,3 47:7,8,20 49:20 51:2,12,13 52:9 52:12,14,20	53:5 54:11,12 57:13 58:24 62:24 66:24 68:23 69:20,22 69:25 70:24 73:3 74:5 75:10 75:16 76:16 78:8,13,24 80:4 83:15 87:25 92:1 95:19 99:19 100:19 101:18 102:2,13 102:23 103:6 109:25 115:10 115:16 116:9,15 117:14 119:9 125:13 130:18 130:19 133:17 135:4 136:3 139:4 144:6,15 146:8 148:13,25 149:14 156:22 157:1,3,9 158:3 161:13,21 164:13,14 165:22,23 171:18 172:12 172:13 173:16 173:21 174:1,3 174:8,22 175:14 176:5 180:9 181:13 182:10 182:16,17,18 184:25 187:6 188:21,23 189:1 189:15,16 190:23 191:8 197:11 217:16 232:20 233:7,8 235:17 237:10 239:2,13 244:10 245:10,21,23 252:1,2,17 255:8 260:16 261:23,24 278:10,13 279:4 285:6 287:13,23 287:23 289:16 290:2 291:11 292:24,24 294:21 302:24	305:24 306:10 306:23 313:25 331:3,16,19 good 5:1 7:13,14 7:18,19 13:19 14:15 22:7 74:9 81:4 102:2,13 104:8,16 114:24 115:2 135:15 136:18 159:9 179:20 187:4 192:9 218:1,13 231:17 237:9 245:12 260:11 289:8 306:18,21 gotten 54:20 265:21 287:25 governor 183:5 gradual 68:7,16 86:17 gradually 68:25 graduate 158:2,4 grain 244:3 granting 32:1 graph 327:19 328:14 graphs 59:16 327:9,9,13,14 327:15,17 329:6 GRAY 3:3 great 109:15 171:9 207:24 greater 39:12 206:8 269:11 Greenville 3:10 157:25 ground 164:10 group 2:5 9:7,22 22:17 33:21 39:7 43:6,7 70:5 84:8 143:11 157:24 157:24 160:20 180:20 206:18 215:11 216:19 249:8 257:24 263:12 270:6 294:2 groups 179:15,15 179:25 180:3 181:6 182:6,8
--	--	--	--	--

182:12,12 183:8 185:9 201:20 grown 222:19 grows 222:20 growth 9:11 GSCDs 75:14 guarantee 44:14 44:17 66:18 147:7 153:17 166:21 167:16 167:17 189:10 189:16 309:13 309:21,25 310:1 310:5,9,9,13,22 310:24 331:11 guaranteed 65:6 65:18,21,25 66:2 75:11,13 75:17 148:2 161:25 163:1 164:25 165:2,4 169:25 170:3,8 171:13 314:14 guarantees 166:20 301:21 302:3 310:11 guess 183:14 215:17 275:23 306:19 guessing 195:12 guidance 132:14 guns 62:20 guy 121:19 guys 218:15 GW 132:7	hand-off 287:20 287:21 handed 12:5 35:2 53:20 71:7 96:17 106:19 117:22 122:3 130:24 141:18 145:18 155:19 180:10 230:4 266:7 272:18 318:14 handing 99:7 112:9 121:6 handle 134:1 handled 166:24 171:16 309:14 handling 171:17 304:1 hands 21:4 handwriting 241:24,25 handwritten 106:16,24 112:6 112:10,14 122:1 122:8 130:21 131:1 178:15 336:25 337:2,9 337:11 338:3 Handy-Whitman 25:9 hanger 48:13,14 48:15,20,23 49:1 hangers 48:9,11 hanging 148:24 happen 103:11 167:12 292:7 303:5 314:24 happened 30:17 30:21 53:11 129:3 131:9 132:19 178:23 210:20 300:25 happening 7:23 happy 35:16 193:4 hard 275:4 292:7 305:5 harped 125:23 HARPER 4:4 haul 177:23	Haynsworth 1:15 head 194:17 199:1 236:19 257:2 293:23 301:11 324:2 headed 145:5 188:14 heading 222:25 326:4 headquarters 122:12 195:8 health 22:3 309:7 314:20,23 hear 15:7 106:10 110:25 219:1 330:7 heard 45:10,11 76:22 111:2 140:21 185:9 207:7 hearing 63:16 155:13 214:18 229:19 230:6 232:10 246:14 248:17 hearings 15:25 heartened 169:17 hedge 11:9 held 44:13 207:23 hello 195:10 help 48:3 49:6 50:4 120:11 135:21 176:11 176:13 helped 46:12 50:19 helping 313:15 heretofore 15:17 43:12 65:6 98:14 146:23 hereunto 334:13 hey 288:25 hiatus 151:16 high 10:10,11 11:16 27:11 28:22,25 43:19 62:11 84:13 97:15 102:18 124:23 125:8 130:2 149:9	153:24 165:13 191:3 244:23 313:5,7,9 327:3 328:5 high-level 282:23 291:11 higher 37:20 42:15 68:2 82:16 83:18 85:18 87:22 97:13 166:18 188:23 212:8 226:14 227:6 228:18 233:6 241:15 260:20 260:25 261:4,14 261:16,18,24 262:4,13 306:13 highest 327:23 highlighted 44:2 highly 325:2 Hill 2:24 hire 58:24 59:22 114:25 115:22 158:11,13 161:11 206:6,17 208:9 239:10 307:24 hired 114:15 116:1,8 118:20 118:22 119:1 137:23 138:2 206:7 308:2 hiring 59:20,24 62:18 88:12 110:16 161:14 185:15,17,17 208:13 328:5 historical 10:9 84:23 264:2,5 328:18 historically 100:19 105:24 231:9 history 8:20 89:10 hit 67:24 68:22 95:20 150:15 153:17 176:22 186:18 262:2 hits 286:21	hitting 68:20 78:6 150:17 173:23 186:21 201:25 290:7 302:22 Hodges 2:19 6:1 6:1 hold 87:20 104:13 210:8,14 229:2 260:7,8 holdback 99:15 holding 326:11 326:25 holiday 168:14 honestly 124:24 223:12 hoped 46:16,18 hopeful 286:25 hoping 327:2 horizontal 107:7 hotel 119:11 hour 62:25 129:24 hours 45:22,24 45:25 46:2,5 67:25 68:3 74:4 81:5,23 125:9 228:19 237:11 282:24,24 283:8 283:22 House 292:4 Huh 259:4 hundred 47:1 154:3 212:23 251:24 252:23 254:13,21 255:1 255:15 289:1 302:10,13 303:13,15 hundreds 23:15 hurt 295:19,23 Hyde 99:4,9 225:10 336:22 Hydrick 60:11 61:10 66:17 hydro 9:22 201:19 211:20 317:21 hydrogen 31:9
<hr/> H <hr/>				<hr/> I <hr/>

idea 114:24 115:2 141:6 211:4 218:22	impediment 48:13	in-staff 116:1	increase 26:11 50:21 51:12	114:5
ideal 18:23 21:5	implemented 52:24 222:18	inaccurate 220:1	54:12 58:1 88:9	info 137:13
identification 12:3 18:5 37:1	implications 62:14 77:24	inappropriate 102:6	146:13 165:9,10	inform 155:3 173:2
53:18 67:1 71:5	imply 18:19	inasmuch 51:25	166:8 169:6	informal 183:4
79:15 96:15	importance 166:22	94:18 157:5	173:18 175:21	informally 183:11
99:5 106:17	important 8:3,5	158:6 184:3	176:17 186:22	information 57:4 72:18 91:4,12
112:7 117:20	48:15 78:20	incent 146:10	228:17 297:13	96:3,4,22 98:1
121:4 122:2	80:3 83:6,10	incented 290:6	299:5,16,22	122:21,23 124:9
130:22 139:7	93:25 104:11,12	incenting 175:23	302:15 314:1,4	126:18,21 128:4
141:16 145:16	104:18 164:2	incentive 98:25	328:25	139:24 144:22
155:17 162:13	165:14,16 167:8	146:9 147:12	increased 26:17	161:9,20 173:13
163:13 178:16	167:9,12 176:2	150:16 165:17	62:17,23 101:6	173:20,22 182:9
180:7 188:3	impossible 267:23	166:1,11 176:15	147:9 175:20	188:15 190:4,14
230:2 240:3	impression 114:14 124:18	176:24 185:4	228:21 230:22	197:17 237:22
266:5 268:11	198:7 239:14	201:13	308:8 309:22,24	237:25 244:9
272:16 293:9	250:24 333:4	incentives 146:4	310:14,25	247:10 248:15
318:12 320:5	improve 47:14	176:9,20	increasing 58:19	249:19 258:16
identified 28:23	53:9 69:21	incident 30:10	266:24	258:19 263:18
29:16 59:19	73:22 74:6	include 139:24	increments 19:19	264:25 265:23
66:21 140:9	76:10 82:17	162:19 163:6	incur 251:14	271:5,7,9,12
142:10,18	83:1,14 88:23	227:22 256:10	incurred 253:21	273:24,25 274:8
316:13	98:12,25 175:24	257:25 258:1	254:6	274:25 275:14
identify 29:1	176:10,25 193:4	266:1 281:9	index 4:13 25:9	275:17 278:4,7
58:12 60:3,18	244:12 287:1,6	283:13 305:5	India 178:1	278:12,16
316:10	323:19,25	321:4	indicate 54:25	280:16 291:14
IFC 221:24 222:9	324:24	included 40:3	173:21 174:3	314:19,22
222:13	improved 87:7	58:17 85:3	indicated 64:7	315:13,16
III 3:18 220:9	improvement 221:19,21	88:12 102:17	74:18 145:4	316:10,25 317:2
immediately 102:3	improvements 38:20 41:25	124:20,22	161:23 276:19	317:4,6,11,16
imminent 330:15	68:7,16 69:23	129:17 142:8	290:12	317:24 318:3,10
impact 21:13	74:12 78:23	143:8 157:16	indicates 68:2	319:17 323:21
30:7,12,16,21	86:17 99:21	188:16 227:18	228:19 235:12	informed 91:14
31:23 47:15,19	136:2 143:15	242:10 251:9	indication 108:14	117:14,15
49:9 58:2,4	168:4,23 220:15	252:4,13,23	indicated 64:7	261:13 279:3,4
77:23,25 78:3	283:10,13	253:12,19 257:1	74:18 145:4	279:8,11 297:25
83:23 156:18	improving 99:23	283:10 296:22	161:23 276:19	informing 260:19
209:19 241:23	239:11	includes 69:14	290:12	informs 71:21
329:8,9,11,12	in-depth 285:11	156:15 268:15	indicates 68:2	infrastructure 29:15
329:15,16	in-house 6:2	280:5	228:19 235:12	inhibited 21:17
impacting 47:23	215:20	including 87:15	indication 108:14	initial 272:24
101:1	in-processing 169:8	95:18 96:4	indirect 242:23	273:6 302:8
impacts 31:15		99:22 111:17	329:13	320:8
57:24 58:4		210:17 272:20	individual 61:16	informing 260:19
69:16 70:6		302:21 317:7,17	individuals 111:7	informs 71:21
77:19,20		inclusion 122:18	121:14 206:25	infrastructure 29:15
impairment 189:7		income 202:8	240:19 244:16	inhibited 21:17
		incomplete 36:9	272:20 274:9	initial 272:24
		inconvenient 319:5	Industrial 76:4	273:6 302:8
		incorrect 310:4	industry 19:4	320:8
			27:5 31:16	Initially 113:19
			157:23	initials 132:7
			inefficiencies 52:12,13,19	initiated 179:2
			inefficiency 51:8	initiative 52:23
			287:21	input 38:9 142:4
			inexperienced	

142:17 157:10 241:2 inputs 17:22 inside 40:15 77:6 77:19 78:11 insisting 229:11 inspection 61:2 inspections 34:9 219:22 inspector 34:23 216:2,7 integrated 9:5,6 9:10,15 71:23 72:16 157:11 228:16 intellectual 307:22,23 intended 36:4 38:14 55:1,24 81:6 141:4 226:23 305:3 329:7 intending 189:13 intent 57:10 148:18 218:23 218:24 223:3 interaction 223:13 264:17 interactions 263:14,19 264:12,13 265:25 269:15 269:17 interest 92:6 180:19 183:22 229:11 235:6,7 260:7 interested 116:20 334:11 interface 179:17 182:7 interfacing 24:8 239:15 interim 151:2 152:19 187:19 188:1,2,5,18 189:25 190:21 190:22,23 338:5 internal 9:7 70:18 85:4 119:1 131:20	137:24 237:17 257:7 262:25 internally 70:1 149:2 international 33:8 110:9 272:7 intervening 181:5 intervenor 1:10 185:9 192:14 intervenor's 229:22 intervenor's 181:19,25 intervention 15:25 interview 109:6,9 110:12 129:17 129:20,21 277:17 interviewed 129:12,15,15 134:24,24 277:4 277:6,7,10 introduce 5:16 introduced 246:19 introducing 115:9,14 intuitive 51:11 intuitively 329:10 inundated 31:4 invalidate 301:20 302:2 invoice 51:25 52:2 101:12 invoiced 252:11 invoices 51:21,23 52:16 82:15 101:17 102:9,22 102:24 103:4 148:21 154:11 154:12 175:7 252:2 253:13,14 255:4 invoicing 101:15 involved 38:7 84:15,18 97:25 111:13,16 119:7	133:3 140:1 143:4,10,12,14 152:18 157:22 160:25 169:15 190:11 210:18 212:1,24 224:17 238:1 258:21 259:16,18 269:22 286:12 290:19 309:17 312:17 320:21 involvement 39:12,12 111:13 138:25 158:23 213:9 223:12 involves 229:21 involving 318:16 iron 41:6 43:7 113:14 island 30:10 40:18 issue 21:18 32:12 50:10 56:21,23 89:21 98:22 103:23 128:11 134:17 152:11 154:24 183:1 185:23 186:1,2 207:14 212:8 218:10 222:5,5 222:16,25 250:9 311:23 312:21 issued 26:17 31:19 78:2 issues 15:12,14 28:4,7 29:4,13 30:1 32:2 33:6 33:24 34:2,10 34:13 35:2,6 39:19 40:3,7,8 41:16 42:10,11 43:11,13,14,23 43:24 44:2,19 44:23 45:4 47:22 50:8 54:3 54:15,18 56:1 61:14 72:17 88:22 89:11,14 90:2 100:22,25 101:16 103:22 104:3 115:5,9	117:3 133:14,16 134:14,21 137:11 140:9 141:5 142:2,4,7 142:11,12,18 143:24 144:10 147:23 148:19 154:16 163:5 164:8 180:22 186:8 209:12,14 210:1,6 212:2 215:5 218:2 243:23 255:12 255:14 270:7 276:6 items 88:22 91:8 iterations 326:21 iterative 250:25 <hr/> J J 2:6 28:11,12,17 32:20 44:21 53:17 99:4 336:9,22 jail 277:14,22 James 3:9,18 6:17 January 53:15 131:9,11 133:20 138:17 157:4 168:13,13,16 300:9 302:13 325:5 Japan 30:24,25 31:1,18 Jason 121:19 126:19 271:2 276:20 JB 183:19 jbarrett@ksla... 2:18 jcox@wyche.c... 3:11 Jeff 53:22 111:6 131:18 142:22 178:13 180:16 183:20,21 195:24 211:8,9 Jeff/Garry 180:19 Jenkinsville 8:22	30:22 41:23 157:18 jeopardy 291:20 Jim 6:13 192:11 195:15 249:9 JoAnne 99:9 225:10 job 36:22 135:15 196:11,12,12,14 197:6 213:6 Joe 160:20 join 53:5 joined 13:18 14:13 joint 44:21 138:1 225:1 jointly 310:19 Jones 111:6 143:11 195:20 206:21 209:24 210:3,3 273:8 276:19 324:2,5 324:8 JR 3:9 judge 30:3 Julia 2:16 5:24 July 180:18 220:5 230:6 jump 89:2 June 61:25,25 65:2,3,25 66:8,9 66:13,13,14,14 66:18,18 72:10 72:10 172:11,13 237:20,20 justification 52:3 284:6 justifications 82:20 justified 55:15 56:20 306:16 jwyatt@wyattl... 3:20 <hr/> K K 3:4 37:1 113:4 113:5 336:6 Kallick 185:10 Katrina 10:8 kbell@robinso... 3:6
--	--	--	--	---

keep 47:18 85:23 243:11,17,18	83:17 84:21 91:22 92:2,19 94:14 95:19 99:14 101:19 102:24 104:6 105:1 108:2,24 111:15 113:4 116:25 118:1,1 118:2,14 119:22 121:16,18 123:24 124:1,23 125:9,11 126:7 127:8,11,17,20 130:3,15,17,18 134:1 135:9,14 137:8 138:2 143:9 144:23 145:2 153:9 154:1 155:7,8 165:10 168:15 174:12 176:23 177:25 181:12 182:4 183:8,11 185:9,23 187:2 189:1 191:7 192:23,24,24 193:5,7,16 199:22 202:17 202:18 203:3 208:25 210:22 213:10,19,20 214:16 215:13 216:9,18 217:16 218:14 219:17 219:23 220:1 224:21 225:13 226:23 227:12 227:17 229:23 231:5 232:15 239:9 241:1 243:13 244:17 245:6,9,22 246:16 247:6 248:11 249:13 249:15,24 251:3 252:21 255:7,11 257:13 258:11 258:15,24 259:12,24 261:3 262:3 263:7,20 264:7 265:15,18	265:22 267:3,16 267:22 268:5 269:8 270:8,12 270:14 271:11 273:11 275:9,12 275:22 276:11 276:11,15,16,22 276:25 281:15 282:4 288:9,11 288:13,20,22 289:6,16,16,18 289:24 291:8,12 292:2,15 293:23 294:5 296:11 298:21 300:10 303:21,24 304:25 305:2,5 308:21,23 309:3 309:7,19 310:21 313:5,6 314:18 314:25 315:16 320:18,20,23 326:8 331:5 333:16	81:5 174:6 228:21 242:23 242:23 266:24 305:5,6 306:9 313:21 324:19 329:13,13	157:21 173:25 320:11
Kevin 3:4 6:7 107:17 112:22 112:24 113:5,12 131:18 195:2 196:6 197:13,14 240:17 247:4 288:25 320:11			labor-related 88:22	latest 148:9
key 145:22 146:21			laden 78:5	law 2:23 6:13 14:21 117:18 118:7,7 131:8 131:22 137:24 146:23,24 167:1 279:5 292:22,25 300:1
keys 19:1 21:4			LAFFITTE 3:3	lawsuits 27:20
kick 75:18 165:3			Lake 22:16,19 33:15,22,25 34:2,13 35:3,8 35:12,16,21 36:5,11,12 38:20 39:19 41:1,21,24 42:7 52:11 76:8 89:16,19,25 90:2 186:10 209:15,16,18 215:5,21 216:1 216:10,12,15 218:3,9,12 224:11	lawyer 137:12 257:13
kick-off 145:8			land-site 211:24	lawyers 85:4 95:11 105:1 119:1 137:24,25 166:24
kicked 307:23			language 92:9 93:21 120:16 147:1,1 234:3,6 234:8,10 303:22	lead 67:15 214:3 248:4,6
kicks 75:15			lapse 29:12	leadership 34:4 35:11 129:16 144:13,14 158:8 158:9 217:19,25 218:1 219:2 228:24 317:17
Kim 240:17 244:14 247:4			large 13:17,23 27:9 29:21 31:1 31:3,4 36:4 39:1 40:23,24 42:10,14 77:6 134:23 147:21 212:22 257:24 334:5	lay 164:10
kind 9:5 26:13 29:4,25 30:5,14 31:12 58:25,25 59:17,17 62:20 77:22 78:6 90:22 94:14 103:14 105:11 114:10,18 116:16 125:5 136:1 142:12 145:8,24 156:25 158:17,18 187:25 197:10 211:4,25 213:5 275:24 283:16 305:1 317:1		knowing 285:5	largely 25:21 33:6 41:1,13,20 42:9,11 297:16	LC 33:23 107:11
kinds 10:20 13:25 20:16 41:8 77:5 169:10 262:14 262:16		knowledge 120:20 236:13 249:4 314:12,16	larger 108:11 257:23	LE 107:16
King 2:12,15 3:14 5:18,25 7:15		known 9:25 25:5 25:12 26:14 119:6 134:15 198:1 209:8	largest 40:22 319:15	lead 67:15 214:3 248:4,6
KM 107:17		Kochems 196:6 240:18 247:4	lastly 116:10	leadership 34:4 35:11 129:16 144:13,14 158:8 158:9 217:19,25 218:1 219:2 228:24 317:17
knew 133:23 209:3 239:2		Kyle 60:10 61:6 66:16 143:9 188:14 196:3 240:18 244:14 247:5	late 54:6 65:13 65:15 66:2 67:14 98:18 119:20 144:2,7	learning 187:11
knight 125:5		L 1:18 2:12 36:25 334:3,21 336:6		leave 44:11 145:11 197:6 250:23 310:2
know 8:11 10:15 16:17 19:12 20:10,17 23:22 35:15 47:2 54:3 54:15 58:9 69:22 76:12 77:19 81:21		labeled 240:9,11 240:13 241:5,23 242:12 244:21 266:8 268:23 272:19 274:22 311:12		Leah 2:23,23 6:3
		labor 25:17 26:13 30:1,4,4,5 59:25		lean 242:15 243:7
				learn 108:20 187:5,8
				learned 82:21 106:6 187:13 188:15 300:10 300:18
				learning 187:11
				leary 313:11
				leeway 85:17
				left 11:21,21,23

93:4 151:25 196:12 197:12 200:8 legal 2:5 5:9 51:24 52:2 70:17 85:3 87:15 95:11 117:16 118:20 138:2 139:20 166:23 187:18 257:5,11 258:12 258:19 301:6 304:1 309:13 310:23 legislation 10:2 11:7,10 292:4 legislature 197:11 legitimate 27:24 54:6 102:12 252:15 lend 46:11 lends 289:3 lessons 82:20 let's 48:2 64:23 109:12 115:19 119:10 138:5 144:1 151:9 167:3,3 177:2 239:20 252:10 254:23 295:8 327:6 332:10 letter 36:24 37:5 37:12,13 38:12 39:14 42:19 52:8,8 53:16,22 54:19 55:12 56:8,16 99:3,8 99:13,20,22 219:6,9,12,18 221:5,10,14 223:2,4,16,19 224:22,23 238:11 336:4,8 336:21 letters 34:19 37:11,22,24,25 38:3 183:5 210:13,14 letting 69:21 81:21 83:17	91:21 95:19 99:14 108:2 252:21 273:11 level 10:10 18:17 28:22,25 37:20 43:19,21 62:11 69:8 97:13 102:18,24 104:17 124:19 124:23 125:8 130:2 134:20 144:14 164:12 164:12 169:17 210:20,23 212:9 223:8 226:14 227:6,19 244:23 264:17 287:21 317:15 326:12 levels 97:15 210:17 leverage 145:12 liability 331:12 liable 310:20 liberties 321:3 license 15:23 16:2 21:24,25 24:7 25:22 30:8 31:19,24 32:4,8 32:13,14 47:24 48:19,20,22,25 49:3,5,8,10,15 49:22 74:7 licensed 148:9 licensee 21:24 104:13 licenses 32:1 licensing 15:11 15:14,21 17:4 29:6,24 32:6 50:6 186:1 lieu 153:12 life 202:15 206:3 lifted 41:6 light 13:23 32:2 261:8 Lightsey 1:3 2:3 5:14,20,22 63:11,19 Lightsey/Clec... 6:24 likelihood 175:20	limit 34:17 limitations 125:14 209:21 limited 22:13 99:24 125:9,9 125:10 limiting 283:22 Lindsay 281:16 281:23 318:16 320:10 Lindsey 131:19 line 15:7 36:14,16 63:10 80:7,12 80:16 81:17 82:7,11,11 83:2 90:6,11,22 91:19 92:10 93:20 94:22 97:7 100:8,8,9 105:8 107:6,7 136:9 146:17 163:23 164:21 166:14,19 167:6 170:2,5 220:18 228:13 229:4 235:2 246:3 251:8 282:3 311:12 335:3,19 linear 327:14,15 327:18,19 328:17 lines 81:4 149:12 153:10 282:2 285:12 liquidated 75:9 75:15,18,21 101:19 146:8,13 147:21 164:22 164:23 165:3,6 165:7,11,13,15 165:16,19,24 166:2 176:18 256:21 314:4,7 314:9 liquidity 309:8 list 180:21,23 listed 82:25 148:1 181:1 183:6 247:20 250:4 283:21 285:7	listened 179:23 literally 8:2 168:10 litigated 152:13 154:24 155:13 litigation 28:2 63:11 104:24 105:2,6,9 117:17 119:2 120:10 145:5 312:17 313:13 little 21:21 28:3 33:15 37:14,19 39:9 41:18 51:5 52:20 59:5 62:9 65:14 114:3 123:17,25 124:25 125:6 127:21 130:7 189:11 257:23 276:17 280:21 289:22 293:17 living 224:6 LLC 2:5,23 3:13 LLCA 3:3 LLP 3:18,22 load 9:16 10:23 11:17 12:2 335:24 loathe 25:17 local 36:19 location 1:15 5:7 17:3 locked 20:12 172:15 175:10 log 15:6,8 logical 170:21 long 23:10 25:16 29:3,12 31:8 32:7 46:13 58:7 78:21 153:9 175:25 176:3,19 177:23 184:23 192:21 203:25 212:24 213:8,8 213:9 275:9 long-standing 164:18 longer 68:3 74:2 83:16 94:16 134:11 145:6	146:9 150:4 158:8 176:12 188:22 Lonnie 107:11,16 108:15 131:13 look 9:11 30:9 35:7 45:19 49:20 55:12 57:21 72:7,13 82:10 91:19 97:21 119:9 125:3 135:9,12 136:13,20 142:21 167:3 173:7 186:17 187:2,24 205:14 220:17 241:6 252:10 265:11 273:21 285:12 288:23 289:8 315:6 327:6 328:12,12 332:20 looked 58:18 59:7,11,20 86:13 138:23 177:16 179:2 186:2,8,11 243:14 284:16 309:10 328:2 looking 11:14,15 28:9 56:9,17 57:23 58:19 64:17 68:19 86:25 88:13,23 100:21 118:24 126:15 132:2,14 136:6 138:16 143:21 150:7 161:17,18 162:19 169:11 178:5 182:13 186:14 215:15 218:7 220:8 222:15 239:9 244:9,11 287:16 295:3 303:3,12 303:14 314:22 318:4 lose 177:22 331:19
---	---	---	---	--

loss 191:17,19	125:3 128:14	155:16,20	168:24 171:11	119:18,19
lot 19:13,17 29:9	146:24 168:4	159:13 162:12	173:25 182:25	121:22 122:9,11
29:25 40:3	185:20 250:8	163:13 169:21	184:1 186:7	129:2,24 131:5
43:10 61:4	255:24 256:15	172:2 178:16	250:10,11	131:11,23 132:1
74:16 76:22	329:22	180:6,10 183:13	265:20 284:7	132:19 138:16
82:22 98:13	Makis 257:15	188:3 230:2,5	287:18 319:9	144:18,18 156:7
109:19 124:8	mammoth	240:3 266:5	meaning 16:23	171:9 178:21,25
133:6 153:25	205:15	268:10 272:15	20:6 22:22 44:8	179:5,11,14,19
158:4 184:22	manage 171:24	293:9 318:11	46:5 91:9	179:20,21 180:5
186:20,25 212:6	management	320:4 332:25	150:14 304:13	180:20 181:3,9
218:2 247:7	42:23 114:6	338:23	means 21:10,11	181:14 183:14
317:23 326:9	149:17,17	market 20:16	62:16 73:19,20	183:16 190:12
328:3	171:10 211:24	109:20	76:24 78:22	226:25 229:7
lots 78:12	272:10 273:18	Marsh 37:1	104:10 113:23	230:21,24
Louisiana 22:20	293:5 296:13	107:17 112:22	114:11 123:6	240:12 257:19
33:15	326:16,16	113:5,12 131:18	136:17 156:24	258:5 259:2
low 9:11 10:22	manager 53:6	145:2 156:4	173:25 184:8	281:17 294:5
243:11,18,19	60:15 143:10	195:2,7 197:8	209:22 223:10	296:17 315:8
lower 16:22	157:8 186:23	219:7 224:24	242:18 282:4	320:15
17:10 21:7	213:2 303:2	225:2 259:16,18	287:21 326:9	meetings 106:25
26:15 42:16	managing 143:5	273:7 288:25	meant 116:19,23	183:5 190:11
47:16 124:5	manifest 115:11	336:7	117:8 161:15	259:17,19 318:2
125:16 174:23	manner 218:5	Martens 3:22	167:23 288:2	member 108:25
222:12 325:4	manufacture	6:19,19	324:14	members 60:22
328:10	39:4	Marty 107:19	measure 46:9	108:3,16 110:3
lump 199:9	March 58:11 65:7	112:23,23	134:23 325:4	110:15,21 111:1
lunch 138:10,15	70:9 87:6 187:8	material 135:17	327:20	126:8 129:16
luxury 48:25	189:22 222:8	materials 25:19	mechanical 41:3	143:8 144:8,12
Lyash 53:17,22	251:22 252:6	27:2 67:16	41:4 42:1	210:8 242:22
54:13 336:9	259:7 322:25	158:14,14	media 274:12	278:11
Lynch 160:20	324:5	matter 5:13	meet 43:12 83:4	membership
161:20 174:5,13	Margaret 240:17	63:19 228:22	83:22 91:25	141:11,12
306:11	247:4	matters 231:12	92:17 94:10	memorializing
Lynch's 174:10	Marion 131:16	Matthew 3:22	98:21 119:11	8:13
306:20	142:21,22,23	6:19	144:17 146:11	memory 299:2,3
	270:18	matthew.mart...	181:25 186:15	mention 80:8
M	mark 11:19 18:2	3:24	217:17 221:15	267:7 277:13
macro 134:20	37:4 66:24	Maybank 197:21	223:17 230:17	mentioned 16:20
magnitude 189:6	79:11 121:25	MC 2:20 107:16	231:14 232:4,16	32:20 37:9
Main 2:24 4:5	139:4	McCall 216:22	232:20 233:14	38:23 150:19
mains 10:23	marked 12:3 18:4	mean 13:9 46:19	233:16 234:18	207:3,23 208:22
maintaining	37:1 53:17,21	56:13 57:8	235:17 243:4	208:24 215:6
103:23	67:1 71:5,8	67:21 68:14	261:22 294:2	236:6 258:1
major 23:17	74:20 79:15	69:17,18 73:17	314:14 323:2,5	265:1 271:25
186:4,7	96:15,18 99:4,8	73:25 74:2	327:2	282:15 283:20
majority 23:16	106:17,20 112:7	77:20,21 80:22	meeting 1:16 5:7	283:21 286:3,23
147:22 161:3	117:20,23 120:2	100:14 113:22	81:9 92:22	291:15 292:8
174:7 186:3,5,7	121:3,6 122:2,4	124:7 127:9	93:21 107:2,2,5	294:1 304:3
307:1 327:24	130:22,25 139:3	132:18 136:15	107:15,22	307:9 308:12
making 41:1	139:6 141:16,19	136:23 142:11	112:15,19,21	mentions 56:9
81:10 101:11	145:16,19	159:17 167:14	119:10,11,12,14	messages 329:18

met 7:16 39:2 42:16 80:18,23 81:18 92:13 118:16 119:8,13 125:21 192:10 228:14 229:6 232:24 233:4,5 233:9,11 269:21 320:11	153:25 154:3 160:2,4,8,10 165:14 166:15 166:18 172:17 199:23 200:15 200:19,22 241:19 242:8 244:23 245:3,14 268:23 269:3,7 279:13,15,18 302:10,14 303:13,14 304:6 304:16 305:10 306:12,17 329:16,17	88:9 mitigation 28:5 47:12 52:22 59:18,23 60:4 69:9 73:14,19 73:23,25 74:2,4 74:8,9,10,13,17 76:3 88:6 91:18 100:21 167:21 186:13 283:25 286:23	moment 295:9 318:18 moments 135:10 272:23 money 47:8 58:25 59:5 69:22 146:17 153:12 161:15 161:19,22 172:20,21 173:16,18,19 174:3 177:22 253:2 255:12,18 256:6 261:19 303:7 331:19	Morehead 3:19 morning 5:2 7:13 7:14,17 13:19 14:15 260:4 mothball 191:5 motivate 98:12 motives 125:7 282:10 mount 223:22 224:20 mouth 234:16,17 move 36:8,18 48:14,20 49:1,4 54:11 64:3 74:10,14 156:16 191:8 285:2 moved 42:8 48:22,23 61:24 148:3 161:25 170:15 284:10 moves 49:3 moving 48:14 50:13 64:17 65:11 149:19 284:5 321:10
method 136:13 153:7 236:14,17 methodology 327:20 methods 21:11 29:17 47:12 58:20 62:17 73:20 104:11 136:21 156:24 209:23 223:10	mind 45:13 47:18 64:4 109:17 129:25 136:17 185:4 218:13 239:13	mitigations 50:23,24 61:23 62:3 66:22 100:24 161:16 161:17 171:15 171:16,25 173:15 239:2,7 239:12 283:11 283:12 287:13 302:24 303:8	monies 261:18 monitor 149:25 Monte 305:1 month 39:17 73:9 73:10 100:18 153:25 154:3 185:18 195:11 199:13,15,18 269:11 302:11 303:15 321:9	MULLINS 4:4 multi-primed 160:18 multiple 30:25 35:12 258:6 myriad 34:1
metric 45:19 metrics 158:16 Michael 107:17 112:22,23 126:6 131:15 268:14 Michael's 329:18 middle 78:12 Mike 108:4,21 113:2 131:14 185:10 281:22 318:16 327:8 Mile 30:10 mileage 46:25 miles 47:1,2,5 milestone 70:21 71:16 72:5 150:9,11,13,15 150:20,25 151:3 152:2,5,22 153:5,13,22 176:21 221:6 311:22 312:8	mindful 30:13 minds 101:25 197:12 262:23 mine 242:3 minimize 244:10 minority 161:6 minute 11:4 15:7 37:10 48:2 64:23 74:18 97:21 100:5 143:22 180:12 265:7 294:19 299:19	Mitsubishi 9:21 model 290:15 306:13 modification 293:21 modifications 159:4 modular 29:18 33:19 76:6 78:13 286:11 module 35:19 39:20 40:7,8 41:15,18 42:10 42:11 62:14 73:24 74:10 186:21 220:6,9 220:15 221:21 224:3	monthly 73:9 152:20 199:2,3 222:1 263:16 months 32:11 58:10 66:11 69:1 87:1 97:15 148:4 151:2 153:11 162:1 170:16 186:24 221:20 228:1 231:4,8,13 232:2,5,7,13,15 232:17,25 266:18 268:24 269:1 284:5,11 284:20 285:1,2	named 107:19 108:4 121:19 206:20,21,23 258:20 names 240:16 272:4,8 narrow 308:21 Narrowed 110:7 natural 10:6,9,10 10:14,15 116:16 nature 7:22 197:23 269:14 NC 3:19
missions 202:6 misstatement 331:25 mistake 250:8 mistaken 109:16 333:4 Mitch 257:17 mitigate 13:11,13 16:24 47:15 69:15 73:17	misnomer 54:25 missed 201:24 missile 77:19,21 missions 202:6 misstatement 331:25 mistake 250:8 mistaken 109:16 333:4 Mitch 257:17 mitigate 13:11,13 16:24 47:15 69:15 73:17	modules 33:17 36:1,2,3,8,14,23 38:22 40:3,10 40:12,12,13,15 40:19 41:2,3,4 41:13,14,19 42:1,2,5,6 52:11 72:19 74:14 186:10,11,12 217:18 220:19 220:20,21 224:4 224:10	Moody 2:23,23 6:3,3 Moore 121:20 126:19 276:20 276:23 moot 132:15,25 134:5 136:8 mooted 133:15 133:17 143:23 morale 135:13	N N 335:1 N.E 2:13 name 5:9 33:22 192:11 271:3 276:19 named 107:19 108:4 121:19 206:20,21,23 258:20 names 240:16 272:4,8 narrow 308:21 Narrowed 110:7 natural 10:6,9,10 10:14,15 116:16 nature 7:22 197:23 269:14 NC 3:19

<p>NDAs 144:21 near 271:22 necessarily 10:16 20:8 23:1 43:17 46:18 57:8 109:4 137:6 144:17 146:25 160:8 182:5 185:24 190:11 216:3 224:21 244:6,11 245:7 249:24 260:10 269:8,24 283:17 284:6 287:24 288:9,20 302:7 306:2 327:22 329:2 330:16 necessary 92:25 170:24 186:5 217:24 necessitated 101:25 Necessity 12:2 12:11 214:21 335:24 need 7:1 8:10 9:12,16 13:10 13:12 14:21 34:20 40:10 59:23 109:23 122:23 134:7,13 136:12,19 169:4 171:16 191:22 192:7,20,23,24 193:4 219:18 228:24 291:6 295:9 310:22 322:22 needed 124:3 135:21 140:13 145:7,12 161:11 176:22 208:9,10 210:25 227:10 285:13,16 303:5 needs 134:4 215:13 319:14 negatives 11:5 negotiate 43:13 146:1 negotiated 44:10 98:23 147:25</p>	<p>149:10 153:21 303:12,15,18 negotiating 43:24 69:19 133:3 156:12 170:12 224:2,15 negotiation 27:16 133:9 149:7 164:6 298:13 312:21 313:19 negotiations 43:10 115:13 118:24 130:9,13 145:9 148:25 156:10 210:16 210:20 238:1 239:1,15 269:22 277:18 314:21 neither 334:9 NELSON 4:4 net 185:20 netted 75:8 never 85:19 201:6 207:24 217:4 231:1 237:6 314:6,9 326:15 331:18 new 9:5,12,16 15:16 16:11 17:19 29:6,6 31:15 36:14 54:4,8 55:23,25 56:2,3,10,11,18 57:11,14,20,23 58:15 62:4 64:9 65:10,24 66:5 66:12 70:16 71:23 72:5,5,8 73:10,20 75:10 75:16 76:19 78:1 84:7 89:11 89:21 91:2,5 94:2 96:2,3,5 105:12 110:21 115:20 122:15 132:15 136:8 143:10 156:22 157:11 160:6 164:21,23 169:14,25 170:3</p>	<p>170:8,17,25 171:12 177:14 201:7,22,25 211:10,17 214:20 230:22 298:14 311:17 311:25 newly 171:13 Newport 76:3 186:13 217:5 218:9,13 News 76:3 186:13 217:5 218:9,13 Nexsen 3:13 6:4 NI 186:13 nice 209:25 210:3 night 51:1,3,6 161:12,13,14 287:18,19 328:20 nights 51:4 NND 40:1 57:19 57:22 58:15 59:1,7 60:6 61:19,22 64:6 105:18 190:15 263:14 264:15 264:16 268:14 270:13 287:8 312:20 313:19 323:22 324:3 NNI 76:4,4,9,10 76:15 nomenclature 107:13 non-nuclear 22:6 317:21 nondisclosure 130:19 144:19 200:9 277:19,24 278:5 nonmanagem... 243:25 nonmanual 242:13,20,20 243:21 329:7,14 normal 185:20 Nos 5:23 Notary 334:4 notation 113:4</p>	<p>123:8 125:17 183:19 note 125:15 163:24 note-taking 107:13 noted 202:4 notes 106:17,24 107:5,8,23,24 112:7,10,11,13 112:14,19 113:15 119:19 121:16,17,24 122:2,8 123:1 123:16 124:5 125:15 130:22 131:1,5,10,11 132:2,6,10 136:3,5 138:16 143:21 178:16 178:25 183:12 183:15,18 194:2 194:4,6,9 281:16,20 336:25 337:2,9 337:11 338:3 notice 56:1 179:21 223:14 300:14,18 326:25 noticed 63:14 notified 227:4 notify 279:20,22 notifying 260:24 notion 149:4 November 53:14 197:9 318:15,21 321:9,20,24 NRC 31:16,25 32:3,8,14 48:16 49:14,19 104:12 104:13 186:1 219:21 nuclear 8:21,24 9:1,3,19 10:25 11:10,11 13:1 13:16,17 15:15 15:17 16:11 17:19 21:20,23 22:1,4,8 23:8,11 23:12,14,15,20</p>	<p>23:23 29:2,8,12 29:14 30:6,14 30:15,24 31:15 31:16 34:8 36:20 40:18 41:20 47:25 54:14 57:20,23 58:15 61:5,7 62:20 66:5,12 74:15 77:2,3,4,5 78:1 82:23 84:7 88:19 91:6 96:2 96:3,5 104:11 110:21 111:18 131:21 143:11 143:11 157:16 157:22,23,24 159:10 169:14 170:17 191:2 201:7,18,22,25 202:22 204:20 211:9,10,10,18 212:14,25 218:2 237:2,5 298:14 number 11:21,24 19:19 26:7,23 45:24 47:24 50:20 54:3 58:9 62:21 69:2,10 90:1 125:24 129:15 132:22 143:13 151:1 154:1 157:15,23 164:4 165:8,15 165:20 166:7,17 176:1 178:1,22 196:23 200:17 200:18 202:17 206:8 210:10,13 246:17 249:17 254:17,17 256:14 257:9 262:16,18 283:3 283:4,5,7,15 287:24 288:2 297:16 302:21 308:24 313:6,7 313:8 316:14 numbered 242:5 numbers 46:22 75:20 82:3</p>
--	--	---	--	---

83:18 166:6	122:9 124:20	216:24	onsite 31:7	149:18 150:3,5
189:14 262:14	126:10 127:6	official 334:14	296:13	155:9,13 156:1
262:15,17	130:14 132:20	officials 223:7	onward 172:13	159:16,19 160:1
286:19 290:22	132:20 133:9,13	331:17	open 94:5 179:3	160:15,23 161:5
328:8	133:22,23	offsets 256:22,23	opening 183:3	162:20 163:7,8
numerous 96:10	138:24 139:25	offsite 31:6	operate 153:21	172:3,5,23
257:20	140:11 145:10	oftentimes	202:22 203:11	173:10 174:9,20
nutshell 162:23	145:19 150:22	124:12	203:13	174:20,23 175:4
NW 3:23	151:25 152:16	Oh 233:9 300:5	operated 13:5	175:16,18,19,25
	152:21 153:15	okay 14:25 28:17	17:2 157:24	177:14 184:17
	155:4,7 156:2	28:17 43:21	218:4	199:9 204:15,22
O	156:12 161:24	65:5 78:25 89:7	operating 15:23	205:2 208:13
o'clock 119:12	170:13 177:8	97:24 100:7	16:2 21:25	290:5 304:9,11
O&M 297:19	197:8 221:4,9	101:2 105:17	30:24,24 32:8	305:14,16
oath 193:10,12	240:5 246:13	107:1 163:22	32:13 48:19,22	306:17 307:3,4
230:12 232:10	250:6 263:23	176:5 180:14	157:17 196:17	325:7,17 330:21
232:23	265:9 273:3,8	192:8 205:17	196:19 203:1	330:25 331:4
Object 81:14	274:14,20,22	219:20,20	211:10,13,16	options 10:19
91:20 147:19	275:1 276:4	225:24 234:21	216:24	11:12,13,15
189:24 278:22	280:2 281:3	239:20 244:20	operation 2:20	12:20 15:13
objection 63:20	282:12 286:25	265:19 267:7	28:13 48:25	16:12 59:2
63:23 231:18	288:1 292:13	268:21 273:5,5	280:7,11 284:19	207:16,20
objective 120:6	295:3 296:17,21	274:15 295:7	operator 61:5	order 12:3 21:12
objectives 120:3	296:23 305:13	310:7 322:24	opinion 85:4	22:14 23:3
obligated 73:7	305:19,24 307:6	326:3,6 332:4	132:24 137:1,4	26:16 44:13
251:23	307:25 308:17	332:13,22	137:7,8 258:10	47:25 49:6 50:4
obligation 92:7	308:22 309:20	old 48:17 150:12	292:21,22	68:15 73:20
obligations 25:24	321:20 322:14	154:11 174:24	295:19,22	74:1,14 85:23
observers 215:20	329:24 330:3,8	Olkiluoto 27:19	opportunities	87:19 116:1
obtain 149:3	333:20 334:14	onboard 153:16	15:24 16:13	123:24 124:4
obtaining 275:19	334:23	once 8:15 21:23	opportunity 8:12	133:25 136:18
291:19	offer 17:11	22:10 56:18	20:7 27:23 98:3	141:7 144:21
obvious 329:10	149:22 321:1	98:22 100:18	129:25 132:3	147:4 153:8,17
obviously 49:1	offered 65:17	128:25 141:13	170:18 171:3	154:13 166:18
61:3 68:23	offering 17:6,7	168:8 175:24	173:7 179:16	167:18,20 174:2
83:23 112:25	217:15	208:6 217:9	181:22 182:11	315:2 325:25
occasion 193:19	offerings 12:23	223:3 297:19	182:15 184:13	326:1 335:25
occasions 96:10	17:10	317:19,22	201:24 217:19	ordered 303:23
occur 35:19	office 1:9 2:23	one-page 96:14	296:19 298:15	orders 76:1
105:6,9 122:11	3:7 6:15 39:21	106:16 112:6	opposed 42:3	116:23 164:15
154:14,15 257:8	39:23 95:22	178:15 336:19	148:23 320:13	257:3
305:12 311:18	96:1,9,22	336:24 337:1	320:25 330:24	ordinarily 73:24
occurred 34:13	174:11 177:20	338:2	opposite 94:15	ORF 13:20
68:11 87:3	181:18 192:12	one-year 185:20	115:18	organization
138:17 150:22	245:14 263:9,11	ones 227:11	opt 116:12	130:7 266:21
255:22,24	263:13,13,19	238:9 257:20	opted 31:13	orient 180:12
257:20 311:25	264:4,14,17,24	270:14 286:2	206:6,17 208:8	origin 183:1
315:9	265:15 266:1	319:18	optimistic 291:3	original 48:12
occurring 241:9	officer 84:17	ongoing 106:2	option 27:18 64:9	51:2 55:6 66:9
October 1:13 5:3	143:1 189:5	130:14	98:18,23 147:18	67:23 68:20
52:21 53:12,13	196:18,19 211:9	online 213:4	149:3,5,6,15,16	80:18,23,24
93:14 120:19,25				

81:19,24,24 146:8 228:15 308:13 310:8 313:25 318:17 originally 22:17 64:16 76:7 149:8 276:18 ORS 96:24,25 97:3,10,23 179:6 181:25 182:3,18 183:4 183:5,7,9 260:5 263:3,6,17,21 264:1,8,12,15 264:22 265:22 279:20 329:21 ORS's 97:20 ORS9_SECG01... 96:15 336:20 out-briefing 249:15 out-briefings 249:16 out-of-state 321:12 outage 212:22 213:2 outages 61:3,4 outcome 150:6 241:3 outline 34:20 40:6 62:1 69:11 151:3 outlined 35:25 87:14 89:25 90:3 98:20 290:16 outlines 90:23 outlining 52:9 output 147:9 246:12 outright 200:6 outset 26:25 outside 25:25 40:17 61:7 70:19,25 75:25 76:18 77:9,15 78:11 105:1 106:13,15 114:12 117:18 127:8 141:8	188:17 190:3,19 194:1,3 195:10 201:18 207:4,8 216:5 273:10,12 279:5 281:24 outstanding 164:8 overall 28:1 62:15 80:18 81:18 124:18 127:22 147:14 222:21 228:14 329:15 overcome 46:21 overhead 55:2 243:19 overheads 243:15 overly 31:24 overnight 68:24 oversee 20:25 overseeing 104:8 overshot 269:2 oversight 20:22 21:18 36:21 104:12 116:1,4 116:6 140:17,19 141:1,5 201:6 206:11 213:11 213:13 218:7 oversold 126:1 overstating 267:24 overview 132:10 owned 1:7 2:10 157:5 owner 21:13,24 22:18 114:12 209:14 215:12 229:10 246:7 266:19 297:11 owner's 114:4,10 114:15,18,21,25 115:14,22 116:7 116:8,24 117:5 135:23 137:1 205:7,10,20 206:4,6,9,12,15 206:25 207:4,9 207:25 208:2,8 208:11,14,17,23	208:24 215:13 243:17 256:24 257:1 266:23 288:23 297:1,7 297:9,13 299:6 299:16,19,22 owners 18:12 20:24 21:20 22:4,5,20,21,21 24:1,5,6 27:14 34:18,21,22,25 35:15 37:10,22 38:4,19 39:9 43:12,17,19 44:11,16,16 45:7 49:12 51:14,18,22 52:6 54:2,5,16 55:9,23,24 57:3 58:5,5 61:23 62:22 67:14 69:22,24 73:8 73:15 75:22 81:25 82:14 88:16 92:4,19 98:16 99:14,24 100:1 101:13,24 102:7,11 104:20 106:3 112:15 114:24 116:25 118:23,24 120:8 120:18 121:12 123:9 126:2 129:2 130:12 134:7,9,21 135:6,9 140:5,8 140:13 141:25 142:8,10 144:9 144:17,23 145:12,24 146:16,25 148:12 149:15 150:24 152:16 153:3 154:7,17 159:21 160:2 166:17 167:11 167:16 170:25 172:10,19 176:4 184:23 188:12 203:6 209:10 210:21 215:6,8	215:15 221:19 223:12 224:9 243:16 244:1 277:20 279:14 279:16 288:2,4 297:6 298:12 299:8 303:5,11 303:17 307:15 330:2,20 owners' 26:1 34:17 54:20 58:5 70:8 75:23 101:24 113:20 134:24 149:15 <hr/> P P 36:25 336:5 P-A-R 142:1 p.m 138:9,13 151:11,15 177:5 177:9 240:6 294:22 295:1,12 295:16 322:11 322:15 333:21 333:22 PA 1:15 3:8 PAC 58:1 pace 38:20 package 213:18 213:22 214:2 packages 169:3 page 12:13,15 42:18,21 44:3 55:11 56:16 67:5,17 68:14 69:12,14 71:14 72:7,14 80:1,2,5 80:6,12,16 81:17 82:7 83:2 86:12,21 88:25 89:3,7 90:4 91:19 92:10 93:19 94:22 100:6 101:3,4 102:15 103:17 103:20 105:4,8 113:3 118:8 120:5 123:16 156:8,15 159:12 162:21 163:20 166:15,19 167:2	167:3 168:5 169:20 171:6 172:1 173:7 181:1,17 182:22 183:18 205:13 205:17 220:3,4 220:8,8,17 221:18,23,25 223:19,20,20 225:23 227:24 228:12 229:3 235:2,6 240:16 241:4,22,24 242:5,12 244:21 246:1,2,3,11 247:19 251:7 266:15 269:10 273:3 280:3,5 282:1 284:12,13 285:15 311:5,11 314:3 324:15,16 325:24 326:3 329:6 335:3,19 pages 242:4 244:20 paid 52:16 102:14 103:13 150:16 153:12 176:22 199:2,3 201:4 252:16,20 254:1 255:10 256:1 279:12,14 290:8 314:7,9 panels 72:20 76:5 76:6 78:19 217:21 paperwork 49:23 50:10 PAR 142:1 paragraph 12:15 16:15 42:21 44:3 55:12 56:16 57:11 71:15 72:7 82:6 120:5 171:6 183:3 205:19 220:4 221:25 224:7 235:12,19 Paragraphs 71:20 72:13 paraphrasing
---	---	---	---	---

296:15	parties 7:6 28:2,7	253:7 254:13,15	260:13 282:24	243:21 282:10
paraphrasing	151:7 152:1,4,7	254:21 255:19	283:3 286:14	period 18:25
260:7	153:2 178:22	306:23 326:12	287:17 289:1	25:16 40:7 68:8
parent 22:18	228:23	326:23	297:16 330:18	68:17,25 78:21
38:25 307:17	partition 49:14	payment 51:22	perceived 141:5	86:17 92:21
parental 44:14,17	partitioned 70:9	52:4 54:20,23	percent 251:24	154:13 188:10
147:7 166:20,21	partner 157:7	55:21 148:20	252:23 254:13	188:19 189:25
167:16,17 189:9	191:15,19	150:9,12,14,21	254:21 255:1,15	190:21,24 231:3
309:12,21,23,25	286:16,16	151:1,2,4 152:2	328:13	231:4 276:7
310:5,9,11,13	partnered 43:4	152:5,22 153:5	percentage 25:1	periods 328:9
310:22 331:11	115:7	153:7,13,22	25:3,4 26:3,17	perjury 193:14
parenthesis	partners 37:19	166:11 176:21	202:7,8,15	permanently
113:22	38:25 43:8,16	311:18,22 312:9	222:13,17,21,24	270:23
parenthical	55:2 109:24	payments 51:15	310:16 311:2	permission 36:8
113:24	115:6	51:19,21 52:7	perform 45:23	202:21
part 11:6 15:20	partnership	54:22,24 55:7,7	46:6 77:2 81:5	permit 15:22
15:20 16:6,6	44:10 171:21	55:14 56:2,19	110:16 236:21	permits 29:9
42:14 46:24	parts 33:5 42:15	56:23,25 57:8	236:23,24	205:19
48:18 54:1	102:1 169:2	75:5,6 99:15,18	238:23,24	permitted 205:7
58:10 63:18	215:15	102:25 103:3	278:19 279:13	persist 104:21
64:18 67:18	party 114:5	147:9,12,15	301:3,15 309:1	person 47:18
69:13,19 77:8	115:10 137:5	150:13,14	330:10,24	124:1 127:13
129:14 147:22	273:21 334:10	152:19 154:9	performance	138:1 142:20
159:23 161:24	pass 159:21	201:1 302:8,12	45:12,14,16,17	143:2 158:2
174:13 201:10	passed 102:7	327:4	45:20,24 46:1,3	207:8 251:2,6
206:16 213:17	103:15	payouts 199:8	46:4,8,16 47:17	269:24 275:22
213:21 214:2,17	passing 223:11	Peachtree 2:13	47:19 68:2,21	276:17
224:9 246:18	passive 13:9,12	peaked 286:18	68:22 69:2 79:5	personal 6:17
250:14 253:1	13:14 14:8	pegged 231:2	80:24 81:7,19	236:13 237:1,23
284:18 286:13	16:23 32:4,5	Pelcher 131:15	81:23 82:3,4,9	264:12,13
286:15 301:24	77:8,14,18	320:22	82:18 83:25	265:25
305:16 308:14	path 78:21 186:3	penalties 146:5	84:6,10,13,22	personally
309:12 312:9	Patricia 1:18	193:14	84:23 87:7,12	263:19 275:13
314:20	334:3,21	pending 10:2	92:8 96:12	personnel 242:20
parte 155:5,16,25	pay 52:1,10,14	11:8 49:23	99:23 102:12	242:20 243:21
156:5 337:20	101:18 102:23	192:22 228:10	105:22 166:3	243:25
participate 14:18	103:6 146:8	261:5 334:10	173:23,24 174:2	perspective
63:17 249:16	161:13 165:22	Pennsylvania	176:15 227:9	10:15 11:11
participated	176:18 189:11	3:23 35:4 50:12	233:4,5,7,17,24	14:10 17:8
110:12 244:18	189:11 228:20	people 14:23	274:1,3 286:5	19:10 20:5
249:14	251:23 252:1,8	39:15 47:11	301:21 302:3	126:5 127:21
participating	252:17 253:18	51:4 60:8,16	307:19 308:12	128:7 145:23
184:6	255:1,4,25	95:19 107:18	323:3,5,6,7,8,15	163:4 176:7
particular 21:16	256:7	116:3 125:11	323:19,20,23,24	191:11,24
54:2 166:22	payer 103:16	161:11,14	327:1,5,20	243:17
180:1 226:10	payers 88:2 92:5	168:25 173:17	328:14	pertaining 4:2
particularly 10:8	149:24	173:17 176:2,12	performed 250:3	5:11 6:11
26:12 88:22	paying 51:4	185:18 196:23	250:14 264:23	petition 71:3,9
100:21 104:6	99:18 103:10	197:1 206:11	278:21 309:9	74:20 78:25
127:24 137:13	160:4 173:18	218:7 239:10	performing 77:17	79:9 87:6 162:8
173:14 261:8	176:4 252:12	242:21 244:8	88:17 238:20	162:11,21,21,24

166:7 172:22,24 179:2 336:13 337:23 PF 51:9,12 67:19 67:22 68:1,4,6 68:15 80:18,24 81:1,3 83:1 85:18 86:16 226:1,3,4,9,13 227:5,21,25 228:14,18 230:18 231:4,7 231:22 232:7 233:21 234:2 239:11 241:9,15 241:18 257:6 259:7,13,13,25 260:20,25 261:4 261:6,6,14,17 261:19,19,23 262:13,14 263:12 266:17 266:19,22 267:1 267:9,10,16,19 283:11 287:14 287:24 288:1 326:8,12 329:1 PFs 96:6 174:6 226:22,25 269:11 306:8 phases 141:10 328:6,7 Philip 37:5 PHILLIP 1:3 2:3 philosophy 116:18 phone 6:22 7:3 14:19 15:7 269:25 phrase 196:22 324:13 physical 319:23 physically 48:10 pick 17:12 151:24 174:8 185:15 picked 172:10 PICKERING 3:21 picking 11:20 185:15 picture 43:23 135:20 136:2	186:18 283:16 piece 27:14 206:22 pieces 33:5 169:2 pipe 48:9,10 piping 41:7 286:6 pitch 110:19 114:15 119:23 pitching 119:16 pitfalls 29:20 Pittsburgh 37:16 place 29:2 53:13 73:25 122:12 157:3 215:20 216:7 219:15 255:8 258:21 290:5 303:24 319:8 328:4 placed 34:22 35:1 216:1,2 places 120:17 157:23 183:23 184:5,9 186:10 plaintiffs 1:5 2:2 63:11 plan 9:6,6,10,15 34:21 35:25 59:21 116:6 189:17 199:5,5 199:6,21 215:7 215:9,10 242:15 242:17 243:3,7 243:9 308:19 309:6,10 321:15 plane 321:21 planned 62:3 65:1 76:7 82:2 321:17,18 planning 160:20 177:16 201:20 307:6,9,13 308:10,25 321:8 321:10,12 330:19 plans 59:24 88:9 88:12 156:16 178:4 plant 9:12 17:3 22:2 23:23 30:23,24 31:2,5 31:7 39:15	40:18 55:8 77:2 88:20 111:18 116:16 150:18 164:20 178:24 187:23 211:10 211:11,16,18 213:3,4 214:3 plants 8:21 9:5 10:12 13:12,14 15:17,18 23:14 23:16 30:14 32:2 43:3 48:17 148:7,8 159:2,3 159:6 184:5 185:5 186:6 187:23 214:22 play 125:25 126:3 331:21 playing 213:19 PLEAS 1:1 please 5:16 6:22 7:7 8:10 93:15 246:3 311:13 pleased 315:19 315:21 pledge 232:25 pledged 87:16 pledging 231:7 ploy 69:19 plus 129:24 165:10 212:23 260:16 290:7 point 5:20 10:4 10:21 21:20 35:18 43:14 44:19 59:3 67:19 68:14,14 69:14 86:8,15 92:1 95:23 97:10 98:15 108:13 110:18 116:2 119:22 126:1 129:5 130:11 133:19 142:25 143:2 153:8 154:5,19 159:14 168:12 177:25 182:21 191:6 192:20 204:21 206:2 208:16 211:24	213:1 225:25 237:10,13 238:5 240:10 242:14 247:15 253:24 255:5,25 262:13 263:24 268:15 268:18,22 275:1 279:20 281:7 287:3 288:25 301:12 313:4 314:3 323:10,13 325:22,24 326:1 326:7,10 329:5 329:7 332:18 pointed 11:4 58:22 161:18 230:16 306:12 313:15 pointing 81:7 235:12 245:2,16 245:19 points 134:5 285:23,24 points-based 17:24 pole 77:22 poor 68:2 174:2 portfolio 10:14 portion 76:15 155:9 166:9,16 174:25,25 189:6 201:3 202:10 245:11 282:18 310:18 318:5 portions 145:13 pose 92:23 93:22 229:8 235:4 posing 234:7 position 87:14 95:12,23 103:2 196:20 251:3 253:16,17 255:3 292:20 297:7 331:6 positive 10:3 78:24 85:23 147:5 150:6,6 157:13,15 158:10,12,23,24 158:25 159:9,10 159:11 166:11	185:7,12 possibility 65:20 83:3 104:23 105:2 106:11 182:13 307:7 308:8 possible 65:12 194:17 197:12 243:12,18,19 320:19 possibly 102:25 185:5 194:16 272:11 posture 224:2 potential 20:23 29:19,20 64:20 73:14 117:17 120:9 168:23 189:16 potentially 115:10 137:11 149:19 pours 186:20 power 6:8 8:24 9:12 13:10,12 15:17 16:24 31:5,7 86:8 119:4 157:21 159:2 240:10 263:23 268:15 268:18,22 274:25 281:7 325:22,24 practice 271:18 practices 287:6 precipitated 99:20 preclude 63:18 precluding 36:14 43:22 predicate 299:13 predict 123:4 predicted 81:13 prediction 136:14,21,25 predictions 137:15,21 prefer 319:3 preference 319:21 prefile 79:12
--	--	---	--	---

81:16 89:1 90:5 100:4 101:2 102:15 103:18 105:5 163:9,19 194:19 226:18 229:19 230:9,16 232:9,14,23 246:1,13 293:20 322:20 preliminary 49:17 120:25 121:2 126:11 133:22 240:3,11 280:6,10 337:6 338:12 premise 19:2 21:2 41:8 51:2 184:11 191:9 203:4 290:17,21 premium 27:10 27:10 51:5 149:6,10,13 159:15,23,25 160:5,9 161:14 304:3,5,14,14 304:23,25 305:10,18,18,23 306:3,17,21,22 313:4 premiums 173:19 prep 194:1 preparation 193:23 194:11 194:20 227:18 240:12 prepare 180:23 193:24 prepared 8:13 142:10 181:10 247:22 256:14 268:19 294:14 301:14 preparing 228:16 prerogative 206:4 presence 39:10 present 4:8 5:16 68:10 121:15,18 121:21 156:4 179:9 240:14 251:12 281:13	281:16,18,20 presentation 9:21 67:13,16 68:10 69:11 82:25 86:9,20 87:2 108:18 120:18,24 121:11,15,17 122:10,16,19 124:16,21 127:7 127:9 128:8 138:23 139:25 155:24 158:13 158:14 231:24 236:16,20 242:25 249:21 250:20 274:14 274:17,19,21 275:6 276:4 280:3,4,11,14 281:10,11,14 292:14,19 315:1 presented 62:6 65:1 67:13 89:9 90:7 105:13,14 118:23 134:22 143:20 156:6 194:9 204:17,24 214:2,23 225:16 251:8,10,14 252:6 256:14 267:25 298:9,11 298:12 309:5 323:21 presenting 95:6 248:5 249:18 251:21 254:10 254:19 president 54:13 118:11 119:4 130:1 196:15 press 35:7 pressed 317:10 pressing 130:16 244:1 277:18 278:3,8 pressure 85:20 85:22,24 95:17 98:24 100:2 176:5 pressurized 14:1	14:8 16:22 pretty 17:10 180:2 187:4 198:1 prevail 252:24 253:1 255:14 previous 19:18 25:7 46:23 97:3 97:15 109:12 151:21 165:19 170:16 194:13 233:1 238:6,8 282:3 321:1 331:11 338:23 previously 89:24 134:19 138:23 165:7 190:5,8 190:16 287:19 302:16 316:1,4 price 10:9 17:10 20:9,13 24:24 25:4,8 26:4,22 27:2,7,18 98:17 98:19,23 147:18 148:14 149:3,4 149:6,14,16,18 149:22 150:3,5 155:8,12 156:1 159:15,19,19,24 160:1,15,23 161:5 162:20 163:7,8 172:3,5 172:12,17,23 173:10 174:9,20 174:23 175:4,11 175:15,16,18,19 175:25 176:4,11 177:14 184:16 187:3 188:24,25 189:2 191:17,25 192:1 244:25 245:11 288:3 290:5,20 301:20 304:22 305:11 306:17 307:3,4 309:9 312:15,18 313:3,12,17 318:8 325:17 330:21,25 331:3 pricing 24:16,17 27:1 302:2	primarily 63:15 124:10 275:20 primary 33:24 85:2 133:10,12 147:16,17 prior 48:16 53:14 111:12 118:21 119:8,13 140:2 157:16 168:18 169:12 280:11 280:17 281:7 282:13 285:16 302:17,20 312:24 private 61:8 privilege 259:1 265:4 279:25 298:2 privileged 265:2 265:3 279:6,24 297:25 298:1 privy 128:2 probabilities 123:5 probably 11:8 23:10,16 25:20 38:2 39:24 40:4 60:9 61:23 103:2 111:10 113:5 116:3 117:5 119:19 121:20 135:15 153:10 168:14 184:22 185:19 186:24 195:3,13 195:22 196:1 197:8 202:16 206:10 212:12 215:23 224:1 238:4 239:5,17 248:3 250:8 264:15 289:7 312:25 326:20 329:9 problem 15:4 50:9 55:5,13,19 151:17 220:6 286:2 problematic 33:13,18 problems 32:22	35:20 43:21 44:1,19 56:5 61:14 89:16 117:2 211:2 218:16,18,20,23 218:24 230:21 270:3 274:6 276:2 proceed 49:18 proceeding 8:17 63:21 89:10 155:14 174:13 proceedings 6:16 7:23 24:12 192:13 193:17 process 11:2 15:21 16:1,10 17:17 29:6,11 32:4,6 49:8,10 49:15 50:6,19 84:15 110:1 115:24 124:15 143:17,19 149:8 155:2 169:8 188:16 189:3 190:5 229:20 248:9 290:1 312:2,3 313:18 processes 287:10 289:5 procurement 18:3,10 24:5 29:5,11,24 32:21,23 61:14 100:25 145:15 186:8 211:22 336:2 337:17 procuring 18:20 produced 224:10 250:16 product 21:3,12 247:15 production 146:11,20 176:17 220:6,10 291:15 productive 98:20 181:9 productivity 45:5 45:5,11,13 47:15,23 48:5
--	--	---	---	---

50:21,25 56:6 69:8 80:10,13 81:12 82:16 83:5 88:10 91:23 92:12,17 92:19,23 93:1 93:21 94:2,11 94:17,25 95:3,7 95:20 96:6 97:1 97:12,14 98:12 98:19,25 101:16 175:20,24 176:1 176:6 228:21 229:5,7,15 230:21,23,24 234:15,19,23 235:3,10,14 241:5 264:2 269:10 270:3,13 283:25 286:24 287:1 324:20,23 324:25 325:4 326:5,17 329:1 329:12,17 professed 237:6 professional 1:19 117:19,24 118:5 120:1 218:5,6 242:24 334:4,22 337:3 proffer 261:4 proffered 57:12 144:18 profit 20:18,19 program 115:14 199:8 200:7 programs 33:7 211:17 progress 54:21 54:24 55:1,7,7 56:23,25 150:12 185:14 201:1 286:4,6 prohibition 260:19,24 261:2 261:3 prohibitive 191:12 project 8:20 19:6 22:21,22,23 23:7 27:19,25	28:24 30:2,16 30:22 34:19 37:11,11,14,15 38:3 39:13 43:11,20 44:12 44:18 45:21 46:7,13,14,19 49:14 52:8,23 53:1,3,5 55:3,15 55:23,25 56:2,3 56:10,12,19,20 57:1 62:5 68:4 70:11 71:17 80:3 83:5,7 84:12 89:9 90:10,14,21 92:14 94:7,11 94:19 95:15 99:13 100:23 103:21 104:11 105:12 107:10 108:12 114:6,9 114:16,25 115:7 115:8 120:10,11 122:15,18,21 125:1,2 126:3 131:17 134:18 139:5,14 141:6 141:8,9,9,25 142:1,9 143:4 143:16 144:13 144:24 145:1,4 147:8 150:11 157:11,12,13 158:10 161:21 164:2,11 165:4 166:22 167:8,22 168:4,8,13,20 168:20 169:1,2 169:3,11 170:23 171:1,8,24,25 173:13 177:14 177:22 182:2,23 182:24 184:20 187:4,21 189:8 201:1,2,8,11,12 201:14 202:5,8 202:9,11,12,15 205:8 206:3,12 207:1,25 208:4 208:6 209:4	210:14 212:3,6 217:18 222:1,3 222:19 224:17 229:7,9 235:5 235:24 241:10 243:11,16 248:8 251:13,14 254:11,19 257:8 264:2,6 266:17 269:1,16 270:2 270:23 272:2 273:22 277:15 279:2 282:25 288:6,22 289:4 290:3 297:14,17 297:18,20 299:6 299:15,16 300:22,23 301:3 301:16 303:3 304:16 305:25 306:1,6,24 307:11 310:2,17 311:3 312:16 313:11,14,16,16 313:20,23 314:7 315:14 317:7,15 323:9 324:23,25 325:2,5,19 327:21 328:6,7 331:18,20 332:11,15,16 333:6 337:12 projected 70:24 230:18 253:21 254:5 290:13 projecting 9:15 projections 67:23,25 68:20 246:4,9 247:2 248:21 249:3 250:2 304:18 projects 22:22 35:15 44:17 47:11 49:13 61:7 111:16 116:11,15 189:8 192:2 237:3,5 245:18 261:23 274:2,3,6 326:8 promise 220:25 223:23,23	224:13,13 231:13 promised 220:16 220:18 223:16 promises 224:3 224:20 238:7,8 promising 227:25 properly 91:10 102:17 251:9 property 307:22 307:23 proposal 12:21 17:20 66:10 108:7 110:19 217:23 proposals 17:18 64:8 propose 56:3 144:20 214:8 proposed 15:16 24:10 64:12,16 65:10,24 66:1,4 66:21 89:12 95:6 106:12,14 143:18 170:10 283:5,6 proposing 57:22 64:13,21 107:25 230:22 234:8 propounded 96:23 97:23 98:4 prospect 85:11 prospects 184:20 184:21 protect 77:18 protection 290:5 protections 149:23,23 188:25 protects 77:3 protracted 164:6 proven 330:19 provide 62:4 89:7 233:19 234:25 278:4 293:4 300:20 provided 64:8 70:3 97:22 137:13 142:17 215:16,19 221:3	246:5 257:11 258:8 318:22 provides 97:19 205:23 providing 116:7 175:8 253:5 provision 26:11 154:17,18,21,22 165:9 300:17,19 303:16 307:16 307:21 314:1,5 provisions 5:11 24:16 102:22 132:22 148:20 164:22,23 184:25 prudent 90:9 Pruet 3:13 6:5 PSC 5:22 6:5,15 6:25 63:15 70:15 84:25 170:22 173:2 192:13 194:19 203:10,22 204:15 213:16 214:6,8,9,12 227:4,9 228:2 259:25 267:8 293:20 297:21 297:22 298:3 322:25 323:1 public 4:2 6:10 6:11 9:8 12:1 12:11,11 22:3 24:9,13 28:21 32:14,17 39:21 40:2 56:4 70:10 70:21 71:1,11 71:21 72:25 74:19 79:1,3,7 81:11 83:11 84:2 88:3 89:8 89:22,24 91:14 91:22 93:1 94:1 94:5 96:8 155:3 155:6,25 162:8 184:15 204:17 213:18 214:16 214:23 229:20 230:1 252:21 262:3 268:1
--	---	--	---	--

324:6,19 334:4 335:23 338:8 publicizing 89:18 pull 65:20 pulled 191:25 pumps 13:10 41:7 77:6 purchased 44:15 321:22 purpose 38:16 46:8 63:15 76:24 81:15 117:13 131:23 131:25 179:11 179:14,18 273:6 273:20 purposes 117:16 pursue 13:2 312:14 pursuing 126:15 push 56:22 98:24 260:11 pushed 14:7 50:16,17 56:24 pushing 166:24 209:11 put 12:21 17:20 31:19 40:5 48:9 48:10,12,13 51:1 70:5 75:24 76:1 98:24 161:12 171:3 174:1 184:24 188:12 223:14 240:23 249:7 254:2 284:9 290:17 291:19 325:25 326:24 331:6,7,15 putting 56:1 74:1 234:16 puzzled 130:16	34:4,24 42:1,15 60:25 127:22 216:4 quantify 58:13 quantities 288:14 316:2,18,19,20 quarter 141:13 220:20,20,21 quarterly 40:4,6 90:1 269:21 question 8:4,5 57:13 80:2 96:25 97:8,11 97:20,23 98:4 102:19 109:13 113:8,12 114:19 140:12 151:19 151:22 154:18 184:10 192:22 193:4,6,8,18 202:3,3 228:6,9 228:11 229:22 230:15 231:19 231:20 241:11 246:25 248:19 250:12 251:8,15 252:16 255:19 256:11 259:6 260:5 263:11 265:20 289:12 299:13 308:15 308:15,16 310:7 318:19 333:13 questioned 145:2 questions 8:16 63:17 130:6 141:5 179:18 180:21 181:10 181:11 182:11 182:15 183:6 192:17 193:2 195:9 237:13 251:6 258:14 272:23 290:4 322:5,20,22 330:17 333:3,17 quicker 148:19 quickly 33:13 quite 40:7 49:11 184:23 324:12 quote 83:3	137:14,15 223:23 225:25 226:2,7,11 229:1 235:20 236:1 242:14 244:22 246:3,7 251:17 266:16 320:11,15 quoted 24:23 quotes 137:21	R radioactivity 14:4 31:14 rail 40:24 rails 41:5 raised 54:4 103:22 134:18 142:11 143:24 276:5 Ramification 182:22 ramp 153:20 303:7 ramp-up 302:23 ramping 153:16 303:4 ran 45:2 84:4,9 84:10 306:16 range 40:19 165:14 rapid 33:9 rate 26:13 88:2 92:5 103:16 149:23 228:18 rates 59:25 254:2 305:6 306:9 317:1 ratings 307:18 ratio 243:11 329:8,13,13,14 rationale 99:17 303:25 ratios 99:22 102:13 327:1 Rau 113:2 121:18 123:1,2,3,8,11 127:1 129:17 130:8,15 277:7 277:9,10,13,17 277:17 285:10	re-baselined 55:23 56:10,12 56:18,20 reach 152:4,9 227:25 232:2,6 232:12 233:21 233:23 234:2,15 234:23 235:14 237:9 266:17 reached 152:7 153:2 221:5 226:14,15 227:6 227:7 264:10 reaching 231:22 reaction 122:14 reactor 12:16 13:25 14:1,9,10 16:22 17:8 29:22 31:12 157:20,21 186:19 203:17 203:18 204:12 204:16,23 205:3 reactors 13:17,23 14:3 16:7 77:5 202:23 203:2,20 204:13 read 8:12 98:3 147:20 151:18 151:21 179:16 200:11 219:13 219:20 228:10 242:3 284:18,20 284:22 318:18 reading 56:14 286:21 319:6,10 319:19,22 reads 228:13 reaffirmation 309:12 310:22 reaffirmed 147:7 real 26:7 31:23 39:16 48:4 86:1 123:17,25 168:15 223:3 230:17 255:17 realistic 59:9 62:1 66:6,19 237:19 299:13 reality 290:3 realize 245:17	319:4 332:7,9 realized 68:7,16 86:16 97:14 244:24 245:4 really 15:2 31:9 38:13,18 40:14 47:19 51:20 55:1,25 57:10 59:17 77:2,25 81:22 82:14 84:16 95:16 98:22 109:23 114:11 115:21 116:18 125:25 126:1 128:3 135:20 138:1 146:7,17 147:2 165:20 166:25 177:1,24 179:23 181:8,11 182:9 183:6 196:20 223:3 288:3 289:19 296:20 304:1 306:21 311:21 314:18 325:15 329:8,18 331:20 realtime 34:24 35:5 REAR 4:13 reason 103:8 144:17 177:18 219:24 229:10 231:12 259:24 265:16 271:16 287:11 291:1 299:9 330:5 331:8,9,14 reasonable 57:8 76:12 90:9 170:6,9 174:7 reasonableness 57:21 59:2,8,10 reasons 13:3 16:20 80:17 85:2,2 86:1 87:13 95:16,18 109:14 115:3 157:15 167:10 228:13 235:21 286:9 312:14
--	--	---	--	---	---

329:4 rebaselining 68:18 recalculated 266:22 recall 64:15 107:21 108:24 108:25 110:14 119:21 120:22 121:14 128:9,12 128:20 129:5,10 129:11,19,21 131:24,25 135:10 137:2,17 139:19,22 152:25 179:19 199:1 201:13 202:14 213:21 215:22 217:1 226:20 234:9,10 257:21 258:7 259:11,14,21,23 263:2 266:13 272:12 277:12 281:18 293:7,22 293:24,25 295:21 296:18 301:5,10 308:3 308:4,6 313:8 314:22,24 318:2 326:18 330:12 Receipt 268:24 receive 57:14 138:19 139:15 139:18 166:13 215:8 271:19 293:14,16 received 17:22 57:17 72:18 75:1 108:18 126:21 138:22 139:19 200:15 200:19,22 201:1 225:18 258:16 258:19 271:8,14 271:17,23 274:1 275:3,5,23 282:11 293:18 307:10 319:22 receiving 138:20 198:21 302:17	302:20 319:23 receptive 126:2,5 126:7 recess 63:5 93:12 138:10 177:6 240:1 295:13 322:12 recognize 12:6 18:6 37:7 53:23 67:3 71:12 79:16,19 94:23 106:20 112:11 121:7 122:4 131:2 139:8 141:22 155:20 162:15 163:15 178:18 229:13 235:9 241:25 244:6 recognized 95:2 228:24 recollection 129:8 209:1 215:25 219:22 236:18 recommend 135:20 recommendati... 140:13 260:1 recommendati... 132:15,24 133:25 134:2 135:19 136:8 140:6,10,15 293:4 recommended 32:3 213:16,20 326:15 recommending 318:21 recommends 326:11,23 reconstituted 185:1 reconvening 63:18 record 5:2,17 63:3,7,12 93:11 93:14 138:6,8 138:12 151:9,11 151:12,14,17,20	177:8 239:21,25 240:5 264:21 294:18,21,23,25 295:8,11,15 322:11,14 333:21 334:7 records 82:24 recouped 253:24 255:12 recover 27:23 198:2 261:15 recovered 254:7 recovering 309:11 recovery 34:21 197:25 215:7,8 215:10 redacted 124:13 redaction 124:7 redactions 275:21 reduce 245:21 256:5 reduced 75:3 252:7 reducing 75:6 147:13 reduction 166:13 245:20 redundant 116:9 208:17,25 reevaluated 54:10 refer 43:1 53:2 123:19 125:20 156:20 164:21 270:16 322:23 reference 12:16 17:13 42:24 76:23 108:15 113:10 123:16 126:20 148:6 156:17 166:20 249:1 311:5 referenced 121:24 131:9 212:11 246:10 257:4 references 42:21 221:25 314:4 referred 140:21	152:14 238:9,10 250:16 274:16 307:8 referring 55:20 67:4,11 136:16 156:21 184:2 188:6 247:1,19 247:23 248:20 308:10 320:17 refers 53:3 refine 72:15 refining 66:12 reflect 107:8,15 113:15 131:12 132:6 142:16 156:11 252:7 256:5 reflected 101:9 107:5,23 112:19 136:5 166:14 183:15 reflecting 254:18 reflects 97:13 132:11 226:3 269:5 273:13 reforecast 226:9 226:13 227:5,20 reforecasted 227:1 reforecasting 227:11 refresh 208:21 refreshed 208:25 refund 103:15 regard 29:14 66:7 115:24 276:6 327:25 regarded 317:8 regarding 134:17 238:17 273:25 311:18 314:20 315:14 322:25 324:6 register 59:12,14 59:15 60:2 66:21 Registered 1:19 334:3,22 regulation 11:7 regulations 10:1 11:9 15:20 16:5	regulator 24:8 regulatory 1:9 3:7 6:15 15:15 15:16 22:1,8 29:8 31:17 34:8 39:22,24 47:25 70:17 78:2 95:22 96:1,9,23 174:11 177:21 181:18 192:13 257:14,16 263:9 263:11,13,20 264:4,14,18,24 265:16 266:1 regurgitated 134:25 reimbursed 244:25 245:4 reject 56:19 189:2 330:23 rejected 101:14 102:8 253:13,13 317:25 rejecting 55:14 55:21 252:12 relate 277:22 related 28:13 44:22 72:19 89:19 334:9 relates 32:20 89:15 relations 115:17 relationship 21:17 42:22 103:24 104:5,9 104:16 108:3,16 108:21 145:6 164:11,19 198:13,18,20 207:5 relative 31:20 66:4 131:5 134:2 135:13 145:3 148:14 171:25 201:14 201:19 224:9 263:12 298:7 325:16 relatively 257:24 264:13 269:23 relayed 274:8
---	--	--	---	---

release 31:14 265:4 279:25 298:2 320:14	145:12 renewable 10:18 11:13	118:4 235:22 representation 231:21	165:23 171:13 reside 321:5 resident 34:23 216:7	22:24 23:16 24:4,6,7 27:15 52:1 75:10,21 104:14 167:15 185:25 211:15 212:19 213:10 213:12,14 253:7 253:11 254:12 254:15,21 255:1 255:15,19
released 44:17 relevant 286:8 reliable 126:11 126:12 282:16 282:19	repeat 228:6,8 265:20 rephrase 278:23 310:7	representations 177:19 307:10 307:14 representative 58:17 131:17 145:3,4	resign 198:5 resigning 198:10 198:14 resolution 35:5 43:23 50:9 148:16,17,18,19 148:23 163:25 164:1 186:3 255:8,11 311:21	276:21 rest 147:20 241:10 257:8 276:21 restarting 29:14 32:24
relied 238:22 285:9 relieving 92:6 relinquish 167:17 rely 61:23 237:7 239:3	replace 191:15 212:23 replacement 111:10 replacements 212:20,21	representatives 179:6 292:5 represented 90:19 92:16 179:15,25 180:4 219:21	resolve 34:13 resolved 40:8 41:16 44:4,7 147:22 220:6 276:8,10 312:5 resolves 311:15 resolving 243:23 resource 9:6,6,10 9:15	restructure 167:10 324:22 restructuring 167:5,7,13,24 168:1 309:6 result 143:16,19 162:6 299:15 301:1 312:6 314:8
remains 171:8 remember 9:20 10:7 75:13 112:2 118:21 119:17 127:15 128:13,15 137:19 198:25 199:11,11 201:22 211:3 213:8 216:18,19 217:12 228:3 257:2 258:4,5 260:4 272:8,14 277:25 280:19 280:22 296:6,20 296:21 303:25 313:8 315:5,11 318:1 327:10 329:3	report 84:19 86:13 128:15 133:20 134:8,10 134:18,22 135:1 135:7 138:20,21 139:1,6,13,16 139:23 140:3,9 142:1,2,3,8,9 143:5,16,25 211:12 241:1 246:17 249:23 250:6 265:10 266:10 280:1 291:2,19,21 292:9,13,23 293:2,6,9,12 296:4,5 318:22 319:22 332:11 332:14,15,17,21 332:25 333:5,6 333:15 337:13 338:19	request 12:21 17:20 35:18 49:16,17,22 74:24 96:22 97:1 98:1 162:22 204:12 301:4 requested 170:12 213:23 requesting 71:15 204:11 requests 55:14 55:21 74:7 317:14 require 16:24 25:23 48:16 70:15 171:9 required 29:10 31:22 76:24 77:1 91:8 171:15 205:11 228:19 235:24 251:16 255:4	resources 47:10 74:3 98:21 122:24 174:1 328:1,21 respect 61:20 65:24 130:5 134:14 142:17 207:24 243:5 246:9 248:21 328:11 respectively 72:11 respond 33:12 responded 33:9 responding 97:25 184:10 response 40:5 96:25 97:19,22 97:22 98:4,6 184:11 320:9 333:2 responses 12:24 responsibilities 23:25 responsibility 23:3 50:14 100:17 201:17 211:9 228:20 responsible 22:1	resulting 47:16 results 121:3 204:18,24 205:1 284:19 337:6 retain 307:15 309:18 retained 187:14 187:17 216:4 299:24 300:2 309:15 retention 138:1 199:8 300:6 retire 197:15 retirement 198:22 199:4,4 199:21 314:17 retiring 197:14 197:15 198:14 198:15 return 322:2 returning 230:14 321:24 Rev 148:11,14 reevaluation 204:19
remains 171:8 remember 9:20 10:7 75:13 112:2 118:21 119:17 127:15 128:13,15 137:19 198:25 199:11,11 201:22 211:3 213:8 216:18,19 217:12 228:3 257:2 258:4,5 260:4 272:8,14 277:25 280:19 280:22 296:6,20 296:21 303:25 313:8 315:5,11 318:1 327:10 329:3	reporter 1:19 7:7 7:25 151:18,21 228:10 334:1,4 334:22 335:14 reporting 141:14 222:12 249:10 reports 40:5,6 90:1 196:24 211:7,19,22 332:8 represent 7:16 90:11 96:21	requirements 78:1 217:17 requires 251:11 rerun 122:21,23 122:25 124:4 rerunning 125:7 reset 162:25	responsible 22:1	

reveal 226:17 227:3 232:11,24 262:24 297:22 298:4	5:14 rid 289:20 Ridge 2:6 right 7:5 14:20 20:17 48:2 55:9 56:16 63:25 67:12 71:25 72:11 73:15 74:22 86:22 87:3 89:12,13 91:18,21 105:13 105:16,21 106:1 113:6 136:10 141:2 152:2,25 154:1 180:17 188:10 192:10 198:16 200:1,18 203:8 204:13 205:22 211:6 218:21 220:9 221:1,17 222:11 223:25 230:19 232:3 236:8 248:1 253:15,16 253:17 268:4 269:18 271:10 276:20 282:2 289:13 291:3 306:24 311:19 321:15 328:24	305:10,18,23 306:2,17,21 313:4,12 risks 19:10,12 20:21 23:21 28:23 29:23,24 29:24 58:13 59:13,19 60:3 60:18 66:20 103:21 204:7 304:17 road 117:17 ROBINSON 3:3 robust 78:9 136:19,19 178:6 285:11,16,21 291:6 299:1,1 299:11 robust' 136:12 rock 2:24 160:6 rocky 185:17 rode 31:2 Roderick 36:25 37:6 42:19 336:6 Rodrick 178:12 219:8 317:18 Roger 13:19 role 108:11 126:3 206:25 208:4,5 208:11 289:21 roll 297:19 Ron 111:6 131:19 143:11 195:19 206:20,21 209:24 281:15 281:23 313:18 318:16 320:10 320:11 324:2,5 room 11:20 14:23 40:20 144:12 257:22 319:6,11 319:20,23 rough 189:6 296:9,12 roughly 26:3 30:3 141:13 149:11 160:2 202:14 281:1 304:7 305:9 route 205:11	RP_0015652 266:9 ruin 184:13 rule 5:11 7:4 78:1 78:3 rules 7:21 run 48:9 84:13 120:23 123:24 126:22,22 213:2 262:13,14,15,16 262:16 275:23 275:24 running 61:11 165:6 304:25 313:19 runs 174:7	294:11,15 306:15 308:2 309:6,16 319:15 320:23 330:8,16 sat 179:23 satisfied 38:19 45:21 215:13 save 26:22 125:5 147:24 172:17 savvy 74:15 saw 60:9 81:2 145:4 195:7,10 207:4 221:19 260:4 saying 54:9 65:15 68:5 94:8 123:12 129:10 137:2 230:15 234:9 245:21 251:23,25 252:5 252:14 253:9 254:3 284:25 288:25 296:6 304:14 306:14 313:9 314:24 318:23,25 319:2 319:2 says 56:18 68:6 69:14 72:14 86:16 93:21 120:6 123:17 125:17 132:13 136:9 137:11 142:15 159:14 180:18,18 182:22 220:12 220:18 223:22 226:7 244:22 253:10,18 266:15 270:18 282:3 285:16 311:13 320:10 326:7,10 SC 1:16 2:7,21,24 3:5,10,14 4:5 scaled 283:1,2,4 283:5 scaling 283:7,8 SCANA 1:7,7 2:10 2:10,19 5:19,25 6:2,3 7:16 37:5
revealed 226:20				
review 12:3 24:10 49:25 53:7 58:8 140:17,19 141:1 144:21 157:1 170:18,23 171:1 175:7 194:10,19 202:18 219:9,11 222:1 228:4 240:2,11 246:8 246:10,12 247:1 247:3,7,8,12,18 248:14,20,23 249:4,22 250:1 250:3,4,13 251:4 263:23 266:21 268:17 268:18 271:19 272:23 298:15 298:17,20,21,22 298:25 299:11 325:23 335:25 338:11	right-hand 123:15 124:6 125:16 RILEY 4:4 ring 78:15 ringing 282:8 risk 26:15 27:9,10 28:12,14,19 30:6,10 32:19 44:20 49:18 59:11,12,14,15 59:18,21,22 60:2 62:2 66:21 83:6,14,21 103:2 104:2,3 149:6,10,13 159:15,20,23,25 160:4,8,9,11 171:14 242:6 304:3,5,14,23 304:24 305:3,8	robust' 136:12 rock 2:24 160:6 rocky 185:17 rode 31:2 Roderick 36:25 37:6 42:19 336:6 Rodrick 178:12 219:8 317:18 Roger 13:19 role 108:11 126:3 206:25 208:4,5 208:11 289:21 roll 297:19 Ron 111:6 131:19 143:11 195:19 206:20,21 209:24 281:15 281:23 313:18 318:16 320:10 320:11 324:2,5 room 11:20 14:23 40:20 144:12 257:22 319:6,11 319:20,23 rough 189:6 296:9,12 roughly 26:3 30:3 141:13 149:11 160:2 202:14 281:1 304:7 305:9 route 205:11	rule 5:11 7:4 78:1 78:3 rules 7:21 run 48:9 84:13 120:23 123:24 126:22,22 213:2 262:13,14,15,16 262:16 275:23 275:24 running 61:11 165:6 304:25 313:19 runs 174:7	sat 179:23 satisfied 38:19 45:21 215:13 save 26:22 125:5 147:24 172:17 savvy 74:15 saw 60:9 81:2 145:4 195:7,10 207:4 221:19 260:4 saying 54:9 65:15 68:5 94:8 123:12 129:10 137:2 230:15 234:9 245:21 251:23,25 252:5 252:14 253:9 254:3 284:25 288:25 296:6 304:14 306:14 313:9 314:24 318:23,25 319:2 319:2 says 56:18 68:6 69:14 72:14 86:16 93:21 120:6 123:17 125:17 132:13 136:9 137:11 142:15 159:14 180:18,18 182:22 220:12 220:18 223:22 226:7 244:22 253:10,18 266:15 270:18 282:3 285:16 311:13 320:10 326:7,10 SC 1:16 2:7,21,24 3:5,10,14 4:5 scaled 283:1,2,4 283:5 scaling 283:7,8 SCANA 1:7,7 2:10 2:10,19 5:19,25 6:2,3 7:16 37:5
reviewed 24:13 57:7 91:5,7 194:2,12 227:17 236:7 246:6 249:2 271:21				
reviewing 57:4 60:6 257:21				
revised 57:18 62:6 65:1 71:22 72:3,16 74:21 74:24 82:9 89:9 91:2 105:20 221:15 228:16				
revising 139:1				
revision 148:9,15				
revisions 71:4,9 87:11 336:14				
revival 10:3				
revolving 130:9				
RFP 12:21,24 17:8,13				
RFPs 184:6				
Richard 1:3 2:3				

51:24 53:7 54:7 70:17 76:14,15 85:3 87:15 95:11,11 98:10 112:25 118:20 129:16 131:6,18 150:8 168:22 169:10 179:6,21 179:22 187:15 195:8 196:13,18 196:21 198:1,18 198:20,22 199:21 200:2,8 258:25 286:17 287:8 292:6 301:6 SCANA's 122:12 309:16 SCANA_RP024... 240:13 SCARBOROUGH 4:4 SCE&G 5:14,19 5:25 6:3 7:16 8:23,25 10:24 11:1 16:17,19 17:14 18:12 19:6,16 23:6,25 28:23 31:13,20 32:5,22 34:12 34:18 35:10,11 35:18,23 39:3 39:10 44:20,23 44:25 47:14,23 50:4 57:14,17 58:8 63:15,20 70:1,9,15 71:15 71:21 72:2,4,9 72:14 74:13,19 75:5 79:2 84:1 84:4,22 85:14 86:1 87:10 89:18 90:6 94:23 95:2,5 96:23 97:11,22 98:5,11 101:5,8 103:11 104:14 104:23 106:12 108:2 115:25 116:6,7,11 117:1 126:5	134:14,18 135:21,23 143:1 143:2 149:2,18 149:21 156:16 157:17 158:2,24 159:3,8 160:22 162:23,25 166:7 172:23 174:19 174:21,22 175:18 177:12 182:17 183:4 185:8,25 187:11 187:13 189:21 190:5,7,20 191:7,9,13,19 193:23 196:19 198:18,20,22 202:21,25 203:21 204:6,10 204:14,17,19,22 205:2,6,7,19 206:2,5,7,10,16 207:23,24 208:8 208:9,12 209:3 209:7,13,16 210:6,19 213:9 213:15,23 214:5 214:8,11,14 215:1,3,20,25 216:1,3,4,25 218:15 220:5 222:23 223:1 224:12 226:12 227:4 228:19 229:13 230:7 235:5,8 236:6 236:24 237:17 240:19,23 241:7 241:13 242:7 246:5,6 249:2 251:12,13 256:13 257:7 260:19,24 263:4 263:18 264:9,23 265:24 267:1,8 268:7 270:20 279:12,16 280:16 281:6,9 281:15,24 288:12 290:17 290:22 292:12	292:15,20 294:12,14 296:10 298:16 299:24 300:24 301:1,4,13,21 302:3,8 306:3,8 306:11,22,23 307:2,13,24 308:2,10,17,24 309:5 312:14 313:11,24 314:19 315:13 316:10 317:10 317:14,15 329:23 330:7,14 330:22 SCE&G's 71:8 79:8 95:23 156:12 166:16 170:17 194:23 203:9 204:11 290:10 296:13 scenario 58:23 scenarios 84:9,10 306:13 SCEUC 179:9 SCH 120:7 schedule 23:22 47:16 54:10,11 54:20 55:5,16 55:17,24,25 56:2,3,10,12,19 56:20,22 57:11 57:14,18,21 58:8,14,16 59:4 59:8,10,13,19 59:20 60:3,7,19 60:21 61:18,20 62:3,6,15 64:9 65:1 69:15 70:16,19,21,23 71:4,5,10,10,17 71:23 72:3,5,6 72:17,24 73:2,4 73:6,8,10,14,18 73:22 74:21,25 76:11 78:23 79:4 83:7,20,23 87:11 88:9 89:9 89:11 91:9,13 94:12,20 96:11	100:17,18,24 101:1 105:19 120:21,23 122:15,18,21,24 122:25 123:8,10 123:23,24 124:2 124:4,20 125:7 126:10,21,25 127:3 128:17 129:9 136:10,13 136:14,18,20,21 137:14 150:9,12 150:14,21 151:1 151:3,4 152:2,6 152:23 153:6,13 153:22 156:18 157:2,9,11 163:3 170:21,24 171:2,4,5,9,14 176:21 186:14 188:18 190:25 191:18 221:14 221:22 228:17 229:10 230:22 235:24 236:7,8 236:15,18 237:17 238:13 238:15,17,20 239:18 241:23 244:12 246:5 253:5 260:13 273:21 275:14 275:17,23,25 276:14,16,23 282:18 284:7 285:9,13,18 288:6,8 289:6 290:7 291:18 293:8,12 297:12 297:15 298:9,11 298:17,18,21,25 299:5,7,9,14,15 299:17,20,21 311:23 312:9 315:14,17 324:7 332:21,24 333:5 333:14 336:15 336:16 338:19 schedule-wise 92:4 scheduler 60:11	schedules 70:11 90:6,8,9,11,13 90:18,21 91:17 92:11 95:6 100:9,10 102:17 140:2 150:9 171:12 189:22 213:2 229:4 235:22 237:2,4 250:14 251:10 251:21 252:6 scheduling 61:3 61:10,11 64:6 65:23 68:19 71:17 126:23 139:24 237:5,6 237:7 275:22 315:18 scheme 15:16 19:24,25 244:25 school 14:21 115:19,20,20 Sciences 5:10 scope 91:7 222:19,19 226:10 Scotland 321:18 scroll 242:4 scrub 105:19 scrubbers 159:5 seal 334:14 second 42:9 58:2 67:18 74:1 76:21 107:2 159:14 161:12 173:18 181:1,17 182:22 183:18 191:5 196:21,25 197:1 220:19 223:22 225:25 242:13 284:4 305:6 325:23 326:3,10 secondly 95:10 115:19 170:17 181:12 seconds 93:5 secret 117:1 317:9 section 80:9 89:15 101:4
---	---	--	---	--

103:22 311:12 see 8:15 42:24 55:17 68:8 71:18 72:21 74:12 80:4,14 80:20 83:8 86:18 90:14 93:23 94:25 97:5,17 100:12 118:12 123:17 125:18 128:24 132:16 145:25 156:18 158:12 167:22 173:8 182:18 183:23 189:13 191:10 217:14 219:14 254:23 256:3 280:7 281:16 320:25 325:8,9 326:12 329:15 332:24 333:15 seeing 100:2 234:10 260:4 266:13 seek 70:15 71:2 seeking 162:23 162:25 198:2 seen 39:9 96:18 97:4 99:10 100:19 117:25 118:2 120:16 129:4 157:12 169:16 210:12 223:12 266:11 267:3 287:10 332:14 333:16 select 10:24 12:17 15:12 16:19 selected 12:19 16:17 22:16,19 selection 11:2 204:25 325:17 self-performed 289:21 sell 183:22 184:13 selling 177:24 semantics 213:19 213:25	semi-professio... 242:24 Senate 292:5 send 37:22 289:2 sending 50:10 142:23 senior 42:22 43:21 228:24 sense 160:22 180:4 278:12 330:14 sensitivity 160:24,25 161:2 161:19 174:4,10 sent 31:17 34:18 37:10,17 39:14 41:19 52:7 219:10 225:10 270:11,14 271:6 329:4 sentence 56:17 94:9 223:22 separate 148:1 214:22 306:16 separated 284:20 separately 214:19,20 September 53:21 56:8 133:13 144:3,7 221:15 sequenced 91:10 sequencing 91:9 170:21 Service 4:2 6:10 6:11 9:8 12:12 24:9,13 28:21 32:15,17 39:21 40:2 56:4 70:10 70:22 71:1,11 71:21 72:25 74:19 79:1,3,8 81:11 83:11 84:2 88:3 89:8 89:22,24 91:14 91:22 93:1 94:1 94:5 96:9 155:3 155:6,25 162:8 184:15 204:18 213:18 214:16 214:24 229:20 230:1 252:21	262:3 268:1 324:6,19 338:9 services 117:19 117:24 118:5 120:2 253:25 273:18 301:3,15 337:4 sessions 194:1,3 194:8 258:6 set 9:23 28:15,20 41:5 89:14 94:23 112:10 131:1 132:13 149:2 171:5 229:14 233:16 235:9 319:6 sets 60:23 61:16 186:21 setting 186:19 settle 164:7,7,18 settled 66:13 154:2 settlement 182:14 seven 123:21 231:13 277:2 severally 310:19 share 109:19 shared 27:13 110:19 174:11 shares 200:5,6 Shari 240:18 Shaw 22:17,19 33:16,19,21 35:14 39:7 42:23 43:5,6 44:4 50:12 158:15 210:19 215:11 313:2 sheet 142:21 sheets 202:18 Sheri 247:4 shield 72:19 76:5 76:22,25 77:1 77:16,17,25 78:8,14,19,24 186:12 217:21 242:6,9 shift 19:10 51:1,3 51:4,6 74:1 161:12,12,13,14	173:18,18 283:3 283:4 287:15,16 328:20 shifted 191:4 shifts 125:10 283:23 305:6 ship 40:24 shop 36:13 41:9 218:4 shops 74:12 short 62:25 63:5 93:12 166:23 177:6 212:4 240:1 289:15 295:13 322:12 short-circuiting 264:20 shortages 305:5 shorten 59:6,9 shortened 33:23 shorter 129:22 shorthand 107:12 123:7 shoulder 218:8 show 11:18 35:14 102:1 188:20 276:20 showed 188:21 189:19 276:18 276:23 306:20 306:25 327:7 showing 168:18 169:12 shown 7:5 263:10 shows 158:16 269:10 shut 213:3 side 126:6 149:21 149:21 244:11 281:15,19 317:21,22,22 sides 153:3 sign 18:23 21:2 136:23 144:21 200:8 Signaure 333:23 signed 18:11 26:6 32:10 37:15,25 118:9 148:8 178:1	187:25 296:24 300:9 301:11 331:10 significant 31:25 39:1 92:3 94:24 95:4 133:24 158:5 159:25 165:9 176:24 223:6 229:14 235:10 323:2,4 significantly 20:9 97:13 169:7 303:4 323:19 signing 156:1,2 182:13 similar 170:19 194:8 260:6 286:7,8 290:1 similarly 1:4 2:4 simple 49:1 147:1 simpler 16:1 simplify 149:24 simulator 185:22 185:25 Sinkler 1:15 sir 63:22 263:7 sister 22:23 sit 84:19 129:25 181:22 site 13:6 24:6 30:25 36:6,9,10 36:19,23 39:25 41:19,20 42:2 43:20,22 44:24 48:5 50:11,13 50:14,19 53:7 53:10,15 56:6 74:14 81:12 104:5,17 128:25 129:3 131:17 141:12 157:18 157:20 164:12 164:20 168:18 169:12 178:24 186:4,6,24 217:18 244:13 263:10,14 327:24 siting 214:18 sitting 7:24 9:21 129:8 250:1
--	---	--	---	--

situated 1:4 2:4	solve 218:16,18	287:7 290:2	195:19,23 196:2	165:5 167:5
situation 104:6	218:20,24	292:6	spoken 8:2 196:7	stat 327:25
115:10,25	solved 218:22	Spalding 2:12,15	196:8	state 1:1,8 2:11
six 40:14,15 69:1	somebody 37:15	5:19,25 7:15	spreadsheet	6:16,23,25 61:9
87:1 153:11	114:5,12 115:15	speak 149:20	142:13 294:11	80:16 85:8
228:1 231:4,8	117:7 130:1	194:22 269:23	294:13	87:19 92:5 97:1
232:2,5,7,13,15	137:22 183:9	330:16	SS 226:2	105:9 158:5
232:17,25	197:12 207:9,12	speaking 193:22	stack 78:14,16	159:9 192:14
266:17 284:11	243:25 289:25	speaks 235:16	219:4	269:7 311:14
six-month 68:8	296:14 316:16	specialist 4:9 5:1	stacked 11:11	321:5,8 334:5
68:17 86:17	331:14	6:21 7:2 61:1	14:10	stated 32:24
92:21	somewhat 59:6	63:2,6 86:3	staff 1:9 3:7 6:15	221:8 232:12
six-story 40:21	65:20 73:12	93:5,8,13 138:7	32:3 39:22,24	233:13 235:20
size 40:20	soon 275:6	138:11 151:10	95:22 96:1,9,23	statement 63:12
SKED 123:4,7	300:17	151:13 174:15	125:13 143:9,13	81:6,16 92:15
136:9	sorry 15:2 27:16	177:3,7 239:22	174:11 177:21	137:5 183:25
skeptical 125:6	80:6 89:2	240:4 294:20,24	181:18 192:13	223:25 224:18
235:17	152:17 156:2	295:10,14 322:8	258:3 263:9,12	227:19,23,24
skepticism 94:6	195:7 198:15	322:13 333:18	263:13,20 264:5	235:15 236:3
111:2 282:9,11	205:14 223:20	specific 25:1	264:14,18,25	251:18
282:13	241:12 260:22	61:13 83:19	265:16 266:1	statements
skill 60:23 61:15	265:12 266:9	88:17 128:15	300:8,20 301:17	178:9,11 276:3
171:10	291:24 302:9	177:18 201:22	staffing 156:25	states 67:19
Skip 99:9 210:12	325:24	212:25 219:22	169:6 287:17	96:24 242:14
slide 67:4,6,11,12	sort 69:23 89:1	231:3,7,15	staged 102:4	stating 254:20
67:18 69:12	162:3 218:11	234:3,6 238:24	standard 206:16	stationed 270:23
156:9,11 159:13	sorted 45:3	248:9,10,11,12	317:20	status 72:24
240:10 242:5	313:22	248:15 258:23	standpoint 315:3	92:13 120:9
245:2 268:22	sound 50:25	258:25 259:2	start 7:19 8:19	229:6
slightly 14:3	125:3	264:8 278:1	28:9 52:12 90:5	stay 297:17
small 14:4	sounds 259:5	300:23	104:4 116:21	steam 77:5 111:9
smaller 41:5	329:22	specifically 38:22	150:17 153:16	212:19,20,21
116:15	source 11:14	105:8 128:21	168:7,13 185:17	steel 77:6,9 78:9
smallest 25:20	sources 9:18 10:6	148:1 218:3	206:7,20 272:25	78:10,10,11
Smith 6:23,23	10:20 11:3,5	259:14 316:10	313:17 332:10	Steering 269:21
99:4,9 118:6,10	South 1:1,7,8,9	318:1	start-up 289:23	stemmed 29:25
120:7 210:12	2:9,11 3:7 4:2	specifics 18:15	started 16:4 28:1	stemming 307:21
336:23	5:8 6:10,14,24	128:12	41:21 45:3 52:6	step 150:10
SMS 33:14,19	7:21 24:10	speculative 85:7	53:6 60:24	Stephen 1:12
snapshot 105:11	79:20 157:25	87:17 95:14	62:11 115:13	3:17 7:9 79:15
softening 69:24	158:2,5 162:12	257:6	168:3 187:18	163:13 335:5
software 61:11	179:8 181:19,21	speed 78:5	starting 36:14	336:18 338:1
solar 10:19	192:12 230:1	spell 114:2	40:4 51:18 52:4	STEPP 3:3
solely 331:12	321:7 334:5,15	spend 160:8	53:15 97:6,7	steps 47:14 128:6
solicitation 184:6	337:23 338:9	spent 124:8	144:2 163:23	308:16
solicited 17:18	Southern 22:23	133:6 202:5,7	170:2 185:14	Steve 5:5 93:10
solid 160:7	35:13 53:7	202:12 255:18	186:22 187:19	93:16 131:15
solution 110:5	76:14 158:3	311:2	229:3 289:23	177:5,10 180:21
321:2	168:22 169:10	spiked 10:9	302:13 311:12	239:24 240:7
solutions 33:20	209:17 272:9	split 284:9 331:13	starts 42:13	320:11,16,18,20
161:2	273:17 286:17	spoke 195:1,5,14	113:4 119:12	320:22 322:10

322:16 333:19 stick 146:4 166:3 166:5 176:14 stock 200:2,4 309:9 Stokes 60:14 61:12 66:17 Stone 18:14 22:18,18 23:19 24:1 44:15,15 53:23 54:3,14 157:6 168:8 stop 48:2 64:23 stoppages 305:6 stopped 27:25,25 203:5 stopping 237:10 storage 101:24 101:25 stored 102:4 straightforward 83:13 strain 115:17 207:5 streamlined 50:5 169:4,9 streams 54:23 168:24,25 287:7 311:22 street 1:16 2:6,13 2:16,24 3:4,14 3:19 4:5 5:7 14:20 stretch 102:25 strict 209:25 stricter 210:25 strictly 328:17 strike 134:16 197:10 214:9 275:4 strongly 126:8 310:23 structural 21:17 33:17 40:13,15 41:2,14,15,18 41:19 42:11 structure 19:8,9 19:23 20:3,24 21:9 23:7 24:11 27:1,12 78:9 130:7 312:22,22	studied 246:6 249:2 studies 156:25 study 247:1,2 249:4 stuff 126:24 sub-modules 33:17 subcomponents 40:25 41:2 subcontractor 88:14 303:2 subcontractors 88:17 subcontracts 245:11 315:24 316:21 318:7 subject 52:22 137:18 205:20 submission 72:25 85:14 214:17 submit 16:7 47:24 79:7 85:17 86:1 87:10 163:9 214:8,11 215:1 submitted 9:8 79:2 84:1,24 86:24 87:5,24 88:4 90:19 163:17 203:21 204:2 214:14 246:18 293:20 submitting 87:21 203:9 204:10 submodules 36:2 36:3 subparagraph 205:18 221:18 221:24 223:21 subsequent 48:12 246:14 subsidiary 1:7 2:10 44:14 substance 7:20 192:16 substantial 65:6 65:18,21,25 66:2,18 71:24 72:8 75:11,13	75:17 148:3 153:18 161:25 163:1 165:1,2,5 169:25 170:4,6 170:8,11 171:13 237:19 290:12 298:4 314:14 substantially 289:11 substitute 150:13 succeed 183:22 184:7,8,12 331:22 succeeding 331:22 successful 103:12 164:5 203:1 successive 66:11 suggest 320:14 330:9 suggested 107:9 292:12,16 suggestion 35:22 319:25 320:1,3 329:21 suitable 10:23 Suite 2:16,24 3:14 sum 199:9 summary 229:21 Summer 13:6 17:3 22:21,22 30:11 35:19 36:19 39:8 49:13 67:6 111:10 157:17 184:8,12 189:8 203:16 212:16 266:3 331:23 338:13 Supercritical 9:22 superficial 130:4 supplementing 190:18 supplier 35:8 suppliers 16:16 33:9 35:7 supply 26:12	32:25 42:5 313:21 supplying 24:6 33:5 50:18 315:25 support 25:21,22 25:23 48:10 87:6 169:18 191:14,14,17 242:21 258:2 289:23 supported 186:14 supports 78:13 suppose 276:25 322:3 supposed 36:1 42:4,7 224:4 Supreme 85:8 87:20 sure 7:22 43:25 57:6 60:8 64:4 64:24 96:20 119:24 138:5 169:7 181:15 196:22 208:18 208:20 214:1 221:8 222:4 228:7 233:9 238:12 241:13 244:5 256:8,9 260:23 269:4 272:13 282:5 286:7 287:25 290:8 294:3 299:8 329:21,22 surprise 135:4 surprised 122:17 129:23 130:8 250:6 swear 7:7 swing 146:15 switch 153:7 sworn 7:10 system 77:8,15 154:12	172:20 174:25 tactic 224:16 tail 128:5 147:14 328:8 take 8:1,10 20:7 30:2 34:12 45:23,23,25 46:2,13 47:3,14 49:11 50:1 58:7 62:25 67:25 69:17,21 83:16 85:20 86:14 95:17 97:21 100:4 119:19 135:12 140:5,14 141:7 147:2,4 151:1 153:8 157:3 163:3,4 172:8 180:12 182:25 183:15 188:22 192:21 193:12 199:9 237:11 239:13 253:16 255:8 265:11 272:22 303:24 307:2,7 308:17 318:17 327:6 328:19 taken 1:17 5:6,13 5:21 26:22 28:6 29:2 63:5 93:12 138:10 140:12 177:6 192:15 193:16,19 200:13 213:18 240:1 244:3 245:20 295:13 311:20 322:12 takes 49:10 168:25 169:1,2 253:17 talent 58:24 talk 28:4 52:20 76:22 132:3 144:4 182:1 185:10 217:19 248:4 294:16 298:7 304:25 322:4 talked 33:14 39:3 41:18 75:4
--	--	---	--	---

89:17 98:14 115:4 129:4 143:22 167:2 170:19 176:14 223:8 326:9 talking 40:12 41:13 48:4 53:12 111:5 140:25 144:13 184:3 194:14 208:3 222:4,7 227:16 229:17 236:9 246:8 247:18 248:7,13 249:16,20 253:20 259:2 265:5,13 273:2 300:5 318:23 325:11 tank 77:12 tape 86:4 174:16 177:2 322:7 tapes 93:7 target 25:14,15 25:19 27:2 67:7 68:21 175:1 244:24 268:14 268:23,25 285:17 targeted 47:17 task 45:23 46:6 88:18 156:24 228:19 tasks 68:1 81:5 243:22 tax 146:11,20 166:13,13 176:17 291:16 291:19,22 TBA 111:23 team 16:11 17:19 27:16 31:17 35:14,15 40:1 57:20,20,23,23 58:8,15,16 59:1 59:7,22 60:6,9 60:11,12,16,16 60:22 61:16 64:6 65:23 66:5 66:8,13,15,17 70:5,17 84:8,16	84:20 85:3 91:6 96:2,3,5 110:16 110:22 111:1 125:22,25 126:8 129:16 134:24 134:25 144:13 144:14 166:23 169:14 170:17 188:13,13,14 190:2,2,15,18 210:7,8 236:7 236:14,16,24 237:18 238:19 239:18 240:2,11 240:20,25 241:7 241:14,17 242:8 242:14,16 243:3 243:8 244:6 245:1,16,19 246:10,12,24 247:3,6,16,20 247:20 248:10 248:12 249:7,11 249:13,23 250:4 250:11,16,21,22 257:5,7,11 262:10,12 263:5 263:14,15,15,23 264:9,16,16,23 265:1,24 266:21 267:1,22 268:3 268:5,8 274:19 274:22,25 276:17,18,21 287:9 288:18,19 289:18 290:17 298:15 312:21 313:9,19 315:18 316:3,6,17 318:4 323:22 324:23 325:23 326:11,15 338:11 team's 61:19,22 95:11 238:16 267:25 teams 35:11 105:18 138:2 187:18 238:2 240:23 270:13 technical 151:17	techniques 223:10 technology 13:1 13:4 16:21 17:2 telephone 77:21 128:18 tell 22:12 38:12 46:11 51:17 62:8 83:11 92:25 94:1 95:13 104:25 105:5 107:14 111:19 113:22 123:6 127:15 152:25 191:23 242:19 243:1,6 275:10 288:15 292:16 295:25 296:5 330:13 telling 135:3 137:12 247:7 248:10 253:4 260:15 264:11 279:10 tells 325:6 ten 47:5 48:9,11 86:3 tended 37:20 Tennessee 61:9 111:18 tensions 43:18 tentative 152:8 tents 101:23,24 101:25 175:13 term 45:10,11 53:1 75:14 114:11,18 137:22 304:3 310:19 termed 111:22 129:2 terminated 198:5 terminology 214:1 terms 94:12 177:15 229:9 304:25 testified 7:10 83:3 89:18 166:10 170:5 209:3 225:6	227:9,15 233:3 234:6,13 237:16 267:10 273:25 276:13 277:3,5 293:1 312:15 333:2 testify 170:2 202:4 233:18,25 322:1 324:5,8 testifying 247:25 264:22 testimonies 96:8 testimony 8:15 32:17 37:9 40:2 64:5 73:3 79:7 79:12,14,20,24 80:9 81:10,17 82:11 83:13 86:25 87:6 89:1 89:15,23 90:5 90:16,17 91:15 100:5 101:3,9 102:15 103:18 103:23 105:5 163:9,12,17,19 166:15 168:6 169:21,25 170:22 171:7 172:1,2 173:7 194:20 226:18 227:16,17,22 228:2,12 229:18 229:19,21 230:9 230:16 232:10 232:14,21,23 233:12,19 234:21 235:1,2 235:11 236:1 246:1,2,14 247:9,19,24 248:1,2,3 254:9 254:14 257:5,21 263:3 264:1 267:8,14,15,19 268:1 293:20 297:21 298:4,16 311:5,6 322:20 323:1 324:10 325:10,15 326:22 331:25 336:18 338:1	Texas 217:3 text 282:2 Thank 15:9 63:13 63:25 86:5 192:3 322:5 thereof 334:11 thing 10:16 45:14 55:10 58:25 62:21 77:22 78:7 85:23 102:2 116:17 125:5 158:18 163:24 169:10 175:23 203:8 218:1 247:12 250:7 285:8 290:6 305:1 things 9:11 10:19 10:20,22 13:10 14:6 20:5,6,16 21:21 25:15,18 25:22 26:12,13 26:23 27:21 30:5 36:13,15 38:18,21 40:20 40:20 41:8 46:12 49:5,12 50:3,20 51:11 52:7,10,17 54:16 55:2 57:19,25 59:17 70:7 74:16 75:4 75:6,25 76:2,18 81:22 82:14,19 82:20,25 88:15 98:13 100:1 101:10,12,16 103:1,4 104:8 109:20 125:3 126:14 128:1 134:6,11,13 135:4,7,8,11,13 135:25 144:15 144:23 145:25 146:2,3 147:24 149:24,24 150:3 156:25 159:20 164:7 166:25 168:19 175:9,13 175:22 176:23 186:18 187:25
--	---	--	--	--

211:25 213:3	180:3 181:5	third-party	tightened 147:3	206:3,9,23
215:14 218:11	182:14 183:2	106:13 108:1	time 1:14 5:3 8:9	208:3 209:9,11
219:21 224:16	184:2 185:11,15	110:24 111:3	9:3,14,17 10:1,4	209:16 211:24
243:23 245:8	185:18 191:7	121:13 131:6	10:8,21 16:3	213:2,9 215:11
250:25 253:22	194:16 195:3	132:4 139:13	17:20 18:13,25	215:17,19,24
287:22,23	196:24 198:1	207:16,19	23:10 25:17,19	216:23,24
288:11,13,18	199:3 200:5,17	Thomas 4:4 6:9,9	26:9,11,14 27:2	217:18 219:15
291:12 302:25	200:21 202:2	Thompson 1:18	27:8 28:1 29:3	224:4 225:10
308:21 309:3	204:3,22 206:5	13:19,20 334:3	31:25 33:19	231:3,4 238:5
315:23,25 316:5	206:10 207:7,13	334:21	38:16 39:7 40:7	239:13,24 240:6
316:6,14 317:1	207:19 210:2,3	thought 14:22	42:16 43:6,14	245:22 247:7
317:8 325:6	210:4,12,20,21	15:2 23:13	46:20 47:7	253:24 262:13
330:17 331:16	215:6 216:8	27:24 35:5 45:6	49:11,12 50:13	271:8,22 276:15
think 11:22 20:2	217:11 219:13	45:7 53:9 54:24	51:14 54:13	278:7 279:20
21:15 22:7,25	219:14 222:6,15	62:19,22 66:6	58:11,21 59:3	281:1 282:11
26:7,16 27:8	223:2 224:1,15	66:15 92:20	62:5 63:3,7	283:18 287:3
31:23 32:10	224:19 225:1,6	100:1 101:13	67:24 73:7,14	288:8,16 289:17
35:9 39:24	227:1,8 230:15	110:1 113:13	74:22 86:24	292:3 293:19
40:22 42:11	232:19 233:2,8	124:2,22 126:1	87:5 88:10 93:3	294:21,25
43:17,19 44:25	235:15 237:16	128:5 135:12	93:10,15 98:10	295:11,15
46:23 49:20	240:15 244:3	145:7 146:16	99:16 106:5,6	296:25 301:6,18
51:18 53:11	245:12,19	154:17 160:3,9	107:25 108:9,13	301:24,25 304:8
57:4,12 58:21	246:23 248:3	167:11 174:6,22	108:20 111:11	304:9,11 307:25
59:4 61:8,24	257:14 258:18	179:20 180:1	111:12 114:14	308:5,5,6,11,17
63:12 66:10	260:2,3,5,10,15	183:7 184:21,25	114:23 115:1,11	308:22,23
76:2 81:2 83:1	261:22 262:1,20	208:16,23	116:2 119:8,13	312:25 313:4,20
83:10,12 85:1	265:9 267:13,15	217:16 218:1	119:15,20,23,24	315:5,6,11
85:22 93:25	267:23,24	219:2,15 265:13	122:25 123:17	317:18 322:10
98:7 99:1,16	276:14,19	287:5 289:5	123:23,25 124:3	322:15 323:24
100:15 101:22	280:20 281:18	292:18,18 296:4	124:8 125:12,21	326:2 328:9
102:1,10,11	282:15,19	303:17 304:20	126:17 129:5	329:23 330:2,8
110:8,18,23	284:23,24,25	306:20 313:17	130:11 133:6,9	330:22 332:24
113:20,24	285:10 286:19	327:3	133:11,19 135:3	333:20
114:19 115:4,12	288:21 289:15	thoughts 282:6	138:8,12 144:1	timely 148:23
120:17 121:19	291:4 294:6	292:20	144:6,12 146:5	165:18 224:10
122:20,22,24	296:12 300:1,8	thousand 38:2	146:6,11,20	times 21:19
123:21,22 126:4	300:13,16	199:17 287:17	147:13,23	78:22 201:24
126:6,9,12	302:12 303:14	three 12:21 17:22	150:21 151:11	206:19 211:21
127:12 128:25	304:4 306:7	23:10 25:7	151:14 152:20	214:4 216:10,13
132:20 134:8	307:8 308:5	30:10 109:10	153:8 154:19	217:8 294:1,4
135:18 146:7	311:20 313:14	110:6 156:6	161:10 166:12	317:11,16
148:4 149:9,11	316:13 320:25	181:18 204:5	168:3 172:22,24	timing 64:13,15
149:20,21 150:7	321:2 322:22	216:12 294:4	176:1,16,16,19	92:11 229:4
152:15 153:24	325:14 329:6,9	329:5	177:1,9,25	308:4 309:18
154:17 158:22	331:24	three-foot 78:11	184:23 185:6	tip-off 114:19
161:1,3 164:5	thinking 9:2	throwing 224:16	186:19 189:20	title 15:19 16:5
165:15,20	third 42:20 44:2	tickets 321:21	195:1,5,7,13,14	18:18 67:6
168:10 172:11	115:9 137:5	tied 25:8 30:14	195:19,23 196:2	178:13 224:8
172:17 173:5,11	142:18 220:20	164:25	197:9,19 200:25	to-go 172:10
175:22 177:15	221:25 241:4,6	tiered 51:20	202:4,7,12,18	241:15,18
177:20 178:13	273:21 329:6	ties 158:4 159:9	203:21 204:1,21	260:20,25

261:14 266:19 266:23 267:8 326:8 today 5:7 7:23 14:16 129:8 192:2 193:11,19 194:9,12,13,20 228:14 250:1 263:11 333:20 today's 5:2 63:14 93:14 177:8 240:5 322:14 Tokyo 39:17 223:17 told 82:8 85:6 111:21,24 127:20 128:6 170:22 231:1 234:5,22 237:22 258:18,21,23 261:21 265:2 279:23 287:8 291:5 292:18 317:18,19 318:4 318:8 323:1,4 331:17 tolerances 42:16 tools 99:24 top 77:13 112:16 194:16 198:25 236:19 257:2 266:15 268:23 282:3 293:23 301:10 topic 74:4 179:12 258:12 264:12 264:17 267:19 topics 38:1,23 79:24 180:19,25 181:1 183:3,4 320:12 Torres 60:10,23 66:16 111:6,15 111:19,21 112:2 206:23 210:9 216:5 Toshiba 38:14,24 39:10,12,16 43:25 147:7 167:18 189:7,10 223:4,5,7,13,14	223:18 224:16 309:4,8,11,13 310:9,13 315:1 331:9,13 Toshiba's 38:17 39:11 tossed 111:22 total 26:3 32:11 146:14 166:17 200:17 229:19 279:15,18 283:6 283:23 304:22 touched 199:6 tout 158:19 tracking 142:13 154:11 trade 317:9 training 36:22 211:15,16,17 trajectory 120:12 transcribing 7:25 transcript 4:13 7:1 8:13,15 229:25 230:6 334:6 338:8 transcripts 200:12 transfer 160:11 167:18 transition 98:17 transitioned 206:21 transitions 153:14 translates 173:17 173:19 transmission 26:2 196:16 201:19 211:21 214:15,18,19 317:22 transmitting 43:22 transpired 247:8 travel 216:17 321:13 traveling 78:4 tried 50:22 125:25 trigger 307:19 triggered 31:3	307:20 trip 216:20 321:18 trips 321:17 Troutman 118:10 119:3,6,8 121:21 127:12 127:16,17 128:18,23,25 129:9 292:17 296:3,8 300:13 301:7 truck 40:25 trucked 36:6 true 214:11 220:4 220:9,13 221:8 221:13 222:23 223:25 224:12 224:18 231:1 232:9,22 235:20 236:4 241:7,13 248:14 251:18 256:4,12 260:18 260:23 262:9 264:7 266:25 268:25 274:18 274:24 275:5 278:24 279:12 292:12 297:4,12 299:4 301:13 312:13,20 313:10 314:6 318:20 334:6 true-up 154:5,8 154:13,15,16,18 154:21,22 303:16,20,22,22 303:24 311:18 311:23 try 28:6 34:12 35:20 50:4,21 50:23 58:13 88:23 92:7 100:2 150:25 160:14 191:9 193:4 209:19 239:3 292:7 trying 20:15 28:7 29:1 38:16 54:19 55:20 73:22 94:13	102:6 114:14 146:1 149:2 150:1 197:10 247:17 254:7 287:5 288:21 319:14 321:1 tsunami 31:3 turn 12:13 16:15 28:11 42:18 55:11 67:17 71:14 80:12 88:25 90:4 100:6 103:17 105:4 118:8 119:25 163:20 169:20 205:13 219:3 221:23 225:3,23 244:4 244:20 245:25 246:1,2 251:7 274:13 280:2,3 294:7 311:4 322:21 325:23 327:12 329:20 turned 42:15 268:3,5 288:5,6 turning 16:14 20:3 41:25 78:25 turnover 51:7,7 287:20 turnover/ 287:20 twice 190:24 two 8:24 13:24 15:24 28:2 37:17,18,25 38:10,13,18 39:17 57:19,25 81:22 82:14 96:11 106:24 130:2 140:8 141:14 147:24 148:4 170:16 190:25 191:2 192:1 202:23 203:2,10,12 204:4,13 237:10 242:4 244:20 257:16 272:7,12 286:16 309:5 310:12 314:25	329:2 332:7 two-page 180:11 two-sided 180:12 two-step 15:21 two-thirds 26:18 twofold 181:8 TX 2:17 Ty 118:10 119:3 121:21 127:12 250:10,11 300:13 tying 250:9 type 34:16 76:6 99:25 116:14 119:14,18 212:5 286:10 types 40:11 41:12 typical 181:10 typically 62:10 226:9,13 227:5 227:20 258:1
U				
U.S 32:2 189:7 331:20 U2 226:1 U3 226:1 Uh-huh 86:11 107:4 168:2 169:23 321:25 UK 178:2 ultimately 10:24 23:6 117:10 184:16 256:7 291:23,24 303:19 unable 152:4 unchanged 286:5 uncomfortable 32:1 underlying 93:2 undershooting 304:17 understand 7:22 8:7 48:3 64:10 68:13 69:7 121:9 139:11,12 180:15 183:25 193:3,5,8,14 247:14,17 248:25 249:3				

254:2 256:9	units 8:24 9:1	23:11 29:7	vein 177:16	95:14 109:17,22
264:19 270:20	16:18 21:15	49:16 50:16	vendors 42:14,15	110:2 113:9,13
299:12 304:13	28:5,8 29:10	191:14 192:1	74:12 218:3	117:7 135:22
315:2 320:16	30:25 33:18	286:17	239:13 315:24	137:1,7 147:4
understanding	71:24 72:9	utility 19:16	318:8	147:12,13 150:6
18:16 22:7	78:21 90:8,25	20:21 25:23	verified 242:14	157:14 158:9,11
63:14 69:5	90:25 91:8	49:6 289:22	vernacular	160:6 164:5
72:23 117:12	146:19 147:10	291:9,10	140:22	176:19,24 185:7
118:18 120:8,14	166:2,12 170:4	utilization 85:25	version 302:17	185:12 207:10
149:5 154:4	172:9 178:2,3,3	328:15	302:20	207:11,13,20,21
181:24 218:25	178:5,6 191:1,1	utilize 21:12	versus 5:14 202:5	207:22 226:24
243:2 279:7,19	191:2 197:25	156:23	241:16 299:17	260:17 261:11
306:15 308:7	203:11,13,25	utilized 29:18,21	vessel 40:16,17	262:22 299:14
understated	251:15 266:3	33:2 45:20	77:7,9,12,13	306:3
189:22	284:9 290:13	85:13 114:17	186:19	views 110:16
understood 57:6	338:14	154:12 291:10	vice-president	violate 130:20
66:23 119:25	University 158:1	utilizing 58:20	178:14 211:13	277:23
161:10 164:14	unrealistic	85:13	211:14,20	Virginia 76:9
164:17 177:21	125:14	<hr/>	victories 135:14	217:6
179:12 181:16	unreasonably	V	135:16	visit 39:17 216:10
208:18 331:19	205:24	V.C 13:6 17:3	video 5:5 7:1	216:14,15 217:2
undertake	unsuccessful	30:11 35:19	93:9,9,16 177:4	217:5,8,13
173:16 188:10	191:16	36:18 67:6	177:4,10,10	218:12,13,15,19
undertook	unusual 248:2	111:10 157:16	239:23,23 240:7	218:20,22,23,24
160:13	317:24	184:7,12 189:8	240:7 322:9,9	218:25 223:17
Unfavorable	update 67:7	203:16 212:16	322:16,16	309:4
228:21	70:23 72:16	266:3 338:13	333:19	visited 39:25
unfettered 190:7	240:3,11 338:12	V.S 331:23	videographer	209:16 216:12
190:13 315:22	updated 74:25	validate 46:13	5:10	217:4
unfortunately	79:4	70:2	videotape 4:9	visiting 141:12
33:12 189:18	updates 70:10	validated 323:22	5:1,12 6:21 7:2	visits 35:12 39:2
unhook 221:3,9	71:3,9 336:14	validating 88:16	7:5 63:2,6 86:3	263:10
221:15	upgrades 31:22	validation 266:10	93:5,8,13 138:7	visual 61:2
unhooked 221:11	use 24:10 59:16	value 45:19	138:11 151:10	Vogtle 49:13
unit 9:22 14:11	69:3 84:22 85:9	159:14 160:4,10	151:13 174:15	290:2
30:11 40:14	95:12 205:7	values 97:3,4	177:3,7 239:22	voiced 96:10
41:21,21 42:9,9	229:12 235:7	valves 13:10 41:7	240:4 294:20,24	209:17
60:25 64:17,18	237:19 244:2	variable 24:19	295:10,14 322:8	Volkswagen
65:2,3,11,12,15	257:6 259:7,13	27:14 311:1	322:13 333:18	77:21
65:15 66:3	261:6,10,10	varied 174:5	view 89:21	voluntarily 198:5
73:11,12 74:11	262:18 291:7	variety 38:1	115:16 135:16	278:20
157:17 191:1,1	301:19 302:1	74:11 82:18	145:5 149:17,18	VP 143:11 211:20
191:4 203:16,18	325:14	88:11,21 305:4	165:12 191:21	249:10
211:13,13	useful 124:24	various 62:2 69:9	206:24 207:17	VRA 40:6,6
212:16 213:7,11	137:13 208:8	80:17 227:8	318:25	vs 1:6
214:20 226:3,4	272:25	228:13	viewed 10:2	<hr/>
280:6 283:13,13	usefulness	vary 302:21	11:15 13:14	W
284:5,10,10,19	124:19	vast 161:3 186:7	15:25 16:13	W 2:16
285:1 289:10	Users 179:8	307:1	17:4 22:25	waiting 195:10
316:25 323:16	181:19	vastly 62:23	27:10,15 57:7	waived 7:6 310:1
323:18,20,23,25	utilities 19:15	vehicles 175:9	85:23 87:17,18	333:23

waiving 259:1	181:8,9,12,15	135:12	136:17 143:22	169:18 171:2,18
walk 48:6 79:23	181:25 182:9,14	we're 8:17 11:20	went 11:1 38:3	171:22,23 172:8
89:10 144:3	190:10 217:14	14:20 18:1 37:3	44:19 54:17	172:9,21 173:14
walked 331:18	217:15,18,23	40:12 41:13	55:3 77:6 92:1	177:13,18,19
Walker 225:11	261:8 278:9	51:2 52:9,13,20	115:11 146:1	178:8,11,12,23
241:1,2 246:23	300:23 303:9	56:8 64:24	151:19 168:19	179:6,17,25
249:9 259:22	304:15 319:12	66:24 74:5	169:13,18	180:2 181:23
Walker's 249:11	333:12	83:21 87:25	188:17 216:19	182:1,3,7,19,23
wall 31:3,4	wanting 87:20	89:1 101:3	216:25 236:17	182:24 183:21
want 7:19,21	135:22 255:9	117:2 122:9	247:10,12	184:4 185:1
8:19,20 11:18	277:14 319:17	139:4 140:25	248:12 287:8	186:23 187:6,20
12:14 17:12	warned 291:6	151:17 167:14	289:18 325:16	188:11 189:1,4
18:1 22:12 28:3	warning 127:2	245:21 252:14	weren't 68:23	189:14 190:9,10
28:9 42:17,20	226:12 285:10	253:11,20	82:3 133:16,24	190:10 191:24
45:18 64:3,4,24	Washington 3:23	294:20 301:8,8	144:23 150:16	203:5,18 207:11
67:2 76:21	119:10	we've 7:16 14:25	246:16 255:17	207:21 210:19
79:11,23 85:15	wasn't 29:11	55:13 59:18	278:13	212:10 222:2,9
85:16,17,19	84:18 92:5	62:24 74:20	Westinghouse	222:12 223:11
86:12,14 90:5	103:5 121:23	76:22 89:17	12:16,22 13:4,5	223:15 225:11
92:9 93:20	134:8 147:12	120:2 121:6	14:9,10 15:13	225:16 228:23
95:17 100:4	150:1 201:12	139:3 141:19	16:8,17,19,21	229:5,8,14
103:9 107:1	208:18 209:25	159:13 167:1	17:2,3,9,15,21	235:4 238:2
109:16 113:20	218:23,24	172:2 184:11	17:25 18:14	239:16 275:19
113:25 115:20	223:15 234:7	202:3 233:15	23:14 24:1	277:20 278:10
136:4 141:19	261:10 276:22	237:10 288:25	25:22 34:8 35:1	286:15 287:7
144:4 156:8,23	283:18 298:25	300:14	35:4 39:7 42:23	288:17 289:9,13
160:8 169:24	309:16	Webster 18:14	43:3,3,8,20 44:4	289:17,20,22
173:6 183:8	watch 135:3	22:18,19 23:19	44:7,15 50:11	290:6,19 300:7
190:12 227:16	water 13:23,25	24:1 44:15,16	50:17 51:15	300:12,14,20,25
239:11 243:17	14:1,2,8 16:22	53:23 54:3,14	53:4 57:15 64:8	301:19 302:1,9
243:18 249:3	31:4,4,12 77:12	157:6 168:9	64:13,16 67:15	302:12,16,19,22
250:23 260:11	Watson 107:20	WEC/CB&I 235:7	69:3,5 72:15	303:6,12 304:15
261:4 262:20	112:23,24	246:5	75:2 82:8 84:11	305:13,19 307:7
264:21 265:19	Watts-Bar	week 275:11	86:9 87:2 89:12	307:10 308:19
277:23 285:1	111:17,20	280:21 283:2	91:24 92:16	309:1 313:1,3,5
289:3,6 317:23	way 2:20 3:9 21:5	weeks 123:21	94:3 95:3 99:1	314:6,23 315:21
322:21 324:9,14	23:1 48:13,17	277:2	105:13 106:3	317:7,17 325:3
325:21,23	54:22 106:8	weighing 11:2	109:18 115:6,15	329:25 330:4,6
329:20 331:24	111:22 125:22	welcome 15:1	124:10,17 133:1	330:9,15,23
332:20	149:19,22	weld 78:16,17	142:11 144:16	331:2,6,15,17
wanted 10:17	196:23 224:22	welded 41:10	144:22,25	Westinghouse's
43:24 57:5	224:24 233:10	welding 61:2	145:11 146:17	70:2 79:4
58:23 63:12	251:13 252:10	74:5	146:19 148:12	105:23 290:11
82:2 95:8	253:11 254:24	Wenick 118:9,14	149:1,8,9	314:20
101:23 115:18	255:7 256:2	118:16,19,21,22	150:15,24	Westinghouse...
144:20,24,25	270:9 289:2	118:25 128:2,10	152:19 153:4,11	80:17 81:18
145:11 160:3	312:22,22 313:9	128:14 131:7,21	154:10,10,19	83:4 92:12,24
161:11 162:5	ways 41:17 51:20	132:6,23 133:14	157:2,4,10	93:22 94:23
165:25 167:22	52:15	137:2,10,11,17	158:8 161:17	228:17 229:12
169:7 170:25	we'll 8:11 63:2	137:23 293:5	162:4,5 167:20	235:9
173:8 180:5	79:11 121:25	Wenick's 136:4,7	168:8,22 169:11	Westington/C...

228:14	words 234:16	292:6,22 300:22	222:4 225:9	203:16,18
white 125:4	work 34:3 36:19	works 21:5 48:3	235:15 237:14	211:14 212:17
Wholly 1:7 2:10	46:10 50:23	320:23	238:12 241:21	213:7,11 231:8
Wicker 240:18	51:3,6,8,13	world 18:23 21:5	256:12 265:15	279:13,18
247:5	56:10,12,18	22:4,6 23:17	269:6,13 270:12	286:10 291:5
wife 295:25	58:20 61:20	30:7,15 33:2,4,8	276:1 279:15	325:5 335:14
Williams 271:2	64:5 73:24	48:4 177:24	284:22 289:15	337:5 338:5,11
willing 43:12	74:15 82:21	178:7 184:14	290:21 291:1	338:23
247:11 304:22	88:14,19 104:8	worldwide	292:15	1.0 68:20 81:4
Willoughby	104:10 105:18	331:21,22	year 64:19 65:12	1.07 226:2
257:17	111:25 112:1,5	worried 227:14	65:15 149:15	1.15 68:7,15,22
WILMER 3:21	116:12 119:16	worry 15:8	186:24 193:17	68:25 69:6 79:5
Wilson 6:25	125:1,2,9,10	worse 51:9 57:3	195:4,18,22	84:3,22 86:2,16
Wind 10:19	150:24 153:17	115:11 125:3	196:1,4 201:16	87:8,12 92:7
wing 249:9	154:6 164:10	226:4	217:10 231:8	94:16 97:2
Winick 281:18,24	168:16,24,24	worth 26:23	232:17 304:10	105:24 228:1
wisdom 53:9	169:1,3,5	62:12 288:22	305:14	231:22 233:21
wise 238:4 239:5	171:19 176:3	worthy 282:22	years 60:24	234:2,15,20
withheld 103:3	185:19,24	wouldn't 83:15	125:24 148:24	241:16 259:7,13
261:20	187:21 190:1,2	102:20 109:22	164:4 186:20	259:24 260:9
withhold 51:15	213:4 218:5,9	160:7 172:14	204:4,5 211:23	261:19 262:15
52:6 102:25	237:7 246:9	243:4 244:10	223:8 249:17	266:17,20 323:3
205:24 261:18	247:15,20	265:17 271:13	314:2 318:3	323:7 324:20
withholding	250:11,12,22	319:5	323:12,16 328:3	325:1,4,14
51:19,21 52:4	251:3 268:8	write 224:7	328:4,5	326:8,23,25
52:17,18 75:5	276:23 283:2,6	292:13	yesterday 63:24	1.4 105:25 241:18
100:3	283:12,22 287:6	writing 224:23	320:12	259:13 262:15
withstand 31:7	287:18,19 289:4	written 137:20	yielded 12:25	326:17
78:3	300:22 303:4,7	224:22 243:1,7	17:24	1.40 84:23 241:9
witness 7:4,6,8	305:6 315:18	267:5	Young 60:10 61:6	241:15 266:22
97:24 174:14	324:24 327:23	wrong 20:18	66:16 143:9	1.41 67:20 68:5
180:14 230:7	327:25 328:3,8	222:25	188:14,14 196:3	81:3 226:1
246:20 247:25	328:13,23,25	Wyatt 3:18,18	210:10 240:18	1.5 189:9,12,15
248:6,16,17,24	workday 74:2	6:17,17	244:14 247:5	269:11
248:25 249:18	worked 61:7,17	Wyche 3:8 6:13		1.74 226:2
250:4,15 251:2	111:11 116:22			1/14/15 130:22
251:5 265:12	124:1 190:8			337:11
268:21 273:2	195:25 196:5	X		1:32 138:12
334:13	212:20 249:13	X 40:22,22 335:1		1:50 151:11
witness's 250:19	255:5 270:19	335:17		1:53 151:14
witnesses 200:12	277:1	Y		10 15:19 16:5
202:4 227:8,15	working 60:13	y'all 14:21		18:2,3,7 166:15
232:19 233:3	103:24 104:4,8	yeah 18:18 21:1		166:19 205:13
248:4,5,8 258:2	104:16 123:23	27:16 28:19,25		205:14 286:13
260:3	144:24 145:6	41:17 44:25		336:1 337:22
won 158:18,20	164:11,19	48:8 58:15		338:20
wonder 208:18	171:21 195:17	63:23 85:1 98:8		10-'11 215:17
Woodlands 217:2	195:21 202:5,5	114:4 152:7		10,000 199:13
217:4 244:21	202:7 276:14	158:22 192:1		10/13/14 240:12
word 8:2	282:24,25 283:3	209:10 213:25		10/22/15 122:2
wording 146:21	283:9,18,19	217:22 219:5		337:9
			Z	
			Zeigler 257:18	
			0	
			08 67:24	
			09 67:24	
			1	
			1 27:3 30:12	
			60:25 75:5	
			81:22 82:14	
			86:4,21 93:9	
			94:5 95:8 97:20	
			114:17 120:5	
			157:17 167:10	
			168:13,13 181:8	

10:20 63:3	141 337:14	71:20 80:12	206:10	132:21 133:4,9
10:29 63:8	145 337:16	91:19 92:10	2000 215:17	133:9,15,17
101 241:19	146 70:20	100:8,9 112:6	20006 3:23	138:24 143:23
106 336:24	14th 193:17	112:10 148:11	2004 9:14	144:3 145:10,20
11 32:10 36:24	15 79:12,14,17	148:14 163:2	2005 9:1,14,21	145:23 150:22
37:4,7 38:5,8	80:1 82:7 87:1	164:21 170:5	10:8	151:25 153:15
42:18 44:3	89:2 93:19	222:1 229:4	2006 312:25,25	155:4 156:12,13
80:16 81:17	100:5,6 101:3	337:1	2007 27:7 312:25	161:24 168:10
82:7 167:2	102:16 103:20	192 335:8	2008 24:12 67:24	168:11 170:13
219:3,5 221:23	105:9 107:25	1979 30:11	208:3,6,14	170:13 172:11
228:13 329:17	119:20 120:19	1982 13:7	214:12 215:2,4	200:20 226:18
335:6,20 336:4	133:24 166:19	1994 111:10	307:22 312:15	228:2 230:6
337:25	167:3,6 172:13	19th 72:10	312:24,25	246:15 251:22
11:13 93:10	217:11 228:5,6	1st 152:17 157:4	2010 26:16 40:4	252:6 259:8
11:14 93:15	245:25 251:8		89:20 216:16	267:7 271:7
112 337:1	334:23 336:8,17	2	2011 30:18	274:14,20 275:1
115 2:24	336:24	2 12:14,15 41:21	215:24 216:1,8	280:3,17 281:2
117 337:3	15-year 9:11	42:18,21 44:3	222:1,14	281:8 282:12
1180 2:13	150 116:3 185:18	64:17 65:2,11	2012 216:9 220:5	287:1 288:1
12 53:16,21,23,25	155 337:19	65:15 66:3	220:10	290:14 292:13
54:1 55:12 56:9	15658 266:9	71:24 72:10	2013 220:20	294:16 295:3
285:1 311:12	16 9:16 72:10	73:11 75:5	221:4,10	297:1 298:18,23
336:8	96:14,18 97:20	82:16 93:16	2014 37:4 43:6	300:2 301:18,22
12-ish 76:16	131:9 133:20	94:6 177:4	51:19 52:4	301:25 302:4,9
12.9 226:8	148:7 152:17	191:1 200:15,19	53:22 54:6,7	304:4,9 305:13
12:18 138:8	217:12 266:9	200:22 226:3	56:8 57:5,12,16	305:19,24 307:6
12:20 138:5	328:2 336:19	231:9 266:3	64:25 67:8,14	307:25 308:11
121 337:5,8	162 337:22	273:3 280:6	68:11 70:3 75:2	308:13,17,18,22
13 66:24,25 67:6	163 337:25	283:14 284:10	86:10,21 105:14	309:20,22
67:18 69:13	165 166:15	284:19 289:10	200:16 219:6	310:14,25 311:6
86:8 163:23	167,461,000	323:20,25 336:1	221:5,11,16	311:17 312:1,7
170:2 223:20	266:24	336:13,21	222:9,13 225:8	312:11,12
225:3 336:11,17	17 65:8 80:1,6	338:13,14	231:23 232:5	314:21 315:4,9
336:19 337:16	90:22 99:3,8,10	2,300 200:5	236:9 237:18	322:20,25
130 153:24	103:17,19,20	2.15 226:1	238:10,14	323:24 324:2,6
337:10	328:2 335:10	2/16/15 106:17	240:20 256:14	326:24 329:24
1310 3:4	336:21	336:25	263:23 264:9,23	330:3,9
1320 4:5	178 338:2	2/5/16 139:6	265:23 266:4	2015-103-E
134 1:16 5:7	17th 4:5	337:13	273:3,8 298:22	79:21
139 337:12	18 65:8 71:15	2:28 177:5	338:14	2016 42:12 53:15
13th 321:20,24	82:12 100:8	2:34 177:9	2015 9:16 26:19	131:11 134:9
14 71:3,8,12,15	106:16,20,21,23	20 47:2 61:25	26:21 52:6,21	138:17 152:13
72:8,14,25	168:5 186:24	62:25 66:14	58:11 70:9 71:9	152:14,15 162:9
74:21 79:3	284:5,20 285:2	80:12 117:19,23	79:1,8,12 84:1	162:19 163:10
119:20 131:11	328:2 336:1,24	117:25 118:3	84:25 87:6,11	163:18 169:21
246:13 336:13	337:3	120:2 161:4	88:5 98:18 99:9	170:22 171:7
337:14,19 338:2	180 338:4	163:2 217:11	104:21 105:12	172:1,22 178:22
338:17	1800 2:16	337:3,10	105:15 106:6	178:24 179:1,3
14.9 242:8	1875 3:23	20% 226:10	120:25 124:20	180:18 181:2
140 153:24	188 338:5	20/20 66:8	126:10 127:18	183:14,16
303:14	19 61:25 66:14	200 116:3 185:18	128:19 130:14	184:20,22

STEPHEN A. BYRNE
October 23, 2018

185:16 186:25 187:2 200:23 292:10 293:13 293:15,21 294:6 297:21 298:3,25 306:22 308:8 309:9 311:4 318:15 324:10 325:5 330:20 332:12,24 2017 187:9 189:23 197:9 290:11 299:24 300:4,5,9,11 315:14 316:11 2017-CP-25-0... 1:6 5:15 2018 1:13 5:3 64:18 65:13,15 66:2 93:15 177:9 240:6 322:15 333:20 334:14 2019 65:2,11 66:1,7,18 72:10 162:1 237:20 202 3:24 2020 65:3 66:1 66:18 72:10 162:2 237:20 2025 334:23 205 3:14 207 5:23 21 72:7 80:16 81:17 82:7 93:20 121:2,7,7 121:9 228:12 235:2 274:13 280:2 337:5 217-7315 2:21 219 2:6 21st 230:6 318:15 22 83:2 121:25 122:1,4,5,7 125:16 172:1 281:21,22 282:1 337:8 220 2:20 229 338:7 22nd 120:25	122:9 126:10 127:6 133:23 138:24 156:2 265:10 274:20 274:22 275:1 276:4 282:12 296:17,21 318:15,21 23 1:13 130:21,25 131:2 136:3 333:20 336:4 337:10 235 2:24 23rd 5:3 93:14 177:8 240:5 322:14 24 72:13 139:4,5 139:9,23 161:1 161:4 284:13 306:13 332:4,5 332:10 335:20 336:11 337:12 338:7 240 338:11 242-8212 3:10 24679 242:5 24680 242:12 24682 244:21 25 72:13 141:15 141:19,22 173:7 285:16 294:7,9 337:8,14 25,000 200:6 250 166:18 25th 53:22 26 145:14,19 180:18 295:6 337:16 266 338:13 268 338:16 27 155:15,20 156:9,15 159:13 337:19 270 5:23 272 338:17 27th 132:20 281:3 28 67:17 68:14 86:13,15 162:11 162:15 225:23 324:15,16,17	337:22 28202-2609 3:19 29 163:12,15,21 169:22 172:2 311:5,9,10 324:10,15 337:25 29033 2:21 29201 4:5 29211 3:5 293 338:18 29402 3:14 29440 2:7 296 244:22 245:3 245:13 29601 3:10 29730 2:24 29th 67:7 86:21 225:18 2nd 2:16 <hr/> 3 3 42:9 64:18 65:3 65:12,15 71:24 72:10 73:12 74:11 90:6 94:22 156:9 177:10 191:1 226:4 239:23 266:3,15 280:6 283:13 284:10 284:19 314:3 323:16,18,23 338:14,21 3,000 59:22 3,700 286:18 30 69:12,14 93:5 129:23 178:15 178:18,20,21 183:13,15 186:20 338:2 30-day 300:17 30-some 172:17 30309-3521 2:13 305 5:23 30th 320:15 321:20 334:14 31 168:10 180:6 180:11 181:2,17	182:22 273:3 329:16 338:4 318 338:20 31st 221:4,10 222:8 273:8 32 188:2,5 338:5 320 338:21 322 335:10 327-4192 2:25 33 229:25 230:5 338:7 331-0767 3:20 333 335:12 334 335:14 34 26:22 88:25 89:4,5,7 240:2,9 246:11,13 247:21 250:4,17 263:21,22 265:5 265:7,9,13 325:21 326:2 338:11 35 266:3,8 338:13 36 246:2 268:10 268:13 327:6,13 336:4 338:16 37 272:15,19 338:17 370 4:3 6:12 371 165:14 38 5:11 7:4 90:4 91:19 92:10 93:20 229:3 235:2 246:2,3 247:19 293:8,11 332:3,5,21,25 333:3,5,14 338:18 39 94:22 100:6 220:21 318:11 338:20 3rd 1:16 168:14 <hr/> 4 4 12:15 22:3 57:9 162:21 205:18 220:3 221:16 240:7 322:9 337:12 4,500 286:20 4/7/15 112:17	4:11 239:24 4:17 240:6 40 101:3,4 105:4 220:20 320:4,7 338:21 40-some 60:24 400 3:14 401(k) 200:6 404 2:14 43 102:15 251:7 435 3:19 44 3:9 105:8 45% 166:8 279:16 457-2053 2:17 4th 168:15 <hr/> 5 5 56:16 118:8 156:15 159:12 183:16 220:8 223:21 251:8 290:7 322:16 335:8 337:1 338:4 5,000 199:15 5/5/15 99:3 336:22 5/6/14 36:24 336:5 5:38 294:22,25 5:39 295:11 5:44 295:15 50 15:20,20 40:22 48:18 50% 26:7 202:17 500 2:16 149:11 149:13 160:2,4 160:8,10 304:6 304:16 305:10 306:12,17 500,000 199:25 505 149:12 50s 48:18 157:21 512 2:17 52 16:6,6 286:13 286:15 53 336:8 546-2408 2:7 55% 166:7,16 279:16
---	---	--	---	--

STEPHEN A. BYRNE
October 23, 2018

<p>57% 26:8 572-2782 2:14 579-7827 3:15 5th 99:9 139:21 179:1 180:20 181:2 183:14 293:13 332:12 332:24</p> <hr/> <p>6</p> <p>6 16:15 37:4 96:25 169:20 219:6 220:18 221:5,11 271:7 6:21 322:10 6:26 322:15 6:42 333:21,22 600 116:3 60s 48:18 157:22 62.4 269:3,7 64.2 268:23 66 336:11 663-6921 3:24 686 240:13 6950 280:4 6th 250:6</p> <hr/> <p>7</p> <p>7 83:2 90:11 119:12 221:18 335:5,6 338:18 70 40:22 704 3:20 70s 48:18 71 336:13 74 205:13,18 78701 2:17 79 336:17 799-2000 4:6</p> <hr/> <p>8</p> <p>8 11:23 71:14 72:8 166:14 338:23 8/5/16 178:16 338:3 80 40:22 803 2:21,25 3:5 4:6 80s 48:18 843 2:7 3:15</p>	<p>864 3:10 88% 222:10</p> <hr/> <p>9</p> <p>9 11:19,25 12:6 12:14 16:15 28:10,12 32:20 72:14 80:2,5,7 105:8 163:20 171:6 202:20 203:22 246:3 311:6,11 335:5 335:12,20 338:16 9/25/14 53:16 336:9 9:03 1:14 5:4 9:30 15:3 90% 52:1,14 75:6 99:18 101:18 102:14 102:24 103:10 148:20 252:2,3 252:20,22 253:18,19 254:15 255:4,10 929-1400 3:5 95% 222:3,6 96 336:19 99 336:21</p>			
--	--	--	--	--