

STATE OF SOUTH CAROLINA
COUNTY OF HAMPTON

IN THE COURT OF
COMMON PLEAS

- - -

RICHARD LIGHTSEY, LEBRIAN
CLECKLEY, PHILLIP COOPER,
ET AL., ON BEHALF OF THEMSELVES
AND ALL OTHERS SIMILARLY
SITUATED,

:
:
: CASE NO.
: 2017-CP-25-335
:
:

Plaintiffs,

: CONFIDENTIAL
: TRANSCRIPT

vs.

SOUTH CAROLINA ELECTRIC & GAS
COMPANY, A WHOLLY OWNED
SUBSIDIARY OF SCANA, SCANA
CORPORATION, AND THE STATE OF
SOUTH CAROLINA,

:
:
:
:
:
:
:

Defendants,

SOUTH CAROLINA OFFICE OF
REGULATORY STAFF,

:
:
:
:

Intervenor.

(Case Caption Continues on Page 2)

VIDEOTAPED DEPOSITION OF DANIEL MAGNARELLI

DATE TAKEN: Friday, October 12, 2018

TIME BEGAN: 9:04 a.m.

TIME ENDED: 12:08 p.m.

LOCATION: Pietragallo, Gordon, Alfano,
Bosick & Raspanti, LLP
One Oxford Centre, 37th Floor
Pittsburgh, Pennsylvania

REPORTED BY: Cynthia First, RPR, CRR, CCP
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1 (Case Caption Continued)

2 THE PUBLIC SERVICE COMMISSION
3 OF SOUTH CAROLINA
4 DOCKET NOS. 2017-207-E, 2017-305-E, AND 2017-370-E

5 IN RE: Friends of the Earth and Sierra Club,
6 Complainant/Petitioner vs. South Carolina
7 Electric & Gas Company,
8 Defendant/Respondent

9 IN RE: Request of the South Carolina Office of
10 Regulatory Staff for Rate Relief to SCE&G
11 Rates Pursuant to S.C. Code Ann. § 58-27-920

12 IN RE: Joint Application and Petition of South
13 Carolina Electric & Gas Company and
14 Dominion Energy, Incorporated for Review
15 and Approval of a Proposed Business
16 Combination between SCANA Corporation and
17 Dominion Energy, Incorporated, as May Be
18 Required, and for a Prudency Determination
19 Regarding the Abandonment of the V.C. Summer
20 Units 2 & 3 Project and Associated Customer
21 Benefits and Cost Recovery Plans
22
23
24
25

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25 ELIZABETH GREEN, Videographer

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1 THE VIDEOGRAPHER: My name is Elizabeth
2 Green, representing EveryWord, Inc. The date
3 today is October 12, 2018, and the time is
4 approximately 9:04 a.m.

5 This deposition is being held in the
6 office of Pietragallo, Gordon, Alfano, Bosick &
7 Raspanti, LLP, located at One Oxford Centre,
8 38th Floor, Pittsburgh, Pennsylvania 15219.

9 The case caption is as follows: In the
10 Court of Common Pleas for the State of South
11 Carolina, County of Hampton, Case Number
12 2017-CP-25-335, Richard Lightsey, LeBrian
13 Cleckley, Phillip Cooper, et al., on behalf of
14 themselves and all others similarly situated,
15 Plaintiffs, versus South Carolina
16 Electric & Gas Company, a wholly owned
17 subsidiary of SCANA, SCANA Corporation, and the
18 State of South Carolina, Defendants.

19 The name of the witness is Dan Magnarelli.
20 At this time will all attorneys please identify
21 themselves and the parties they represent,
22 after which our court reporter, Cynthia First,
23 of EveryWord, Inc., will swear in the witness
24 and we can proceed.

25 MR. COX: Jim Cox appearing on behalf of

1 the South Carolina Office of Regulatory Staff.

2 MR. EVANS: Jerry Evans on behalf of the
3 Plaintiff ratepayers.

4 MR. PUMPHREY: Brian Pumphrey, McGuire
5 Woods, LLP, on behalf of Dominion Energy, Inc.

6 MR. BELL: Kevin Bell on behalf of Central
7 Electric Power Cooperative.

8 MS. NEWTON: Emily Newton,
9 King & Spalding, on behalf of SCANA and SCE&G.

10 MR. KEEL: Brandon Keel, King & Spalding,
11 on behalf of SCANA and SCE&G.

12 MR. MURA: Dave Mura, Westinghouse
13 Electric Company, LLC.

14 MR. RYAN: Thomas Ryan from the Law Firm
15 of K&L Gates, representing Westinghouse
16 Electric Company, LLC.

17 MR. SCHALK: Michael Schalk from the Law
18 Firm of K&L Gates, representing Westinghouse.

19 MR. COX: I think we're ready for the
20 telephone appearances.

21 MS. MOODY: Leah Moody, on behalf of SCANA
22 and SCE&G.

23 MR. NELSON: Jeff Nelson on behalf of the
24 Office of Regulatory Staff.

25 MS. HODGES: Bryony Hodges, in-house

1 counsel for SCANA and SCE&G.

2 MR. COX: I think we're ready to swear in
3 the witness. Thank you.

4 THE NOTARY PUBLIC: Please raise your
5 right hand to be sworn. Do you solemnly swear
6 the testimony you are about to give shall be
7 the truth, the whole truth, and nothing but the
8 truth, so help you God?

9 MR. MAGNARELLI: I do.

10 - - -

11 DANIEL MAGNARELLI, being first duly
12 sworn, testified as follows:

13 - - -

14 EXAMINATION

15 - - -

16 BY MR. COX:

17 Q Good morning, Mr. Magnarelli.

18 A Good morning.

19 Q Could you, for the record, state your full
20 name and spell out your last name?

21 A Yeah. It's Daniel Lawrence Magnarelli.
22 And Magnarelli is spelled M-A-G-N-A-R-E-L-L-I.

23 Q Mr. Magnarelli, we met just before your
24 deposition began. And my name, again, is Jim Cox.
25 I represent the Office of Regulatory Staff in South

1 Carolina in a couple of different proceedings. One
2 is a state court action involving claims asserted by
3 customers of SCE&G against SCE&G and SCANA.

4 The other action in which I represent the
5 Office of Regulatory Staff is a proceeding before
6 the South Carolina Public Service Commission in
7 which SCE&G is seeking recovery of costs in
8 connection with the V.C. Summer Units 2 and 3
9 project.

10 We've noticed your deposition to occur in
11 all of these proceedings. And before we get into
12 your deposition, I'd like to just go over the
13 procedure of how a deposition works.

14 Have you ever had your deposition taken
15 before?

16 A No.

17 Q You just took an oath. And that's the
18 same oath that would apply that you would take and
19 that would apply if we were in a courtroom, and it
20 carries the same weight and penalty of perjury.

21 Do you understand that?

22 A Yes.

23 Q I'll be asking you questions today, and so
24 will other attorneys that represent parties in the
25 proceedings. If at any point you don't understand a

1 question I ask, I can try to improve it with your
2 help. However, I won't know if you don't understand
3 a question if you don't let me know.

4 So I would ask you, if you're confused
5 about a question or don't believe you understand it,
6 if you would let me know, I'll try to work to
7 improve it.

8 Will you do that?

9 A Yes.

10 Q We can take breaks when you need. As you
11 probably know, we're not planning to be here for the
12 full day, but we can take a break whenever you need
13 one. Again, we won't know you need a break unless
14 you let us know.

15 But if, for some reason, you become
16 distracted or you need to, for some reason, take a
17 short break, let us know and we'll take a break.

18 Will you do that?

19 A Sure.

20 Q I'll be asking you about conversations
21 that you had with some of your co-workers on the
22 project and other individuals. When I ask about
23 conversations, I'm not interested in any
24 conversations that you had with any attorneys that
25 represent Westinghouse, and I don't need you to tell

1 me about those.

2 If, for some reason, I ask a question that
3 you feel may call for that kind of information --
4 and I wouldn't intentionally do it, but I may
5 inadvertently do it -- just let me know, and I can
6 move on from that question.

7 Did you look at any documents to prepare
8 for your deposition today?

9 A We had looked at whatever the documents
10 were that came in that notebook. There were
11 probably five or six exhibits. So that's what I
12 looked at yesterday.

13 Q Can you describe what those documents are?

14 A It was mainly the documentation that we
15 supplied to the clients every month while we were,
16 you know, just basically constructing the project.
17 So it would be things like the plan of the day
18 meeting and the slide deck for that; it would be the
19 project review meeting that was held once a month
20 for the client's benefit, and things like that
21 where, you know, it's essentially just the reports
22 that we had put out for the clients on either a
23 daily, weekly, or monthly basis.

24 Q And when you say "the clients," are you
25 referring to SCE&G?

1 A Yes, SCE&G.

2 Q Would you also include Santee Cooper as a
3 client?

4 A Sure, sure; but, you know, I think the way
5 it was termed to me was that SCE&G was Santee
6 Cooper's agent. So -- so when SCE&G spoke to us,
7 they were in fact representing both SCE&G and Santee
8 Cooper.

9 Q And who gave you that understanding?

10 A That was kind of the understanding. We
11 had direction from SCANA that way. We had direction
12 from our own people at Westinghouse.

13 Q Which people at Westinghouse?

14 A It would have been the project director.

15 Q And who was that?

16 A Well, it varied from time to time. So
17 there was a number of project directors in my tenure
18 there, but the first one was only there a month, and
19 he passed away. So we had several.

20 Q And who was that project director that
21 passed away?

22 A That was Tom Sliva.

23 Q What time period was he the project
24 manager?

25 A Project director. He was -- he was in --

1 I don't know when Tom started, but I know his
2 passing date was, like, April of 2013.

3 Q And when did you get on the project?

4 A March of 2013.

5 Q Just so we're clear, when I say "the
6 project," I'm referring to the V.C. Summer Units 2
7 and 3 project. Is that the understanding you have,
8 as well?

9 A Yes.

10 Q Who became the project director after
11 Mr. Sliva?

12 A There was a couple of interim ones. So,
13 like, Bill Macecevic was, like, an intern project
14 director. Rick Easterling served in that role for a
15 little while. Then we had a new project director
16 come in, who I believe was Chris Levesque came in
17 after -- after Tom Sliva passed. So more of a
18 permanent project director rather than an interim.

19 Q So did Macecevic and Easterling come in
20 between Sliva and Levesque?

21 A Right.

22 Q And do you know -- do you recall when
23 Mr. Levesque became the project manager?

24 A I do not. I'm not sure of the date.

25 Q And who succeeded, came after

1 Mr. Levesque?

2 MR. NELSON: We cannot hear the witness'
3 answers.

4 THE WITNESS: I can speak up.

5 MR. RYAN: You should have a mic.

6 THE WITNESS: It's right here. I don't
7 know if --

8 THE VIDEOGRAPHER: I think it's the...

9 MR. NELSON: We can hear the questions but
10 not the answers.

11 THE WITNESS: Okay.

12 BY MR. COX:

13 Q So, Mr. Magnarelli, who succeeded
14 Mr. Levesque as project director?

15 A I'm not -- I don't recall if there was one
16 in between, but Carl Churchman was the last project
17 director before the shutdown.

18 Q Do you recall about when he began as
19 project director?

20 A I don't have the date for that.

21 Q Did you report directly to the project
22 director --

23 A Yes.

24 Q -- during your time on the project?

25 A I did.

1 Q And what was your duty position on the
2 project?

3 A So my title was Director, Construction
4 Integration for Westinghouse. And in that role, it
5 was essentially to install the major equipment. So
6 it started out as just being technical assistance to
7 the installation of the equipment, and actually
8 rolled over to actually managing the installation
9 when Westinghouse had taken over.

10 So all the primary equipment, reactor
11 vessels, steam generators, pressurizer, reactor
12 cooling piping, that would have fallen under my
13 group for installation. In addition to that, there
14 was other major equipment that Westinghouse was
15 responsible for, like the turbine generator set from
16 Toshiba. So we were on that end too. So we were
17 responsible for the machine set on the turbine
18 generator.

19 Q Can you go back to that point you made
20 about your responsibilities changing at some point?
21 Can you go into a little more detail on how your
22 role changed?

23 A Yeah. When it was originally set up, the
24 consortium basically had -- well, it was Shaw, and
25 then they went to CB&I, but they were the

1 constructor. So Westinghouse would offer the
2 technical guidance, and the constructor would do the
3 installation. That changed for a lot of reasons,
4 but the main reason was they just weren't producing;
5 productivity was extremely poor.

6 So Westinghouse decided to really take on
7 that role themselves. And when we did, I think
8 things increased. Productivity was better. It
9 eliminated a lot of commercial issues between the
10 two companies. So it was a much better -- better
11 road for the project overall.

12 Q Did Westinghouse, at that change, begin to
13 actually do the installation of the equipment?

14 A Yes. So Westinghouse affiliates -- so we
15 hired, like, Carolina Energy Services to do the
16 installation of the primary equipment. And we had
17 subcontractors through them, like Barnhart Rigging,
18 for specialty rigging.

19 So -- and then there were other
20 Westinghouse affiliates, like Turbine Pro, that
21 would have done the installation of the turbine
22 generator set. So we had several Westinghouse
23 affiliates that were actually working for us,
24 Westinghouse, to go do that scope of work.

25 Q Was this a change that occurred at the

1 time of the October 2015 amendment to the EPC
2 contract?

3 A Yeah, that was the primary driver then,
4 yes.

5 Q At the time of that change, what did
6 Fluor's role become on the project?

7 A Fluor -- Fluor took the role of the
8 constructor. So they picked up anything that was
9 left behind through the Shaw/CB&I combination.
10 Fluor essentially picked up that role.

11 Q Let me go into that a little more then.
12 If Fluor took the role of Shaw and CB&I, then what
13 was the role of the Westinghouse affiliates in
14 conjunction?

15 A Yeah. So -- so we gave -- Fluor took the
16 role of Shaw/CB&I, but they didn't take everything.
17 So that primary equipment installation, we held that
18 back simply because we had the folks that really
19 knew how the primary equipment was being installed,
20 and they had much more to offer.

21 We had a number of people who had kind of
22 managed that when they were in China for the first
23 AP1000 plants. And those folks were in our group
24 over here in the U.S. to oversee that work.

25 Q So I'd like to now turn to your background

1 a bit before we talk more about the project.

2 Before you took on your role at the
3 project, can you walk us back through your career at
4 the different positions that you held?

5 A How far back? I could start in 1979 when
6 I actually got out of college. My first job out of
7 college, from an engineering standpoint, was with
8 Stone & Webster in Boston. So I'd grown up in
9 Boston; Stone & Webster was the logical choice.

10 And then I went to the field for
11 Stone & Webster down in North Anna, and then
12 Millstone III, in new construction.

13 And then I wanted a little more stability,
14 so I joined Yankee Atomic. And we had four
15 operating plants and one plant under construction.
16 That was Seabrook. So -- so I did that for quite a
17 while.

18 And then we were sold to Duke
19 Engineering & Services. And then we were sold again
20 to AREVA -- well, Framatome at the time, but AREVA.
21 So then I ended up working for AREVA, and under --
22 for my position in AREVA, it was essentially Vice
23 President, Construction and Commissioning for U.S.

24 Q And did you go from that position to
25 Westinghouse?

1 A Yes.

2 Q And that was in March 2013?

3 A Correct.

4 Q The work that you were doing for AREVA,
5 was it the same type of work you did on the project?

6 A At the end, yeah. It was essentially
7 trying to market the AREVA plant, new plant, which
8 is an EPR 1,600-megawatt reactor. Unfortunately,
9 it's not -- it's really not suitable for sale in the
10 U.S., you know, logically and like that. So -- so
11 we never did sell one here.

12 So when I wanted to pursue my career
13 further and actually build another new plant,
14 Westinghouse was really the only option in the
15 United States.

16 Q Who hired you?

17 A Tom Sliva.

18 Q And did he tell you anything about the
19 reasons he was hiring you to work on the project?

20 A We had worked together at AREVA, so we
21 kind of knew of each other. And it was mainly for
22 the planning work that we had done for the AREVA EPR
23 that he wanted to bring that same type of effort
24 onboard for the Westinghouse AP1000.

25 So one other function that we did serve

1 while we were there at the AP1000 was that I also
2 had a group that was responsible for construction
3 planning. So it was about a hundred-person group
4 that essentially prepped the work packages and did
5 the lookaheads for construction planning.

6 That was taken with some -- well, let's
7 just say that the full effects of that group were
8 never really -- the benefits really weren't fully
9 realized. But anyways, they did do quite a bit to
10 streamline the processes.

11 Q Was that a change when you came to the
12 project?

13 A Yes, yes. That's why Tom -- one of the
14 reasons Tom hired me.

15 Q So was your position a new position at the
16 project?

17 A Yes.

18 Q Did Tom tell you that he was unhappy with
19 the progress that was being made on construction at
20 the project?

21 A He had concerns, yes.

22 Q Did he describe to you what his concerns
23 were about?

24 A Well, he described a lot of things, but --
25 but I think it was just the overall approach to the

1 project. The consortium -- for whatever reason, the
2 contract structure was such that you had divergent
3 goals, I think. You know, the constructor was
4 looking in terms of maximizing profit. The
5 Westinghouse company was looking at, you know, the
6 technological breakthrough to get an AP1000 on line.
7 So I think the goals might have been a little
8 divergent.

9 There were a lot of commercial issues
10 between the two companies. So he thought that by
11 really offering a streamlined approach to the
12 planning, that maybe we could bring both groups
13 together and, you know, improve productivity.

14 Q Did he describe any concerns with the
15 oversight that the clients were -- SCE&G were
16 exercising over the project when you were hired?

17 A No, there wasn't really any mention of
18 SCE&G, as far as, you know, burdensome or anything
19 like that for oversight of the project. I think
20 SCE&G's manpower situation, from a construction
21 standpoint, I'm not sure of the numbers they had,
22 but it was a pretty small group for a project that
23 size.

24 Q Did you feel, in your time at the project,
25 that the group that SCE&G provided for oversight was

1 insufficient for -- to manage a project of that
2 size?

3 A I can't say that, no. In my mind, SCE&G
4 did what they had to do to manage the project. I
5 can't really speak to the SCE&G side.

6 Q Okay. I think you mentioned that the
7 group that Tom Sliva set up under your control, that
8 it never achieved the impact that you and Tom were
9 hoping; is that correct?

10 A True.

11 MR. SCHALK: Object to form.

12 THE WITNESS: True.

13 BY MR. COX:

14 Q Can you describe why that was?

15 A Well, there were reasons associated with
16 it. The first was trying to get the constructor to
17 actually buy into the process. And, you know, since
18 we were still on both sides of the fence then where,
19 you know, it wasn't under total Westinghouse
20 control -- it was like I said before, we had
21 divergent goals, so the constructor was basically
22 saying, "Hey, we know how to construct things.
23 We're going to handle that. You know, you can't
24 tell us what we should or should not be doing."

25 And in fact, you know, some of that's

1 true, but for the most part, we needed to come
2 together a little better to be unified as a team
3 going forward. Otherwise, we were going to have the
4 same issues down the road.

5 Q And what -- why didn't that group that was
6 set up to help address those issues, why do you feel
7 it didn't achieve the impact that it -- that it
8 would have liked to have had?

9 A I think it was the commercial issues that
10 got between the two companies. But once it came
11 under Westinghouse control, then -- then I think you
12 saw better results and improvements in productivity.

13 Q Did you have any role in preparing the
14 estimates to complete the project, both with respect
15 to schedule or to cost?

16 A Well, it would be -- the ETC was actually
17 done out of Charlotte. So -- so there was a group
18 there that was set up just to perform that function.
19 We as a project provided input to that ETC group,
20 but, I mean, we were not the primary players in the
21 development of the ETC.

22 Q Who were the players, to your knowledge,
23 who were involved in that?

24 A It would have been the Charlotte office;
25 it would have been the cost estimating group out of

1 Charlotte. They would have relied on, you know,
2 basically the people working at the site, as well as
3 from a schedule standpoint, they would have relied
4 heavily on the scheduling group at V.C. Summer.

5 Q And who was in that scheduling group?

6 A I believe Terry Elam was actually the head
7 of the scheduling group.

8 Q Do you know who at the project from
9 Westinghouse played a key role in the cost estimate
10 process, if anyone?

11 A The cost estimating people?

12 Q Right.

13 A Well, I'm not sure that, you know, the
14 names. It would have been the project management
15 group out of Charlotte, and then it would have been
16 the cost estimating group out of Charlotte. Those
17 would have been the players. Okay.

18 And in there, there's -- there's a
19 multitude of names. So I'm not sure that one person
20 would be the name. We had people who were
21 theoretically in charge of the ETC that have since
22 left the company; and that would have been like a
23 Karin Stoner would have left the company.

24 Q And when you say "Charlotte," you're
25 referring to the Stone & Webster office in

1 Charlotte?

2 A It's the Westinghouse WECTEC office now in
3 Charlotte.

4 Q And before the 2015 amendment to the EPC,
5 was that office staffed by --

6 A Yeah, it's pretty much --

7 Q -- Stone & Webster?

8 A -- Stone & Webster, yeah.

9 Q Is there anyone at the project who you
10 felt, from Westinghouse, played the same role that
11 Mr. Elam did on schedule, but did it with cost?

12 MR. SCHALK: Object to form.

13 Go ahead.

14 THE WITNESS: For cost?

15 BY MR. COX:

16 Q Cost estimating.

17 A There were -- there were a lot of people
18 that provided input, so I -- to give you one name,
19 no. The only -- the only name that really comes up
20 is probably Joe Arostegui that would have been at
21 the site that was providing some cost control input.

22 Q And he would have been providing that
23 information to -- was it Karin in -- in Charlotte?

24 A Uh-huh, Karin Stoner's group, whoever she
25 had working for her.

1 Q And what information did you provide to
2 Terry Elam's group or Joe Arostegui's group to
3 assist in these estimates?

4 A So it would have been the estimate of what
5 it was going to take to finish the job from the
6 standpoint of my group. So that was kind of the
7 estimate we provided.

8 And then we would have in our constant
9 schedule reviews -- I mean, we had a multitude of
10 schedule reviews to lay the baseline out. We would
11 have had input into that, as well, from our group.

12 Q And you provided this information to
13 Mr. Elam and to Mr. Arostegui?

14 A Uh-huh. Yes. Actually, it went -- it
15 went directly to Charlotte, so it would have gone to
16 somebody in Karin Stoner's group.

17 Q What kind of format did you provide this
18 information?

19 A It was a -- it was kind of a template
20 shell that was provided to us to basically fill out
21 so they could have the same format for all the
22 groups. We weren't the only group supplying an
23 estimate obviously. And that template, we filled it
24 out, sent it back up to Charlotte for what they
25 asked for.

1 Q Was that an Excel spreadsheet?

2 A It was -- it was an Excel spreadsheet to
3 some extent, and then it was some narrative and
4 text, as well, to describe the scope.

5 Q Did you ever work on the Primavera
6 scheduling software that Westinghouse used?

7 A No. I reviewed it, but I never -- I'm not
8 a box runner, if that's what you mean.

9 Q When you say you reviewed it, what was
10 your role in looking at that?

11 A Well, it would have been for anything that
12 we were responsible for. We would have looked to
13 make sure that that schedule was sound, that that's
14 exactly how we were going to approach the project.

15 But in addition to that, we would have
16 looked at the prerequisites in that schedule for us
17 to do our work. So say -- say we're trying to
18 install the pressurizer, but we need the floor of
19 the pressurizer cubicle to board before we can
20 install the pressurizer. You know, we would have
21 been looking at all those prerequisites to make sure
22 that none of those were going to hold us up from
23 what we had to do.

24 So we would go through that. We would be
25 reviewing the schedule for those items. And then if

1 there was obstacles or barriers from these
2 prerequisites in getting the work done, you know, we
3 would try and alleviate those and do something that
4 would minimize those impacts.

5 Q Would that be like a mitigation effort?

6 A There were -- yes, there were mitigation
7 efforts, yes.

8 Q Okay. What information would you use to
9 estimate the time periods for being able to take
10 those steps, say, in installing a pressurized
11 reactor?

12 A I'm not sure what you're asking. What are
13 you saying?

14 Q Sure. How would you come up with the
15 estimate on how long something would take?

16 A Oh, the duration of the actual
17 installation?

18 Q Right.

19 A Right. So we would use our affiliates,
20 the people that were actually going to do the work,
21 and we would sit down with them and walk through
22 each step of the process that they had to do to
23 install it, and then the follow-through on it. And
24 we would look at those durations that they would
25 supply us, our affiliates, and we would work through

1 those details and see if we agreed or didn't
2 disagree -- or disagreed with those.

3 So it was kind of a working together to
4 make sure that we had the right schedule going
5 forward.

6 Q In general, were there times when the
7 information provided to you by the contractors that
8 you worked with was incorrect, too optimistic?

9 MR. SCHALK: Form.

10 THE WITNESS: The -- I really can't say
11 that they're too optimistic, because at the
12 time those schedules were developed and
13 reviewed, and at the time those schedules were
14 felt to be the schedule going forward. So I
15 can't really conjecture that they were too
16 optimistic, no.

17 I think, in the long run, we had a lot of
18 productivity issues at the site. So if you
19 could just see where the plan was to get these
20 plants on line and where it was when we ended
21 up shutting down, I mean, we weren't very close
22 to that plan.

23 BY MR. COX:

24 Q To what do you ascribe -- to what do you
25 ascribe the causes of not hitting the productivity

1 that you wanted to reach?

2 A Well, I think -- I think the civil work
3 was underestimated, so we had a lot of issues with
4 civil work. And that should have been probably
5 dealt with early on, but, you know, we had issues
6 with, say, some late engineering. We had civil
7 work, just the constructor itself, on the way the
8 constructor was doing business. So there were just
9 a multitude of issues that really slowed the project
10 down.

11 Q Were there issues with fabrication of
12 modules?

13 A Yes, there were issues with fabrication of
14 modules.

15 Q Can you describe what the issues were
16 there that affected productivity?

17 MR. SCHALK: Form.

18 THE WITNESS: Well, I can't -- I can't
19 talk about the productivity at the fabrication
20 sites, but I can tell you that, you know, the
21 module dates kept slipping.

22 So -- so, you know, there's a reliance on
23 some of those modules to be prerequisites in
24 order for the rest of the building to be built.
25 So those module dates kept sliding to the

1 right. The project was getting delayed due to
2 those module suppliers not keeping up with
3 demand.

4 BY MR. COX:

5 Q Do you feel that SCE&G contributed in any
6 way to the productivity problems at the site?

7 A SCE&G contributing to productivity issues?

8 Q Right. To describe it further, do you
9 feel that there were steps that SCE&G could have
10 taken that could have addressed it, the productivity
11 issues, but they didn't take?

12 MR. SCHALK: Form.

13 THE WITNESS: I -- I can't speak for
14 SCE&G, no.

15 BY MR. COX:

16 Q And why do you feel you can't speak to
17 that?

18 A Well, I know there were some issues. I
19 know there were commercial issues, as well. But I
20 can't -- I can't speak to why SCE&G did what they
21 did, so...

22 Q Did you interact with anyone from SCE&G
23 during your time on the project?

24 A Yes.

25 Q Who did you interact with from SCE&G?

1 A There were a number of people, but it
2 would have been the site management group. So you
3 would have had the site VP, Ron Jones; you would
4 have had the construction manager, Alan Torres; the
5 licensing manager, April Rice; the engineering
6 manager, Brad Stokes. So it just goes on. So it's
7 all essentially the senior management team from
8 SCANA on-site.

9 Q And what was the nature of your
10 interactions? What were you interacting with them
11 for?

12 A It was kind of a management-to-management
13 type arrangement where we would give status. They
14 would need some things from us, as far as for their
15 informational purposes. We would provide that.

16 But -- but what we did is we met with
17 those folks on a daily, weekly, and monthly basis
18 just to essentially provide the information that
19 they needed to know what the status of the project
20 was at any given point in time.

21 Q Did you have any discussions with SCE&G
22 about steps to improve productivity?

23 A We had the discussions and
24 recommendations. We went through a scheduling
25 workshop in August of 2014 with some SCE&G folks up

1 on-site. And then in November of 2015, before the
2 transition to Westinghouse in January of 2016, we
3 went through an effort of laying out the schedule
4 again.

5 We did have some presence from both
6 owners. Southern Nuclear had provided a
7 representative, and SCANA actually provided a
8 representative for those meetings.

9 Q Let's talk about the August 2014 workshop.
10 Can you describe what occurred during that workshop?

11 A Yes. So we had a schedule. We had some
12 constraints in the schedule. We had a number of
13 major issues that, you know, were identified as risk
14 items.

15 So we had a team from the project, and we
16 had representatives from SCANA that sat in there and
17 tried to work through and develop mitigation
18 strategies for the constraints that were in that
19 schedule.

20 So that was originally supposed to be a
21 two-week effort, but I believe it carried on even
22 further after that. My recollection is a little
23 fuzzy, but I believe it carried on with the smaller
24 group after that to develop those mitigation
25 strategies even further.

1 Q When you say "constraint," what do you
2 mean?

3 A So when you have a schedule, you might put
4 in a date like, okay, delivery of module CA20 or
5 something like that. Right? And you just nail that
6 date in the schedule and you hold it so it can't
7 move.

8 But when that module is late, that means
9 that date is going to shift to the right. But
10 before that date happens, you're still holding that
11 date, so the schedule doesn't really push out to the
12 right. And what you try and do is develop
13 mitigation strategies so that they won't move.

14 So in the case of, say, CA20, we installed
15 half of it in Unit 3, and then brought the other
16 half in later just so you can keep working on the
17 containment structure.

18 Q So the constraint is an effort to keep a
19 certain date in the schedule from moving to the
20 right?

21 A Uh-huh.

22 Q And the goal is to come up with strategies
23 that will allow that date not to slip to the right?

24 A Correct.

25 Q In August of 2014, did you feel that the

1 work that the team put together was effective at
2 coming up with mitigation strategies?

3 A It was. I think that that was the first
4 cut at really trying to get into detail on the
5 strategies. So I think it was -- it was a good
6 effort, I think, for -- for what was being
7 considered at the time.

8 What we did after that, in the November
9 time frame of 2015, was essentially carry that even
10 further where there was a lot more detail provided
11 to identify those mitigation strategies. And those
12 then were tracked.

13 And this was all being captured in the
14 schedule, and it was being captured in the risk
15 program that we shared with the owner on a monthly
16 basis.

17 Q Is there a reason the August 2014 workshop
18 wasn't able to get as detailed as the one in
19 November 2015?

20 A Well, it was -- it was detailed up to the
21 point for the information that was known, but there
22 was still a lot of unknowns in August of 2014.
23 So -- so we needed to get a little more detail.

24 And then in November of 2015, a lot of
25 things were known that weren't known prior to that.

1 So we were able to come up with a better approach to
2 things and better mitigation strategies.

3 Q What was known in November 2015 that
4 allowed you to come up with better strategies?

5 A A lot of the module issues were kind of
6 brought out in 2015. So in 2014, there were a lot
7 of uncertainties. There was commercial negotiations
8 with module suppliers that still had to be done. In
9 2015, there was a clearer picture of where that --
10 where all that stood.

11 Q And why was there a clearer picture?

12 A Because they were talking to resolve the
13 commercial issues with the suppliers.

14 Q So you're talking there about Westinghouse
15 taking over the role of one of the contractors?

16 A Uh-huh.

17 Q Is that correct? Yes?

18 A Right.

19 Q Who were you providing information to for
20 that August 2014 scheduling workshop?

21 A That basically went into the schedule.
22 Okay. So it was development of the project
23 schedule. And then it also went into our risk
24 register, where those mitigation strategies are
25 tracked in the risk register to see if there were

1 any issues or if there were any obstacles to
2 accomplishing the mitigation plan.

3 Q And who from Westinghouse would you
4 provide this information to?

5 A So -- so the scheduling piece, obviously,
6 would have gone to Terry Elam, you know, for the
7 scheduling group. But the risk piece originally
8 went to me. But then we had the project controls
9 group manage that risk piece, as well. So that
10 would have gone to a person like Lisa Cazalet.

11 Q And when you say "the risk piece," are you
12 referring to the likelihood that a mitigation
13 strategy would not be effective?

14 A Yes. So you had a risk register that
15 showed what your primary risks were for the project,
16 and then the likelihood that those risks would be
17 eliminated. So you tracked those risks and made
18 sure those mitigation strategies were working. And
19 as you passed that risk period where, you know, the
20 actual risks never materialized, you know, you would
21 essentially remove that from the risk register.

22 If there was some issue, though, where you
23 needed to, you know, amend your mitigation strategy,
24 then you needed to take that action well in advance
25 of the point of no return.

1 Q At what point did Ms. Cazalet's team take
2 over that role from you?

3 A I don't have an exact date on that.

4 Q Was it after the August 2014 workshop?

5 A Yes.

6 Q Was it after the November 2015 workshop?

7 A No. I think it was prior to then.

8 Q Was there a reason that her team took it
9 over from your team?

10 A Yeah. It was just better managed out of
11 that group. We were too busy installing stuff. It
12 was better that that risk group relied or stayed in
13 the project controls arena.

14 Q Do you know the reasons that Westinghouse
15 was engaging in that August 2014 workshop?

16 A I think it was a consensus from both the
17 client and the consortium that it would behoove us
18 to really look to try and make improvements. And
19 that was one of the things that we thought we could
20 improve on, you know, mutual agreement on how we're
21 going to handle the schedule.

22 Q Was there a belief that you had that the
23 current schedule was no longer an accurate
24 assessment of how the project was going?

25 A Well, I think it was an accurate

1 assessment at the time the schedule was -- was
2 completed. I think the -- I think as we went on,
3 you know, it kind of matured. The schedule matured.

4 So there was a lot of things that we
5 picked up doing. And even the processes to track,
6 you know, progress on the schedule were even, I
7 would say, grown into mature, where in the earlier
8 days, you know, we would just basically schedule in
9 big blocks. But in the -- as time went on, we got
10 more refined with that schedule. So, you know,
11 almost down to every hour was blocked out for
12 scheduling.

13 Q Was it your belief that a more detailed
14 schedule needed to be prepared in 2014?

15 A No. I think the schedule actually served
16 the purpose. It was that -- we had so many
17 uncertainties with the other issues, that you
18 couldn't really refine the schedule because there
19 were uncertainties.

20 So once those uncertainties were addressed
21 through either, say, mitigation strategies and plans
22 and stuff like that, then you could -- you could get
23 a more detailed schedule based on those strategies.

24 Q Do you feel that the August 2014 workshop
25 developed a more robust set of mitigation strategies

1 than had existed previously?

2 A I think so, for the major issues, yes.

3 Yes.

4 Q Were those strategies effective?

5 A Some were. Some -- obviously we had
6 issues with the modules still that carried forward,
7 but some of them are because it made -- it made the
8 project aware of what -- of what they needed to
9 watch out for.

10 Q What strategies, would you say, from that
11 workshop were effective?

12 A Well, I don't know. In the original
13 workshop, I think there were, like, 43 major
14 strategies or something thereabouts. I can't
15 recall. It was 2014, so...

16 You know, modules would have been one,
17 obviously.

18 Q Modules? You feel the mitigation
19 strategies from that workshop were effective?

20 A Well, I feel that the strategy was laid
21 out. The commercial arrangement was a roadblock,
22 but I think the strategy was actually laid out
23 pretty well.

24 Q Did that workshop discuss strategies to
25 improve productivity?

1 A I think the whole essence of going through
2 that workshop was increased productivity, yes.

3 Q And do you know if the productivity factor
4 improved after that workshop?

5 A The productivity factor over the years was
6 fairly constant in the 2014 range, that year. But I
7 think what we had laid out as a plan when
8 Westinghouse took over, I mean, the actual percent
9 complete per month, those goals were very hard to
10 achieve when the plan was laid out. And then there
11 were issues that came up that we never did achieve
12 that -- those planned percent complete per month.

13 So I think the best month we had was like
14 a 1 and a half percent complete. And at the time,
15 we should have been nearing the 2 percent range.
16 And then we were supposed to have a sustained period
17 of almost 3 percent. So those issues were kind
18 of -- we never got there.

19 Q Did you feel that the goals that were set
20 out at the outset were unattainable?

21 A I don't think so. You know, it was laid
22 out, to the best of our ability, to just go forward
23 with the process that we had and the people that we
24 had. And we laid it out with a -- with an estimate
25 that said, you know, this is what we think is giving

1 us our best shot at making these substantial
2 completion dates.

3 Q Did you identify factors that were causing
4 productivity to not be at the level that
5 Westinghouse initially anticipated?

6 A Well, that was more on the constructor
7 side, like the Shaw Group/CB&I/Fluor, you know,
8 because they had the majority of construction. So
9 those issues would have been more on that side of
10 the house.

11 When it did come time for the installation
12 from my group, from what I could see, I mean, we
13 were pretty much on schedule with the durations that
14 we had specified.

15 Q With respect to the productivity of the
16 Shaw Group or the subcontractor, I think you
17 mentioned earlier incentives. They were
18 incentivized to be productive. Is that -- is that
19 kind of the reason that you feel they weren't as
20 productive as anticipated?

21 MR. KEEL: Object to form.

22 THE WITNESS: I didn't mention anything
23 about incentives, yeah.

24 BY MR. COX:

25 Q Okay. Did you ever have a belief as to

1 why their productivity wasn't hitting the level
2 Westinghouse anticipated?

3 MS. HODGES: Excuse me. Would you please
4 ask the witness to speak up? He's very
5 difficult to hear.

6 THE WITNESS: Okay. All right.

7 MR. SCHALK: Do you need the question
8 repeated?

9 THE WITNESS: Yes, please.

10 BY MR. COX:

11 Q Do you have a belief or a reason as to why
12 the productivity of CB&I/Shaw wasn't at the level
13 that was anticipated by Westinghouse?

14 MR. KEEL: Object to form.

15 THE WITNESS: Yeah. So there were a lot
16 of issues. So I think -- I think what it was
17 was this wasn't your normal civil work project.
18 I mean, the civil work in this project was a
19 little bit complicated. But the constructor
20 also probably wasn't prepared as they should
21 have been to handle the civil work in this
22 project.

23 So -- so it was kind of from both ends
24 that you were finding that you weren't going to
25 achieve the goals that you had set out to do.

1 BY MR. COX:

2 Q Are you familiar with the different levels
3 of schedules on a construction project?

4 A 1, 2, 3, right?

5 Q And can you describe the differences in
6 those level of schedules?

7 A Well, at the top level, level 1, it's
8 essentially just a small -- might show you 100
9 activities in a schedule.

10 Level 2 goes into more detail, so you have
11 anywhere from 200 to 1,000 activities in the
12 schedule, maybe. Maybe even more.

13 And then a level 3 is you have a detailed
14 schedule where it's thousands of activities in that
15 level 3 schedule.

16 Q And what level schedule did Westinghouse
17 have at the project, if you know?

18 A Yes.

19 MR. SCHALK: Form.

20 Go ahead.

21 THE WITNESS: So that -- do you want --

22 MR. SCHALK: You can answer.

23 THE WITNESS: Okay.

24 So it was a level 3 schedule.

25 BY MR. COX:

1 Q And is that throughout the whole time that
2 you were on the project?

3 A Yes.

4 Q Was that a fully integrated
5 resource-loaded schedule?

6 A It was a fully integrated schedule.
7 However, resource loading, there were some areas
8 that were resource-loaded, and then there were other
9 areas that weren't.

10 So if you were asking the question, was it
11 a fully resource-loaded schedule, no. There were
12 gaps where some of it was, some of it wasn't.

13 Q And is that true for the whole time you
14 were at the project, that there were gaps in the
15 schedule, as far as resource loading?

16 A Yeah. I don't think the resource loading,
17 the identification of that resource loading was
18 treated as a primary importance for some of the work
19 that was secondary in nature.

20 So if you had something that was on the
21 turbine building side, not necessarily nuclear
22 island side, you know, you wouldn't -- you wouldn't
23 have tried to resource all of that schedule. You
24 would have spent more time trying to do that than
25 actually -- than actually just having a crew that

1 was assigned to the turbine building, working
2 through it on a daily basis.

3 So on the nuclear island side, that's
4 where you really tried to resource load, because
5 there's only so many work fronts you can work
6 because it's a pretty small footprint in the nuclear
7 island. So you've got some limited access. So
8 you've really got to plan your work out and the
9 crews associated with that.

10 Q When we say "resource loading," can you
11 describe what that means for a schedule?

12 A Yeah, it just means that if you have an
13 activity, then you have a crew associated with that
14 activity, and for the duration and time that that
15 activity completes.

16 Q And when we say "fully integrated" for a
17 schedule, a construction schedule, what does that
18 mean to you?

19 A It means that you're integrating all the
20 components of a construction project. So you've got
21 engineering, procurement, licensing. All that
22 theoretically was integrated with the construction
23 schedule. And then you continue on with the
24 operations side of those.

25 Q And just so I'm clear as to what you are

1 saying existed on the project, is it -- is it your
2 belief that there was a fully integrated schedule
3 during your time on the project, but it wasn't
4 completely resource-loaded the whole time?

5 A Uh-huh. True. I think the -- the fully
6 integrated schedule, once the engineering completion
7 schedule was developed, that's when that fully
8 integrated schedule came in. Up until that
9 engineering completion schedule was developed, you
10 had gaps between the engineering supply and then the
11 construction work that, you know, follows it.

12 So -- so when that engineering completion
13 schedule got developed, we had a much better picture
14 of just what needed to be done when so you could
15 support construction from an engineering
16 perspective.

17 Q And when did that engineering completion
18 schedule get completed?

19 A I can't recall.

20 Q Was it before the August 2014 workshop?

21 A I don't -- I can't remember.

22 Q Would you describe the schedule that came
23 out of that August 2014 workshop as a fully
24 integrated schedule?

25 A Fully integrated from a construction

1 standpoint, yes. Yes, to the best -- the best of
2 the available data that was available at that point.

3 Q Was Terry Elam really the lead person from
4 Westinghouse on putting that schedule together?

5 A Correct.

6 Q Were you ever informed that SCE&G
7 disagreed with the schedule analysis that was
8 prepared in the August 2014 workshop?

9 A Disagreed with the workshop results? Is
10 that what you're asking?

11 Q Correct.

12 A No. No, no knowledge of that.

13 Q What was your -- did you have any
14 understanding as to how they viewed the schedule
15 that came out of that workshop?

16 A No. I think -- I think there was a
17 mutual -- mutual arrival at -- you know, it was both
18 groups coming together to produce the schedule and
19 mitigation strategies that would enable us to finish
20 the project when we were supposed to.

21 Q Did Westinghouse provide SCE&G with access
22 to information to allow SCE&G to analyze that
23 schedule?

24 MR. SCHALK: Form.

25 MR. KEEL: Same.

1 THE WITNESS: Yes.

2 BY MR. COX:

3 Q What types of information did SCE&G
4 review, to your knowledge, to analyze that schedule?

5 A Well, there was a monthly schedule report
6 that was transmitted to SCANA every month, yeah, and
7 they would have had that knowledge from the
8 schedule.

9 Then we had plan of the day meetings where
10 we went through certain sections of the schedule for
11 lookaheads.

12 Then we had the weekly meetings with
13 SCANA; and then the project review meeting, which
14 was the overall status of the schedule, just where
15 we stood with percent complete and that sort of
16 thing, in a presentation to the client.

17 Q So let's talk about each of those
18 meetings. The progress review meeting, how often
19 did that occur?

20 A The -- the PRM was once a month. Okay.
21 And it changed in format over time, but essentially
22 it went over the major areas of the project. So you
23 would have had safety; you would have had quality;
24 you who have had quality, engineering, procurement,
25 licensing, construction, operations.

1 And then there were -- there was, you
2 know, a presentation on schedule. And there was a
3 presentation on percent complete every month.

4 So -- so I mean, it was -- it was pretty
5 transparent just where we stood at that monthly, you
6 know, end of month.

7 Q How long did that -- those meetings
8 typically last?

9 A Well, they varied. They started out where
10 it was only a couple of hours. But then there was a
11 period there where they were going six to seven
12 hours. And everybody felt that that really wasn't
13 worth it to have all these people sit there all day.
14 So they cut it back to a smaller group and a -- and
15 a reduced time. So it went more efficiently at that
16 point.

17 Q Are you aware of any instances where SCE&G
18 was requesting more information to support a
19 schedule analysis from Westinghouse, and
20 Westinghouse wouldn't provide it?

21 A Not to my knowledge.

22 Q In the estimate to complete schedules
23 workshops that you were a part of, were the
24 substantial completion dates of the units ever
25 constrained?

1 A Estimate complete workshops.

2 Q The schedule workshops. I think you
3 mentioned two, August 2014 --

4 A Yeah.

5 Q -- and November 2015.

6 A Right. That wasn't ETC. That was just --
7 the August 2014 was just a workshop with SCANA.
8 Okay. The November of 2015 was actually the
9 transition to Westinghouse taking over.

10 Those -- those -- the ETC was handled
11 separate from those meetings. So if you want to ask
12 the question again, go ahead.

13 Q No. I appreciate that.

14 So those workshops you were a part of, to
15 your knowledge, they didn't come up with a date when
16 the units would be substantially complete?

17 A Uh-huh, they did. They did.

18 Q Do you view that -- I'm having trouble
19 understanding how that's different from an estimate
20 to complete.

21 Can you describe the difference between
22 coming up with a schedule that comes up with a
23 substantially complete date versus an estimate to
24 complete?

25 A Right. So you're talking kind of apples

1 and oranges. So the schedule is the schedule. But
2 then the ETC is the actual cost associated with the
3 project.

4 Q Right.

5 A So -- so it depends for that estimate to
6 complete, to generate those costs, obviously you
7 have to use schedule as input. But you're kind of
8 talking apples and oranges when you're saying
9 schedule versus ETC.

10 Q Okay. And I didn't mean for ETC to refer
11 to costs. So I'll try to avoid that term when I'm
12 talking about schedule.

13 A Right. Yeah. So those dates that we used
14 as substantial completion in the -- in that
15 November 2015, I believe they were June of 2019 and
16 June of 2020 for the two units. And that's what
17 was -- what came out of those meetings.

18 Q And were those dates constrained?

19 A They would have been constrained with
20 other constraints in that schedule. And then we
21 would have had to address those through mitigation
22 strategies, like I explained before.

23 Q So from your view, when those schedules
24 were put together, did -- was there a position where
25 you were told, "These dates can't move to the right,

1 and we need to find a way to develop mitigation
2 strategies that keep these substantial completion
3 dates from moving to the right"?

4 MR. SCHALK: Form.

5 THE WITNESS: Yeah, you'd have to ask
6 Terry more about that.

7 BY MR. COX:

8 Q Okay.

9 A Yeah.

10 Q And what was your role on the ETC the cost
11 analysis?

12 A Yeah. Like I said before, it was just to
13 review items like schedule, et cetera, but it was --
14 mainly our role was to develop the estimate for our
15 group, and the personnel that we had, and the
16 installation costs that we would have been
17 associated with. So, you know, the installation of
18 the primary equipment, that sort of thing.

19 So those are the estimates that we would
20 have developed and submitted to the ETC people in
21 Charlotte.

22 Q From your perspective, looking at
23 installation, did the difficulties in fabrication of
24 the modules create lower productivity on
25 installation because you had personnel that weren't

1 being used to install who should have been?

2 A I really can't answer that one because,
3 frankly, if you have a delay in the module supply,
4 obviously that's going to set you back
5 productivity-wise. However, there was plenty of
6 work for people on-site to go accomplish other than
7 saying those module deliveries. So there was still
8 enough work to go around that those folks should
9 have remained busy with other things to take up
10 their time.

11 Q From your experience on the project, were
12 those folks staying busy who weren't performing the
13 task that was initially anticipated?

14 A Yeah, they would have reassigned those
15 folks to do other things. So -- so it might have
16 been that they were doing lookaheads on installation
17 of mechanical modules. We had a lot of issues
18 associated with mechanical modules because they
19 would come in from the supplier and they wouldn't be
20 just right. So we would have to modify those
21 modules on-site.

22 So -- so for those folks that were
23 supposed to come in and work on the big structural
24 modules in welding those out, they would have been
25 transferred to go work on the mechanical modules, to

1 help us where we never anticipated those kind of
2 delays, but we were finding that from the suppliers,
3 they weren't coming in exactly right.

4 Q So why did those steps not help the
5 productivity factor improve?

6 MR. SCHALK: Form.

7 MR. KEEL: Same.

8 MR. SCHALK: Go ahead.

9 THE WITNESS: Right. So the productivity,
10 I mean, it's still going to be what it's going
11 to be. Right? So that would accelerate one
12 piece of the project. But the major piece of
13 the project is, you know, these delivery of
14 modules, period, still is holding you back on
15 the project.

16 It's critical path. So those modules
17 assemblies, the smaller ones, would not have
18 been, quote, critical path.

19 BY MR. COX:

20 Q And when you say "critical path," can you
21 explain what that means?

22 A It's just a single path through the
23 project that gives you the shortest duration of
24 time.

25 Q Is it the most important path to the

1 substantial completion date?

2 A Yeah, it's what you concentrate on, yeah.

3 Q And why do you concentrate on that?

4 A Well, everything works from that. So
5 you -- you have the critical path work, and then
6 everything kind of flows into the critical path,
7 either in parallel or as prerequisite steps. So
8 with the critical path, that's how you drive your
9 project.

10 Q What happens if you have mitigation
11 strategies on the critical path that fail?

12 A Then you come up with other ideas to
13 mitigate the delays. And in some cases, if you
14 can't, you just, you know, take the hit in the
15 schedule.

16 Q In your experience on the project, were
17 any mitigation strategies developed that you found
18 to be impractical -- impracticable?

19 MR. SCHALK: Form.

20 THE WITNESS: No. From my involvement in
21 that, I thought that the people really made a
22 good effort to develop strategies that were
23 workable. And they hinged on certain
24 decisions, either by consortium or the owner,
25 but there were decision points that were made.

1 And the fact is, I think, the folks that
2 developed those strategies really did a pretty
3 good job. And that was the consensus that, you
4 know -- there must have been, I'd say, 40
5 people sitting in the room down in Columbia for
6 this transition period. And those are the
7 folks that really put in the effort to develop
8 those mitigation strategies in detail.

9 BY MR. COX:

10 Q And why do you believe the substantial
11 completion date for the project continued to slip to
12 the right if you feel those mitigation strategies
13 were -- were effective?

14 A Well, I'd say the mitigation strategies,
15 the development of them, that part was good. The
16 actual execution of them may or may not have been as
17 good. And there was still issues commercially on
18 mitigation strategies that took time to resolve.

19 So -- so while the mitigation strategy was
20 adequate, the duration for the decision-making
21 process probably would have taken too long, so it
22 extended the window.

23 Q So let's turn to those changes that
24 occurred in November 2015, or the fall of 2015.

25 Were you involved in the negotiations that

1 resulted in Westinghouse taking over some of the
2 role from CB&I?

3 A No.

4 Q How did you hear about that change?

5 A Through management.

6 Q And who informed you about that
7 specifically?

8 A It would have been the project director.

9 Q Was that Mr. Churchman?

10 A Yes.

11 Q What was your view on the changes that
12 occurred then?

13 MR. SCHALK: Form.

14 THE WITNESS: I just -- our company let
15 out -- you know, basically had a direction to
16 go, and we were the people to execute it.

17 BY MR. COX:

18 Q Did productivity improve, from your point
19 of view, after the changes in the fall of 2015?

20 A I think it did. And I think it shows in
21 the percent complete because it was climbing. We
22 never achieved what we wanted to achieve, but it was
23 climbing. So there were some improvements. It
24 never really got to where it had to get to if we
25 wanted to meet those substantial completion dates,

1 but it was headed in the right direction.

2 Q Why didn't it get all the way to where it
3 needed to be to meet the substantial completion
4 date?

5 A Well, there were a lot of changes being
6 made, and the full effect of those changes, I don't
7 think they were realized yet. But you could start
8 to see the trend that we were improving.

9 Q And did that trend go all the way up -- of
10 improvement go all the way up to the time of
11 Westinghouse's rejection of the contract?

12 A I think on the last month, from what I was
13 told, we had like a 1 and a half percent completion
14 for the month, that essentially that was the highest
15 that we had achieved; so yeah.

16 Q Did you think the project was going to get
17 constructed all the way up until the time that
18 Westinghouse departed?

19 A Yes. My belief was we'd finish the
20 project.

21 Q Do you have any knowledge of SCE&G's
22 requests of information from WEC for information
23 regarding the risks to meet the schedule?

24 MR. SCHALK: Form.

25 THE WITNESS: Well, we talked to SCE&G

1 about those risks quite a bit, and we held
2 monthly meetings with SCE&G to identify and go
3 through those risks on a monthly basis.

4 Actually, certain representatives of SCE&G
5 were in the weekly risk meetings. And then we
6 presented all of, you know, what we had done to
7 senior management of SCE&G, senior site
8 management, on a monthly basis. So people were
9 aware of exactly where we stood.

10 BY MR. COX:

11 Q Who from SCE&G was at those weekly risk
12 meetings?

13 A The weekly?

14 Q Right.

15 A It would have been somebody like Kyle
16 Young or one of his representatives.

17 But then on the monthly ones, it was
18 attended by senior site management for SCANA, so
19 like a Ron Jones, Brad Stokes, Alan Torres, those
20 folks.

21 Q What was the nature of the information
22 presented at those meetings versus the monthly
23 progress meetings?

24 A It was just -- it was just talking
25 specifically to risks. So this is the risk. This

1 is the major project risk. This is how we're going
2 to try and mitigate it. Here's where we stand.
3 That was the type of information that we shared with
4 SCANA.

5 Q How did it differ from what was discussed
6 in the monthly meetings?

7 A The monthly meetings, you know, the risk
8 register might have been talked about in high-level
9 form, but it wasn't going into the detail that the
10 risk meeting itself would have.

11 Q And who presented the information from
12 Westinghouse at those weekly meetings?

13 A The weekly meetings? That would have been
14 somebody from Lisa Cazalet's group.

15 Q Did you become aware at some point in time
16 that Bechtel was doing an assessment of the project?

17 A Yes.

18 Q When did you become aware of that?

19 A We were told that Bechtel was going to be
20 performing an assessment. SCANA had told our
21 project director, and then that flowed down from the
22 project director that Bechtel was coming on-site to
23 do this assessment.

24 Q So Mr. Churchman was the one who told you
25 about the assessment?

1 A Right.

2 Q Do you recall when that was?

3 A No, I don't know.

4 Q Have you ever worked with Bechtel before
5 2015?

6 A Yes. We had done a lot of decommissioning
7 work in spent fuel and that sort of stuff. And
8 we -- I was actually involved in working as a
9 subcontractor to Bechtel at Connecticut Yankee to
10 develop and build a new fuel transfer facility
11 farther. So yes, I've been involved with Bechtel.

12 Q What time period was that?

13 A Now you're testing my memory.

14 That was quite some time ago. That was
15 with AREVA; so I would think that that's got to be
16 10 years ago.

17 Q What is Bechtel's reputation in your
18 industry?

19 A I think Bechtel is very good. I think
20 they're kind of a stickler to work with
21 commercially. They're not the easiest people to get
22 along with, but typically they finish the job, so...

23 Q Did Mr. Churchman tell you anything about
24 the reason that Bechtel was doing an assessment of
25 the project?

1 A No. The assessment was just basically
2 they were coming in to assess the status of the
3 project and what they felt about it. So other than
4 that, there wasn't much detail.

5 Q Did you ever receive any information about
6 the reason for the Bechtel assessment from anyone
7 besides Mr. Churchman?

8 A Not really.

9 Q Were you ever told that the purpose of the
10 Bechtel assessment was to prepare for litigation
11 against Westinghouse?

12 MR. SCHALK: Form.

13 THE WITNESS: Never told that.

14 BY MR. COX:

15 Q Were you ever told that they would have
16 any role in the project beyond assessing the
17 project?

18 A No, I was not told that.

19 Q What were you told about the scope of
20 Bechtel's assessment of the project?

21 MR. SCHALK: Form.

22 THE WITNESS: Kind of like I said, it was
23 just to come in and do an assessment of where
24 the project stood. And then the going forward
25 on the project, whether it was reasonable to

1 assume that, you know, they make schedule
2 dates, et cetera. So that was kind of what we
3 were told.

4 BY MR. COX:

5 Q So you were told that schedule assessment
6 was part of the assessment?

7 A Well, I'm not saying schedule
8 specifically, but just the likelihood of making the
9 substantial completion dates. And then there were
10 other things factored into that.

11 But, you know, it was essentially Bechtel
12 had the scope of work that they were going to come
13 in and perform. Details behind it, I didn't get any
14 written details of what exactly they were doing, so
15 it would just be conjecture on my part.

16 Q What type of interactions with Bechtel did
17 you have during the assessment?

18 A So -- so we provided logistics, or some
19 logistics for them, for them to get around the site
20 and to go in and investigate certain areas, and just
21 like a support function for them. But we did not --
22 we did not work with those folks as far as
23 developing any details that went into the report.

24 Q What types of documents did you provide to
25 Bechtel?

1 A I -- I can't answer that, but I know SCANA
2 had set up a reading room that Bechtel would
3 basically be able to look at those documents. And
4 Westinghouse, I think, had supplied some documents
5 for that reading room, as well.

6 Q Are you -- are you aware of any requests
7 for information by Bechtel that Westinghouse refused
8 to meet?

9 A No, not that I know of. And those
10 requests would have come through SCANA. They
11 wouldn't have come through Bechtel.

12 Q Okay. Well, that's fine.

13 My question to you is: Even if the
14 request to Westinghouse or to you came through
15 SCE&G, are you aware of any times where Westinghouse
16 said, "We're not going to provide that information"?

17 A Not to my knowledge.

18 Q Were you ever given the suggestion that
19 you were not to cooperate with Bechtel in their
20 assessment?

21 A No. Nobody ever told us to just not
22 cooperate, no.

23 Q Beyond no one telling you that, did anyone
24 give you the impression that you shouldn't be
25 forthcoming with Bechtel?

1 MR. SCHALK: Form.

2 THE WITNESS: Nope.

3 BY MR. COX:

4 Q Did you have an interview with Bechtel?

5 A Have an interview?

6 Q Yes. Did someone from Bechtel interview
7 you?

8 A No. There were discussions, but it
9 wasn't, quote, a formal interview.

10 Q So you had conversations with --

11 A Yeah, certain Bechtel people.

12 Q Okay. Who from Bechtel did you talk to?

13 A Well, I had talked to John Atwell, who
14 was -- John, I don't think, was part of the team
15 that actually did the assessment. I think John was
16 more the Bechtel lead on-site putting it together.
17 So...

18 Q What did you talk to Mr. Atwell about?

19 A Well, just, you know, what they need from
20 the support standpoint for us to try and help them
21 out.

22 Q What did he say they needed?

23 A Well, it would just be like escorting into
24 the areas that they needed to get in to see what the
25 status of the scope of work was. So, you know, we

1 could provide them that access.

2 Q Do you recall talking to anyone else from
3 Bechtel, besides Mr. Atwell?

4 A I don't. I don't. I'm getting the
5 Bechtel thing confused with the Construction
6 Oversight Review Board. So -- so from the Bechtel
7 side, I don't recall anything on the Bechtel side.

8 Q Did you provide a schedule to Bechtel?

9 A I can't say definitively, but I guess
10 that's a question for Terry.

11 Q Okay. Did anyone at Westinghouse express
12 any concerns to you about providing information to
13 Bechtel?

14 A No, not to me.

15 Q Did you ever see the report that Bechtel
16 produced regarding the assessment?

17 A I've seen what's been printed in the
18 papers. You know, I've seen that. I haven't seen
19 the attachments that were associated with the
20 report, but the main body of the report, I've seen,
21 yes.

22 Q Did you see it while you were still on the
23 project?

24 A No; it was after.

25 Q So it was within the past year that you

1 saw it?

2 A Uh-huh.

3 Q Is that a yes?

4 A Yes.

5 Q Did you have any understanding, when
6 Bechtel was doing the assessment, whether there
7 would be a written report?

8 A I didn't know what the scope of their work
9 really was, you know. I was just told that they
10 were coming in and doing an assessment.

11 Normally, when you do an assessment, you
12 write it up. So I would imagine that there would be
13 a report, but I had -- I had no knowledge of what
14 they were contracted to do.

15 Q Did you have any conversations with your
16 colleagues about requesting to see the Bechtel
17 report?

18 A No. We just picked it up online when it
19 was available.

20 Q Right. And I should rephrase that
21 question.

22 When you were still on the project, in
23 2015, after the assessment was complete -- and let
24 me preface this by saying: Did you have an
25 understanding of when the Bechtel assessment was

1 done?

2 A I guess the -- the completion date of the
3 Bechtel assessment, I don't really know the end date
4 on that. Okay? But -- but the report itself, the
5 first time I saw it was when it was public.

6 Q And did you have any conversations, while
7 you were at the project, with your colleagues about
8 asking for a written copy of the Bechtel assessment?

9 MR. SCHALK: Form.

10 THE WITNESS: I didn't.

11 THE COURT REPORTER: Did or didn't?

12 THE WITNESS: Didn't.

13 THE COURT REPORTER: Thank you.

14 MR. SCHALK: Try to keep your voice up.

15 THE WITNESS: Voice up? Okay.

16 BY MR. COX:

17 Q Did you have any discussions, while you
18 were on the project, about what Bechtel's
19 conclusions were?

20 A Not really. I think, you know, the report
21 was put out and, you know, was -- it wasn't viewed
22 one way or the other from the project perspective,
23 so...

24 Q Did you know that a report had been put
25 out while you were on the project?

1 A No. You know, the first -- like I said
2 before, the first time I saw the report was when it
3 became publicly available.

4 Q And I want to kind of shift this
5 questioning back to the time period right after the
6 Bechtel assessment was complete.

7 Did you have any understanding -- even
8 though you didn't see a report, did you have any
9 understanding of what the conclusions Bechtel had
10 reached in its assessment were?

11 A Not -- not -- not until I saw the report
12 when it became public. That report and the
13 assessment was basically handled from SCANA
14 internally, so they were working through SCANA. So
15 we weren't obligated to see anything that was
16 generated from Bechtel on that.

17 Q So it's correct to say that you did not
18 know what Bechtel's conclusions were while you were
19 on the project?

20 MR. SCHALK: Asked and answered. Go
21 ahead.

22 THE WITNESS: That's true. Or at least I
23 don't recollect when those -- those -- when the
24 information became available.

25 BY MR. COX:

1 Q Did it become available while you were on
2 the project?

3 A No, not to my knowledge. I mean, I told
4 you it started when it became public.

5 Q Right. And I just want to know what you
6 personally know, not your company.

7 You mentioned the Construction Oversight
8 Review Board. Can you explain what that is?

9 A Well, SCANA had brought in the seasoned
10 veterans -- I guess "seasoned" is the best word to
11 use -- that had a lot of construction experience.
12 And they were supposed to basically bring some
13 oversight and make recommendations to SCANA from the
14 construction perspective.

15 So it was infrequent meetings. There were
16 periods -- I think it might have been once a
17 quarter. I don't really remember the periods on the
18 meetings, but this construction oversight board
19 would do some reviews. They'd interview people that
20 they wanted to interview. And then they'd go out
21 and complete their assessment and make
22 recommendations to SCANA.

23 Q Were you ever interviewed by the board?

24 A I was. I was.

25 Q Who interviewed you?

1 A I'm trying to remember. I can see his
2 face. He used to work for SGT. It was Williamson,
3 Mr. Williamson.

4 Q And what did you discuss with him?

5 A Just the overall approach to construction
6 and our scope associated with the project.

7 Q Are you aware of any recommendations that
8 were made by the Construction Oversight Review
9 Board?

10 A They put it out and they issued those
11 essentially to SCANA that would then roll through
12 SCANA and come to us in the form of, you know,
13 enhancements, whether they be schedule or a process
14 or whatever.

15 Q And did you implement those
16 recommendations?

17 A Well, we would have taken it to put it as
18 an action to implement it. So there would have been
19 like a performance improvement plan that would have
20 taken that item and captured it and tracked it to
21 make sure that that recommendation did get utilized.

22 Q And how often did this -- these
23 recommendations come from the review board?

24 A Well, I can't remember that clearly when
25 they met, you know. I don't know if it was once a

1 quarter or whatever, but usually there was an
2 assessment for each time that they came and met.
3 And we would take those assessments that came
4 rolling through SCANA to implement.

5 Q Was anyone from Westinghouse on the
6 Construction Oversight Review Board?

7 A No. It was independent.

8 Q Did SCE&G ever use an owner's engineer on
9 the project?

10 A That's a good question. They had
11 engineering firms come out and perform services for
12 them. But as far as, like, an AE on the project,
13 I -- they didn't have an AE, but they did, for
14 specific scopes of work, contract engineering
15 companies to perform work for them.

16 Q What does AE mean?

17 A Architect engineer.

18 Q How is that different from an owner's
19 engineer?

20 A Well, an architect engineer is actually
21 involved in portions of the design, as well. The
22 owner engineer would not be.

23 Q Have you worked with owner's engineers on
24 other projects?

25 A Yes, yes.

1 Q What type of role does the owner's
2 engineer usually fill?

3 A So the owner's engineer is basically to
4 review whatever happens on the other side of the
5 house. So if somebody's been contracted to go build
6 a building, right, the owner's engineer is looking
7 at it from, you know, what specs were provided and
8 all that, making sure the compliance between the
9 constructed building is essentially the same as what
10 was outlined in the specifications.

11 Q Do you feel the project would have
12 benefited from having an owner's engineer?

13 A I can't answer that. It's a SCANA
14 question.

15 Q Why do you feel it's a SCANA question?

16 A Because, you know, SCANA had an overall
17 plan, I guess, to manage the project. And it didn't
18 include, I don't think, an owner's engineer. So --
19 so you'd have to ask SCANA that question.

20 Q The project ran into some issues with
21 productivity --

22 A Uh-huh.

23 Q -- correct?

24 A It did.

25 Q Do you feel an owner's engineer would have

1 helped mitigate those problems?

2 MR. KEEL: Object to form.

3 THE WITNESS: I can't see where they would
4 have actually -- would have had the insight to
5 actually mitigate the problem.

6 BY MR. COX:

7 Q When did you become aware that
8 Westinghouse was going to declare for bankruptcy?

9 A March of 2017.

10 Q At the time it occurred?

11 A Yes.

12 Q You didn't have any notice that it would
13 happen earlier?

14 A We had -- we had a day or two. That was
15 about it.

16 Q What was your reaction to learning about
17 it?

18 MR. SCHALK: Form.

19 THE WITNESS: My reaction was it was a
20 necessity. They needed to do it.

21 BY MR. COX:

22 Q Why was that?

23 A Well, cash flow issues inside of
24 Westinghouse. They had to do it.

25 Q Did you feel that the project was, from

1 your view, was creating financial troubles for
2 Westinghouse?

3 A I'd say obviously, yeah. Yeah.

4 Q Did you have any view on whether the fixed
5 price amendment that occurred in October 2015 would
6 cause financial problems for Westinghouse?

7 A At the time, I didn't -- I didn't know
8 anything that had been worked out in the details of
9 that agreement. But going forward, obviously it did
10 prove to be not -- not probably the right thing to
11 do. So -- so I really can't answer beyond that.

12 Q Did you ever hear anyone at Westinghouse
13 convey to SCE&G that Westinghouse would continue to
14 work on the project even if it resulted in
15 Westinghouse losing money on the project?

16 A I never heard that.

17 Q Were you involved in Westinghouse's
18 calculations, financial calculations, that they used
19 in negotiating the 2015 amendment to the contract?

20 A Huh-uh.

21 Q Were you involved in providing SCE&G
22 information about the project in 2017, after
23 Westinghouse's bankruptcy?

24 MR. SCHALK: Form.

25 THE WITNESS: Say that again.

1 BY MR. COX:

2 Q Sure.

3 In 2017, after Westinghouse's
4 bankruptcy --

5 A Right.

6 Q -- were you involved in providing
7 information to SCE&G about the status of the
8 project?

9 A We continued on like it was a normal
10 project. So all the reports that we generated, we
11 kept them to generate those reports and transmit
12 those to the owner.

13 Q Did you have any unique obligations during
14 that time period to work with SCE&G on calculations
15 that SCE&G was making about whether to continue
16 constructing the project?

17 MR. SCHALK: Form.

18 THE WITNESS: I never did.

19 BY MR. COX:

20 Q Is that a no?

21 A That's a no.

22 MR. COX: If we can take a short break,
23 I'll look through my notes and finish up.

24 MR. SCHALK: Sure.

25 THE VIDEOGRAPHER: The time is 10:33 a.m.

1 We are off the record.

2 (Recess in the proceedings from 10:33
3 to 10:45.)

4 THE VIDEOGRAPHER: The time is 10:45 a.m.

5 We are back on the record. Please proceed.

6 BY MR. COX:

7 Q Mr. Magnarelli, I have just a few more
8 follow-up questions.

9 A Sure.

10 Q During your time at the project, did you
11 ever have any interactions with any personnel from
12 the South Carolina ORS, Office of Regulatory Staff?

13 A Yes, we met on -- there was functional
14 area assessments that went on between the consortium
15 that gave the results of those functional area
16 assessments to the owner. ORS was of particular
17 interest in that, and we met regularly with the ORS
18 to go over those functional area assessments with
19 them.

20 And then there were the periodic monthly
21 meetings with the ORS. And then those I didn't
22 regularly attend, but on once or twice, I met with
23 them on that, as well.

24 Q Those monthly meetings you're referring to
25 are different meetings than the progress review

1 meetings, correct?

2 A Correct.

3 Q Did ORS attend the progress review
4 meetings?

5 A They could have. I believe they were
6 invited. I think in some instances, they did, but I
7 don't have a total recollection.

8 Q And these monthly meetings with --

9 A ORS.

10 Q -- with ORS --

11 A Right.

12 Q -- were you always in attendance there or
13 generally?

14 A No. Once or twice, I had gone as a
15 replacement for, like, Carl Churchman or somebody
16 else.

17 Q What issues -- I'm sorry.

18 A Because Carl would have been the guy that
19 normally attended those.

20 Q And what was discussed at those meetings?

21 A Again, it was just the status of the site.
22 And, you know, if the ORS had particular concerns or
23 any issues that they wanted to discuss, they would
24 have brought them up during that meeting.

25 Q Did you ever have any interactions with

1 ORS staff outside of those meetings, like one-on-one
2 conversations?

3 A There were some, because the ORS
4 representatives were there and, you know, you'd just
5 have a discussion with them. Like, I can
6 remember -- I can't remember the gentleman's last
7 name, but his first name was Gene. And we were
8 setting a steam generator, and he wanted to know
9 exactly what the status was and the setting of that
10 steam generator, because we had some issues with bad
11 controllers that day.

12 But, I mean, discussions like that we
13 would have when you'd see them around the site and
14 they'd stop you and ask you some questions.

15 Q Were you ever told not to share certain
16 information with ORS personnel?

17 A No.

18 Q Did you have any input into the filings
19 that SCE&G made with the South Carolina Public
20 Service Commission?

21 MR. SCHALK: Form.

22 THE WITNESS: No.

23 BY MR. COX:

24 Q Was there an issue or problem at the
25 project regarding parts arriving and backing up

1 before they were ready to be constructed?

2 A There were. You know, we had to establish
3 storage tents, and then we actually had to rent
4 warehouses offsite to actually store the equipment,
5 as well. So, you know, it did.

6 We had a lot of equipment delivered that
7 we couldn't put into the plant because the plant
8 wasn't that far constructed yet. So we had to find
9 someplace to put it and store it properly, because a
10 lot of this equipment had pretty stringent storage
11 requirements, you know, humidity, temperature,
12 et cetera.

13 Q Did that increase the cost of the project?

14 A The added storage, yeah. Yes.

15 Q What was the volume of parts that you had
16 on hand that you couldn't use yet?

17 MR. SCHALK: Form.

18 MR. KEEL: Form.

19 THE WITNESS: I couldn't answer that.

20 BY MR. COX:

21 Q How much space were you required to rent
22 out to store this equipment?

23 A Well, there were two warehouses. One was
24 Metro and one was Blythewood. And I believe the
25 combination of the two was about 400,000 square feet

1 of storage space.

2 Q How long did you have to rent that space?

3 A That I don't know.

4 Q Was it the whole time you were there?

5 A No.

6 Q Did it end before you left?

7 A It's ended now, since they've removed all
8 the equipment from those warehouses and brought it
9 back to the site. So -- so all the equipment is out
10 of those warehouses. They no longer pay rent. And
11 it's back on-site right now. It's stored in tents
12 and warehouses on-site.

13 Q Was that space still being rented at the
14 time that Westinghouse rejected the contract?

15 A It was --

16 MR. SCHALK: Form.

17 THE WITNESS: Yeah, I'm not sure. I'm not
18 sure.

19 BY MR. COX:

20 Q About how much did it cost to rent that
21 space?

22 A I don't know.

23 Q Did you ever know?

24 A No. That's not my bailiwick, rent.

25 Q Whose bailiwick is it?

1 A It would have been our procurement people.
2 They would have established the contract.

3 Q And who was that?

4 A Ed Terres is the WECTEC purchasing
5 manager. So it probably would have been something
6 through his group.

7 Q How do you spell his last name?

8 A T-E-R-R-E-S.

9 Q During the August 2014 schedule workshop,
10 do you recall whether Westinghouse projected that it
11 could reach a 1.15 productivity factor in six
12 months?

13 A 1.15?

14 Q Right.

15 A Right. So the 1.15 was the nominal that
16 we believed was achievable, yeah. And that's a
17 performance factor, not a productivity factor.

18 Q What's the difference between those two?

19 A They just call that the performance
20 factor; so it's not to be confused with
21 productivity.

22 Q What does performance factor measure that
23 productivity doesn't?

24 A So if you had a 1.0 performance factor,
25 that means that you're performing at what you had

1 planned. Okay. So because of the complexity of the
2 buildings, et cetera, the plan was to use a
3 performance factor of 1.15. And as long as you met
4 1.15, you were on plan.

5 Q And how is that different than a
6 productivity factor? Because I thought they were
7 the same.

8 A They call it performance factor. That's
9 all I can tell you.

10 Q Okay. Who from SCE&G did you interact
11 with the most while you were on the project?

12 A It would have been their construction
13 folks, so Alan Torres, Kyle Young, people in Kyle's
14 group.

15 Q How often did you interact with them?

16 A Daily.

17 Q Are you still a Westinghouse employee?

18 A Yes.

19 Q What's your current position?

20 A Director of Operations. [REDACTED]

[REDACTED]

[REDACTED]

23 Q And has that been your role ever since you
24 left the project?

25 A No. We -- my role was actually to demob

1 the V.C. Summer site for the Westinghouse
2 construction. So we demob'd that site and I shipped
3 the construction equipment for auction. So the
4 construction equipment has been auctioned. We still
5 have a couple of things left on-site, like the HLD
6 and the batch plant that we're planning to also
7 auction off at some point.

8 So right now I'm the last guy badged at
9 V.C. Summer from Westinghouse.

10 Q But you no longer physically work out of
11 V.C. Summer; is that right?

12 A No. I make periodic trips.

13 Q When did you leave the plant from working
14 there on a full-time basis?

15 A It would have been the -- what is it now?
16 I believe it was -- I don't have the date offhand,
17 but I think it was June 1st is when we actually made
18 that transition.

19 Q June 1st of 2018?

20 A Yes.

21 Q This year?

22 A Right.

23 Q Were you in touch with SCE&G about their
24 estimates to complete that they performed after
25 Westinghouse rejected the contract?

1 A Repeat that, please.

2 Q Sure.

3 Were you involved with SCE&G's work in
4 determining an estimate to complete schedule in
5 2017, after Westinghouse rejected the contract?

6 MR. SCHALK: Form.

7 THE WITNESS: No, I was not.

8 BY MR. COX:

9 Q Did you ever hear that SCE&G was critical
10 of the schedule that Westinghouse had at that time?

11 MR. SCHALK: Form.

12 MR. KEEL: Same.

13 THE WITNESS: No.

14 BY MR. COX:

15 Q Were you ever involved in the work at the
16 Vogtle plant construction?

17 MR. SCHALK: Form.

18 THE WITNESS: No. We do -- we do some
19 minimal work with the Vogtle plant, but no, not
20 primarily.

21 BY MR. COX:

22 Q Are you aware of any differences in how
23 the Southern Company supervises the work at Vogtle
24 versus how SCE&G supervised the work at V.C. Summer?

25 A No, I wouldn't have any knowledge of that.

1 MR. COX: Thank you for your time,
2 Mr. Magnarelli. I have no further questions.
3 I believe my colleagues do.

4 THE WITNESS: All right. Thanks.

5 MR. NELSON: Could we ask again that the
6 deponent speak more loudly?

7 THE WITNESS: Okay.

8 - - -

9 EXAMINATION

10 - - -

11 BY MR. EVANS:

12 Q Good morning, Mr. Magnarelli. I'm Jerry
13 Evans, and I represent a class of plaintiff
14 ratepayers in this case. And I also thank you for
15 giving us your time to be here today.

16 I want to ask a couple of terms you used
17 in your testimony. You said at the period that
18 Fluor took over some of the responsibilities of Shaw
19 and CB&I, that Westinghouse maintained
20 responsibility for primary equipment installation,
21 correct?

22 A Correct.

23 Q Define for me "primary equipment."

24 A It would actually be the nuclear circuit.
25 Okay. So the heart of the plant, it would be like

1 the reactor vessel, the steam generators, the
2 pressurizer, PRH, our heat exchanger, reactor
3 cooling piping. It would actually be probably the
4 most important equipment that goes into the plant.

5 Q And what about other construction-type
6 equipment, like cranes, for example? Would that
7 have been Westinghouse's responsibility or --

8 A Well, cranes, like the polar crane that
9 were down in containment, that would have been our
10 responsibility. But just normal construction
11 cranes, that would have been the constructor's role.

12 Q Which would have been Shaw and CB&I?

13 A Shaw/CB&I and Fluor.

14 Q And then Fluor?

15 A Right.

16 Q Another term you used, when talking about
17 productivity issues, you cited one of the causes,
18 that the civil work was underestimated.

19 What's your definition of the "civil
20 work"?

21 A Civil work is the actual structure itself.
22 So in other words, it would have been the aux
23 building, auxiliary building, annex building. For
24 the nuclear island, it would have been containment,
25 and then the shield building. So that would have

1 been the nuclear island civil work.

2 Q And are you aware of any particular steps
3 that SCE&G took to mitigate the civil work problems?

4 A No, there wasn't -- I think any -- any
5 issues that came up, it was kind of a joint effort.
6 Like I said before, on these mitigation strategies
7 and the meetings between the consortium and the
8 owner, that mitigation strategies were developed to
9 address issues. However, there were just certain
10 issues that -- that the constructor was having
11 trouble with, concrete placements, for instance.
12 And then there was the issue associated with the
13 complexity of the rebar patterns and actually, you
14 know, making sure that everything fit.

15 So it -- it wasn't as straightforward, I
16 think, as the constructor had originally planned.
17 So it was a bit more complex than your straight
18 structural steel building or something like that, or
19 reinforced concrete building.

20 Q And was it your understanding that SCE&G
21 was fully aware of these construction problems as
22 they were happening?

23 A Yes. Yes.

24 Q You mentioned a scheduling workshop in
25 August 2014.

1 A Right.

2 Q Whose idea was it to have that workshop?

3 A I think it was mutually agreed upon
4 between the consortium and the owner.

5 Q Do you remember anyone in particular who
6 was responsible for planning or setting up the
7 workshop?

8 A Well, Kyle Young from SCANA was probably
9 the point person, and Terry Elam from our side was
10 the point person on that.

11 I know in the initial first few days, we
12 had a lot of people in the room at management level.
13 Like Alan Torres probably would have been in there
14 on the first day. There were some senior managers
15 in there on the first few days of the scheduling
16 workshop, and then it was left up to their designees
17 to complete the effort.

18 Q You mentioned an amount of equipment that
19 had to be stored in warehouses offsite. Was there
20 an inventory done of that equipment?

21 A Yes.

22 Q Okay. So were you fully aware of where
23 equipment was, what it would take to get it into
24 service, and who would be responsible for getting
25 it?

1 A Right.

2 MR. SCHALK: Form.

3 THE WITNESS: That was all recorded.

4 BY MR. EVANS:

5 Q At some point in 2016, were you
6 responsible for heading up an inventory of
7 equipment?

8 A That wasn't me, but it was -- we had some
9 involvement. The person that actually was the point
10 person on that was a gentleman by the name of Tony
11 Boone, and he was actually in my group.

12 So -- so that whole planning organization
13 that I had talked about before, those were
14 essentially people that went out and captured the
15 inventory and the status of the project of where it
16 stood right at that point from a construction
17 perspective.

18 Q What was the need for -- for an inventory
19 assessment in 2016 that was different from before?

20 A The inventory assessment in 2016 was to
21 actually calculate how much had been installed in
22 the -- in the units. So it was not only doing the
23 inventory of where the equipment was, just to verify
24 the equipment, but it was also how much rebar had
25 been installed, how much embedment plates.

1 It was to get some percent complete and
2 have a good handle on that percent complete, if
3 that's the effort that you're talking about. My
4 dates, 2016, it was about that time frame that they
5 went through this effort. And it was a major effort
6 to do that. So that's my recollection, 2016, is the
7 approximate time for that.

8 There was also -- there was also material
9 inventory going on at all the warehouses and in all
10 the tents, et cetera. And I can't -- can't remember
11 the dates on that, so I'm not sure exactly what
12 you're talking about in 2016. They both might have
13 overlapped.

14 Q Well, about how long did this inventory
15 process take?

16 A Okay. So the inventory process that I was
17 talking about, to see how much had actually been
18 installed in the plant, was weeks. Not -- not
19 several months, but it was actually weeks.

20 Q Six weeks? Eight weeks?

21 A I would say between four to six, somewhere
22 in that range.

23 Q As part of the inventory assessment, was
24 there any attempt to reduce the amount of equipment
25 that was either on-site or in storage?

1 A No. We had planned to put it in the
2 plant.

3 Q A number of documents have been produced
4 in this litigation, and we've seen a number of
5 presentations that are made. And a couple of them
6 have your name on them.

7 A Great.

8 Q So I wanted to ask you a question.
9 What is the advanced constructibility
10 program?

11 A Yeah. So this is the planning effort that
12 I had talked about before. When I got to the
13 project, there really wasn't a lot of lookahead from
14 a construction planning standpoint. So we -- we
15 established a strategic planning team, is what the
16 organization was called. And that strategic
17 planning team then morphed into this planning group
18 that actually did the construction planning effort,
19 as well as refine the work control processes.

20 So we actually took the procedures --
21 there were nine procedures that you had to adhere to
22 from a work package preparation standpoint. And we
23 basically scaled that down into one procedure that
24 you had to use versus the nine. So it was things
25 like that for enhancements, efficiencies.

1 As far as the planning team, they did
2 reviews of just how the building should be
3 constructed. And they kind of laid it out step by
4 step, what you should be installing first, second,
5 third, et cetera. So the strategic planning team
6 would identify that, but then this advanced
7 constructibility review team would also look to see
8 if what the design -- the design provided was
9 actually constructible, and then what information we
10 could give the constructor that would help them in
11 constructing.

12 So -- and I'll just give you an example.
13 So they had spacing on rebar. Okay. But that
14 spacing on rebar would have been a problem, because
15 if you laid it out from one end, which typically
16 constructors will do, and then go all the way across
17 the face of the wall, you would have run into
18 interferences in the middle of the wall because
19 there's other embedments, et cetera.

20 So that group would have said, "Hey, you
21 have to lay out your rebar pattern on either side of
22 these embedments, and then that way you won't have
23 the issues associated with the misalignment and
24 interferences." That would have been the group that
25 would have done something like that.

1 Q And was this advanced constructibility
2 program -- was it implemented?

3 A It was.

4 Q And do you think it solved problems?

5 A We got through the pilot program, and that
6 showed benefits. And then we instituted it
7 projectwide. And I think the fact that it wasn't
8 totally bought into by the constructor might have
9 been -- might have been part of the reason that we
10 didn't fully realize what it could have done.

11 Q Did anyone from SCE&G have any involvement
12 in the advanced constructibility program?

13 A They -- they were aware of it. Did they
14 actually sit in that group? I don't think that they
15 were actually part of the group. You know, they
16 were obviously involved in knowing that strategic
17 planning was going on, advanced constructibility.

18 We also had a group that did Tekla
19 modeling. That's a software program that would
20 actually model rebar patterns to make sure that
21 things were going to line up and not interfere with
22 each other. So that effort was ongoing to help the
23 constructor actually gain some efficiencies.

24 Q And was SCE&G aware of the constructor --
25 I think this was your term -- not fully buying into

1 this?

2 A You know, we talked about it. The
3 constructor -- and it's a mindset with the
4 constructor that if you're going to get them to
5 think in these terms, you should probably have
6 started at the project inception.

7 But these -- the constructor was
8 essentially just dealing with day-to-day issues.
9 And they just wanted to see -- wanted to face what
10 was, you know, really staring them in the face.

11 So these things were really planning. So
12 they were out further than just, you know, their
13 day-to-day activities.

14 Q I think you -- in your earlier testimony,
15 you described the constructors and Westinghouse as
16 having divergent goals; is that correct?

17 A Uh-huh.

18 Q Is that an example you were just talking
19 about of seeing the immediate need?

20 A No. I think at that point, you know, we
21 were all one team at that point. But I think the
22 original contract setup was what I was talking about
23 before. And that contract setup just kind of lends
24 itself to people having different goals and purpose.

25 MR. EVANS: I don't have much more, but

1 I've been informed we need to make a tape
2 change. So let's do that now.

3 THE WITNESS: Oh, okay.

4 THE VIDEOGRAPHER: This ends disk 1. The
5 time is 11:10 a.m. We are off the record.

6 (Recess in the proceedings from 11:10
7 to 11:12.)

8 THE VIDEOGRAPHER: Here begins disk number
9 2 in today's deposition of Dan Magnarelli. The
10 time is 11:12 a.m. We're back on the record.
11 Please proceed.

12 BY MR. EVANS:

13 Q Mr. Magnarelli, another -- another topic
14 that I see your name attached to in the documents is
15 something called a Bluefin 16.0 Construction & Site
16 Management Work Stream. Are you familiar with that?

17 A Yes.

18 Q In general, could you describe to me
19 what -- what this is?

20 A That -- is that the one that was done in
21 The Woodlands or is that the one that was done in --
22 could I actually see the document so I know what I'm
23 talking about?

24 Q (Handing.)

25 MR. SCHALK: Actually, can I take a look?

1 Are you attaching this or just using it?

2 MR. EVANS: No. I just have a general
3 question.

4 MR. KEEL: Let's at least read the Bates
5 into the record.

6 MR. EVANS: Sure.

7 MR. SCHALK: Just go from there
8 (indicating). You can give that back.

9 THE WITNESS: Okay. Yeah, this was -- we
10 were in Columbia, actually, setting up the
11 construction piece of this Bluefin effort.

12 So this -- you know, we had broken down
13 the Bluefin. That was the project name before
14 we actually transitioned in January of 2016 to
15 where Westinghouse took over. And this was in
16 preparation of that takeover, how we were going
17 to transition and make improvements to the
18 construction segment of the project. And
19 that's why you'll see that these were the
20 things that were identified on here. This
21 construction site management, these were the
22 areas that we were actually trying to go make
23 improvements on.

24 So we had that discussion. It was a group
25 effort between Fluor and Westinghouse. And we

1 did have SCANA representation, as well. So
2 people were involved with this. I know Kyle
3 Young was down in Columbia. And I think there
4 was a gentleman that worked for Kyle -- I can't
5 remember his name offhand right now -- who
6 actually sat on this team.

7 BY MR. EVANS:

8 Q And so this is a program or plan that was
9 implemented?

10 A Yes. We went through and created the
11 functional area assessments for all of these. And
12 there were 31 functional area assessments
13 identified. We went through and actually executed
14 about 15 of those. And these were all included --
15 these were included in all of that.

16 Q And do you believe that as a result of
17 implementing those plans, there was improved
18 productivity on the project?

19 A Yeah. I mean, a lot of these don't deal
20 with productivity per se, because you would have had
21 facilities, construction facilities and equipment,
22 you know. So it's not necessarily productivity
23 improvement.

24 But things like on the welding program,
25 there were a number of improvements made to the

1 welding program. Rigging and handling, we
2 simplified the processes of rigging and handling.
3 The subcontracting plan was also reviewed; and kind
4 of streamlined the subcontracting plan, as well.

5 So these areas were addressed. They were
6 contained in functional area assessments, written up
7 as to what the recommendations would be going
8 forward. And there were -- some of those
9 recommendations were actually carried out; some were
10 not.

11 Q Okay. What's an example of a
12 recommendation that was not carried out?

13 A So it would have been, like, the resource
14 plan. So the resource plan. So we had a resource
15 plan, but it wasn't loaded into the schedule fully.
16 Right? Like what we explained before, there was a
17 gap in that. And we wouldn't have carried that out
18 to completion.

19 So that was something we felt that wasn't
20 really worthwhile to spend the extra effort to get
21 that detail, so we would not have carried that back
22 end of that out.

23 Q And who decided that that would not have
24 been worth the effort?

25 A It's decided between the constructor,

1 Westinghouse, and relayed to the owner, reported to
2 the owner that we were not going to go down that
3 path.

4 Q Did the owner react in any way to your
5 decision not to go down that path?

6 A I don't recall any negative feedback on
7 that, because the areas that we weren't going to
8 resource load, you know, weren't really the primary
9 areas of critical path representation for the
10 project.

11 Q May I?

12 A Yes (handing).

13 MR. KEEL: Can you just read those two
14 pages?

15 MR. EVANS: The witness was referring to a
16 document that has the following Bates number,
17 SCANA_RP0274251.

18 And I'm happy to make this an exhibit. I
19 just didn't have another copy of it.

20 MR. KEEL: Up to you.

21 BY MR. EVANS:

22 Q I just wanted to ask you a couple of terms
23 that were used in here. There's a phrase in here
24 called one-by-four planning. Are you familiar with
25 that?

1 A Yes.

2 Q Define that for me.

3 A It's essentially kind of a fleetwide
4 approach. So we had four plants that were under
5 construction, two at Vogtle, two at Summer.

6 So, you know, if there was, say, an
7 engineering design change or if there was a
8 procurement strategy where we could gain the benefit
9 by, say, buying for four plants versus one, then,
10 you know, that would be an efficiency.

11 So it was -- one-by-four planning was the
12 title of the functional area, and it represented
13 that we would be doing one thing for all four
14 plants.

15 Q How was that a change from how you had
16 been managed before?

17 MR. SCHALK: Form.

18 MR. KEEL: Same.

19 THE WITNESS: Okay. So -- so I'll just
20 give you an example of work packages. Right?
21 Vogtle had their way of doing it. Summer had
22 their way of doing it. We skinnied that all
23 down to a way to do it.

24 So that's where, I think, both sites
25 gained some efficiency in the scaled-down work

1 package process.

2 BY MR. EVANS:

3 Q And included in the goals in this Bluefin
4 project were the 3 percent a month completion rate;
5 is that correct?

6 A Right.

7 Q And I believe you testified earlier, that
8 was never achieved?

9 A Correct.

10 Q I think the best you said you achieved was
11 about 1 and a half?

12 A That's my recollection.

13 Q Okay. And, of course, SCE&G was fully
14 aware of that level of progress, correct?

15 A Correct.

16 Q Did you have -- in your work on the
17 project, did you have any direct involvement with
18 folks from Toshiba?

19 A We did. We had Toshiba representatives
20 for the turbine generator. And they -- they kind of
21 annexed a group that was responsible for the turbine
22 generator installation. So we had that group
23 on-site. They were at one point five, and then it
24 went to four. So there were four individuals from
25 Toshiba.

1 There was also some Toshiba folks that
2 were actually stationed down in Vogtle that would,
3 you know, review schedules and offer their input
4 into it. We also had one of the Toshiba personnel
5 that switched to Westinghouse eventually, but he was
6 actually part of the planning team, as well.

7 Q Were they on-site for the whole time that
8 you were there?

9 MR. SCHALK: Form.

10 THE WITNESS: Well, I think the Toshiba
11 folks came when it was necessary for the
12 turbine generator installation, but they were
13 there prior to that, too.

14 The Toshiba folks that I was talking about
15 planning, et cetera, those were assigned to the
16 Vogtle site. So they would come over here
17 periodically, but they were actually assigned
18 to Vogtle.

19 BY MR. EVANS:

20 Q Were Toshiba folks involved in the design
21 elements of the AP1000?

22 A From the turbine system side, yes.

23 Q For the turbine system side?

24 A Yeah.

25 MR. EVANS: Thank you, sir. That's all

1 the questions I have.

2 I will -- since we ended up discussing
3 this document, I will make this an exhibit.

4 - - -

5 (Bluefin 16.0 Construction & Site
6 Mgmt. Work Stream, SCANA_RP274251-274264,
7 marked Magnarelli Exhibit Number 1 for
8 identification.)

9 - - -

10 MR. COX: I never entered the other one,
11 so it should be Number 1.

12 MR. KEEL: Do you want both of these,
13 Jerry?

14 MR. EVANS: Just this one.

15 - - -

16 EXAMINATION

17 - - -

18 BY MR. KEEL:

19 Q Mr. Magnarelli, we met just before your
20 deposition, but, again, my name is Brandon Keel. I
21 represent SCE&G and SCANA in these matters. I want
22 to thank you for your time here. I just have a few
23 more questions for you. Okay?

24 A Sure.

25 Q So I believe you testified in response to

1 Mr. Cox's questioning that you first started on the
2 Summer project in March of 2013; is that right?

3 A Correct.

4 Q And you stayed through the project
5 until -- through Westinghouse's bankruptcy filing;
6 is that right?

7 MR. SCHALK: Form.

8 THE WITNESS: No, longer than that.

9 Actually, the bankruptcy filing was in March.
10 The shutdown was the end of July. And then I
11 stayed there to demobilize the site, which was
12 extended into 2018.

13 BY MR. KEEL:

14 Q Okay. And throughout your time working on
15 the project, did you always perform your job
16 responsibilities to the best of your ability?

17 A Yes.

18 Q Throughout your time working on the
19 project, did you always communicate information
20 honestly and completely?

21 A Yes.

22 Q And you've talked about various schedules
23 that you were aware of throughout the time that you
24 were working on the project.

25 Did you always believe, at the time that

1 those schedules were proposed, that they were
2 achievable?

3 A Yes; hard, but achievable.

4 Q Did you always believe that Westinghouse
5 was committed to doing everything it could to meet
6 those scheduling projections?

7 A Yes.

8 Q And to the extent that there were delays
9 in the project for various reasons, Westinghouse was
10 committed to various mitigation strategies in an
11 effort to meet the projected schedules, correct?

12 A Correct.

13 Q You are aware that the project was being
14 billed pursuant to an Engineering, Procurement and
15 Construction Contract, correct?

16 A Uh-huh.

17 Q Yes?

18 A Yes.

19 Q Sorry. She can't take down "uh-huhs."

20 A Yeah. No shakes.

21 Q And is it your understanding that under
22 the terms of that agreement, the consortium was
23 solely responsible for all means of construction?

24 MR. SCHALK: Form.

25 THE WITNESS: Yes. There was some scope

1 of work that the owner decided to do on their
2 own. Right? But other than those owner scopes
3 of work, it was up to the consortium to perform
4 the remainder of the project.

5 BY MR. KEEL:

6 Q Do you know what specific scopes of work
7 the owner decided to do on its own?

8 A I'm thinking, like, the OWS system, they
9 had some involvement for the treatment plant that
10 they were using their own folks with. There was a
11 couple of small segments that they had carved out
12 that they would continue with.

13 Q But for the bulk of the project, your
14 understanding is that the consortium was responsible
15 for --

16 A Yes.

17 Q -- construction?

18 A Yes.

19 Q And the consortium was also responsible
20 for procuring the materials for construction?

21 A Correct.

22 Q I want to talk a little bit about
23 Westinghouse for a minute. You've been with
24 Westinghouse now for how long?

25 A Since March 1st, 2013.

1 Q And how would you describe Westinghouse's
2 role in the nuclear industry historically?

3 A Historically, they -- they're the brand
4 name, so they've got a history of successful
5 operations and supply of equipment and engineering
6 backup to all that equipment. So it's a pretty
7 well-known and respected name in the industry.

8 Q You understand that -- is it your
9 understanding that Westinghouse is considered the
10 global leader in nuclear technology fields and
11 services?

12 A Correct.

13 Q And Westinghouse is a leading supplier of
14 nuclear plant products and technologies to utilities
15 throughout the world; is that correct?

16 A Correct.

17 Q And from my understanding, Westinghouse
18 supplied the world's first commercial pressurized
19 water reactor; is that right?

20 A Correct.

21 Q And today Westinghouse technology is the
22 basis for approximately one half of the world's
23 operating nuclear plants; is that correct?

24 A I don't know that offhand, but it sounds
25 right.

1 Q And Westinghouse designed the AP1000
2 nuclear power plants that we have been talking about
3 here today; is that right?

4 A Correct.

5 Q Is it your understanding that the AP1000
6 is the safest and most economical nuclear power
7 plant available in the worldwide commercial
8 marketplace today?

9 A That's my opinion.

10 Q And I assume Westinghouse spent years
11 developing the AP1000?

12 A True.

13 Q How long, do you know -- how long did the
14 company spend developing the AP1000 design?

15 MR. COX: Object to the form.

16 THE WITNESS: To the extent I know, I just
17 know that the development has been 15, 20 years
18 on this AP1000 project.

19 BY MR. KEEL:

20 Q And the AP1000 design was certified by the
21 U.S. Nuclear Regulatory Commission?

22 A Correct.

23 Q And the design works, doesn't it?

24 A It does. There's operating plants in
25 China.

1 Q I believe I saw a press release today that
2 the first AP1000 is now in commercial operation in
3 China; is that right?

4 A Correct.

5 Q And how many AP1000 plants are being built
6 around the world today?

7 A So there's two at Vogtle, and then it's
8 the China plants.

9 Q Is Westinghouse proposing to build other
10 AP1000s in different areas around the world?

11 A We are.

12 Q Do you know how many other AP1000 plants
13 Westinghouse is planning to build?

14 A It's just -- you know, we're in the
15 proposal stage, the bidding phase; so, you know,
16 that's open-ended.

17 Q Would you agree with me that nobody knows
18 more about the AP1000 than Westinghouse?

19 A Correct.

20 Q And would you agree that that has been
21 true since the day that the AP1000 design was first
22 created?

23 A I believe that's true, yes.

24 Q At the time of the EPC amendments in
25 October 2015, did you understand that Westinghouse

1 was committing to build the plants pursuant to new
2 guaranteed substantial completion dates?

3 A Correct.

4 Q Was it your understanding that
5 Westinghouse was committed at that time to building
6 those plants in accordance with that schedule?

7 A Correct.

8 Q Do you believe that Westinghouse did
9 everything it could to meet that schedule?

10 A Yes, we tried. Yes.

11 Q And then ultimately, Westinghouse decided
12 to file bankruptcy, right?

13 A Uh-huh.

14 Q Yes?

15 A Yes.

16 Q Do you know what changed, from the time of
17 the EPC amendment until the time of the filing of
18 bankruptcy, that caused Westinghouse to conclude
19 that it no longer wanted to try to fulfill the
20 obligations of the contract?

21 MR. SCHALK: Form.

22 THE WITNESS: I can't answer that.

23 BY MR. KEEL:

24 Q You were not involved in any discussions
25 about --

1 A No, I wasn't.

2 Q -- why --

3 MR. SCHALK: Let him just finish.

4 BY MR. KEEL:

5 Q You were not involved in any discussions
6 about why Westinghouse was seeking bankruptcy
7 protection at the time it did?

8 A I wasn't involved in that.

9 Q And you had no expectation that
10 Westinghouse was going to seek bankruptcy protection
11 prior to your being informed shortly before the
12 filing; is that fair?

13 A That's correct.

14 Q You mentioned certain interactions that
15 you were involved in with the ORS about the status
16 of the project.

17 A Uh-huh.

18 Q Correct?

19 A True.

20 Q I believe you said that there were monthly
21 meetings with the ORS and -- and what was the other?

22 A There were several specific meetings we
23 had with them to discuss the results of the
24 functional area assessments.

25 Q I know you didn't talk about all -- or you

1 didn't attend all of the monthly meetings with the
2 ORS, but do you know what information was conveyed
3 to the ORS during those meetings from the ones you
4 did attend?

5 A Yeah. From the ones I did attend, it was
6 basically the status of the plant, and then the, you
7 know, the construction progress.

8 But then it was also to address any issues
9 that were raised by ORS so that via an open
10 discussion between ORS and site management as to,
11 you know, any issues or concerns that ORS had, you
12 know, going forward.

13 Q And so those discussions with the ORS
14 about the status of the project, would those
15 disclose performance factors and things of that
16 nature?

17 A Yeah -- yes. I believe we would have
18 talked about it if it was specifically asked.
19 However, the -- you know, the data that, on the
20 performance and percent complete and all that, that
21 was typically reserved for the project review
22 meeting, which was once a month. And I believe the
23 ORS was invited. You know, my understanding is they
24 were invited; so that data would have been available
25 to them.

1 Q Okay. Your understanding is the same data
2 for the project review meetings was available to the
3 ORS; is that right?

4 A Uh-huh. That's correct.

5 Q And you also mentioned one-off
6 conversations you may have had with ORS personnel
7 on-site. How often was the ORS on-site?

8 A It varied, you know. So we would see one,
9 potentially two representatives from the ORS on-site
10 on a pretty frequent basis, maybe one or two days a
11 week. But the -- the actual presence on-site every
12 day, I didn't observe that, so I can't -- I can't
13 say that they were there all the time.

14 Q But at least on a weekly basis, from
15 your --

16 A Yes.

17 Q -- observations?

18 A Yes. You know, they were kind of camped
19 out at the entrance to the plant site. So I -- you
20 know, unless they were actually walking by up at the
21 construction site, I wouldn't have -- I wouldn't
22 have interacted.

23 Q To the extent that you provided any
24 information to the ORS about the project, did you
25 always do so honestly and completely?

1 A Correct.

2 Q Was the information that was provided to
3 the ORS about the status of the project consistent
4 with what was provided to the owners?

5 A Yes.

6 Q Do you recall -- or scratch that.
7 Were you present at a meeting with the
8 ORS, in August of 2016, that related to a PSC
9 proceeding for the election of the fixed price
10 option?

11 A I was not present.

12 Q Did you ever have any interaction with
13 Gary Jones from the ORS?

14 A Gary Jones. Maybe, but I don't recognize
15 the name.

16 Q Fair enough.
17 I want to talk a little bit about the
18 process that went into developing schedules for the
19 project. How would you describe the amount of
20 effort that the consortium put in to developing the
21 schedules for the project?

22 A Quite a bit of effort. Quite a bit of
23 effort. And I think it was actually joint because
24 the input not only came from the consortium side,
25 but it was also being looked at from the owners'

1 side, as well. So I think there was a lot of mutual
2 input into the schedule itself.

3 But from a resource and, you know,
4 workload effort side, it was quite a bit of work
5 that was required to generate and maintain the
6 schedule.

7 Q Do you know, roughly, how many people from
8 the consortium side were involved in scheduling for
9 the project?

10 A I wouldn't guess, but that's a question
11 for Terry because he was manager of the group, and
12 there was a lot of people.

13 Q Do you know, roughly, how long -- how much
14 time it takes to put together a reliable schedule
15 for a nuclear project of this size?

16 MR. SCHALK: Form.

17 THE WITNESS: In my opinion, just it
18 evolves. So it's a long, lengthy process to
19 get it to where you actually have -- believe
20 that you have created an efficient schedule and
21 a plan to execute the project. So it is a
22 lengthy process to get to that point.

23 BY MR. KEEL:

24 Q Would that process require dozens of
25 people?

1 A It would.

2 Q Would it be years or months? How long are
3 we talking?

4 A The initial would be months. But that
5 gets refined over the period going forward.

6 So, I mean, the schedule develops as you
7 get closer to, you know, your construction start
8 date. And to evolve that schedule over time, you
9 know, a lot of these projects are laid out in the
10 bidding phase with a -- a schedule that will morph
11 over time to become extremely detailed before that
12 construction period actually starts.

13 So some of these projects go months -- I
14 mean, the development goes months; some of these are
15 years.

16 Q Now, the same sort of questions about the
17 estimates for how much cost it would -- what the
18 cost would be to complete the project. Could you
19 describe, roughly, how much effort or resources go
20 into that analysis?

21 A From the ETC side?

22 Q Yes.

23 A Estimate to complete.

24 Yeah, so there was -- there was an
25 abundance of people involved in that, as well. I

1 was involved from offering up my input from my
2 group, and then reviewing some of the items that had
3 been compiled from other groups. But as far as
4 looking at the resources that were required to
5 produce an ETC, it's -- it's scores of people.

6 Q And, roughly, how much time, using scores
7 of people, would it take to develop a reliable ETC
8 for a project of this scope?

9 A Yeah. I don't recall the exact time frame
10 that we generated the ETC in. I can't recall. I
11 just don't have a recollection of that.

12 Q But would it be months' worth of work?

13 A Months, yes.

14 Q Based on your understanding, did the
15 schedules that were proposed for this project along
16 the way always reflect the best available
17 information about the project?

18 A Yes.

19 Q Based on your understanding, did the
20 estimates to complete along the way always reflect
21 the best available information, a point you
22 understood at the time?

23 A Yes.

24 Q I think Mr. Cox asked you some questions
25 about your involvement, whether you were involved in

1 providing information to SCE&G or the owners after
2 Westinghouse's bankruptcy filing.

3 Do you recall those questions?

4 A Yes. So after the March timeframe, right,
5 up until the end of July, when the project was shut
6 down? Uh-huh.

7 MR. KEEL: Can you mark this as 2.

8 - - -

9 (Motion of Debtors Pursuant to
10 11 U.S.C. § 105(a) For Entry of an Order
11 Approving Interim Assessment Agreements
12 marked Magnarelli Exhibit Number 2 for
13 identification.)

14 - - -

15 MR. KEEL: I have one more (handing). You
16 can feel free to take a minute, if you want.

17 MR. SCHALK: Yeah. I'll see what kind of
18 questions you have.

19 MR. KEEL: Sure.

20 MR. SCHALK: If we need to --

21 MR. KEEL: If at any point you need to, no
22 problem.

23 BY MR. KEEL:

24 Q Mr. Allen -- or Magnarelli -- I
25 apologize -- I'm showing you what has been marked as

1 Exhibit Number 2 for your deposition. Do you
2 recognize this?

3 A It's the bankruptcy filing, yes.

4 Q It's a -- it's a motion in the bankruptcy
5 filing to approve entry into interim assessment
6 agreements.

7 Do you recall Westinghouse entering into
8 interim assessment agreements with the owners of
9 Vogtle and VCS?

10 A Yes.

11 Q And if you could turn -- do you see the
12 page numbers at the top of the document? It's page
13 X of 41.

14 A Uh-huh.

15 Q If you could turn to page 13 of 41 for me,
16 please.

17 A (Witness complies with request.)

18 Q Now, this Exhibit Number 1 to the document
19 you're looking at now is an interim assessment
20 agreement, dated March 28, 2017, between SCE&G,
21 Santee Cooper, and Westinghouse Electric Company.

22 Do you see that at the top?

23 A Yes.

24 Q And the second paragraph underneath the
25 background, the second "whereas" clause says:

1 "Whereas in order to perform its obligations under
2 the EPC, the Debtors have entered into various
3 agreements with subcontractors and material and
4 equipment suppliers and other counterparties."

5 Do you see that?

6 A Yes.

7 Q Is that your understanding that
8 Westinghouse had contracted with various different
9 subcontractors and material suppliers for the V.C.
10 Summer project?

11 A Correct.

12 Q If you turn to the next page, at the
13 bottom, the very last line on page 14 of 41 says:
14 "Accordingly, the Parties, each intending to be
15 legally bound hereby, agree as follows." And then
16 there's a series of numbered paragraphs.

17 Do you see that, Mr. Magnarelli?

18 A Yes.

19 Q And I just want to direct your attention
20 to a couple of these paragraphs.

21 A Okay.

22 Q Turning to paragraph 4 on page 15, it
23 says: "During the Interim Assessment Period, the
24 V.C. Summer owners shall have the right to consult
25 with Fluor to determine which Subcontractors and/or

1 Vendors are necessary to perform work on the V.C.
2 Summer Project during the Interim Assessment
3 Period."

4 Do you see that?

5 A Yes.

6 Q Is it your understanding that that is a
7 right that the owners did not have prior to entry of
8 this agreement?

9 MR. SCHALK: Object to form.

10 THE WITNESS: I don't think -- I don't
11 think they were ever prohibited from discussing
12 this with Fluor. So I have no knowledge of
13 that.

14 BY MR. KEEL:

15 Q Was it your understanding that SCE&G could
16 determine which subcontractors and vendors were
17 necessary for the project during the course of the
18 project?

19 MR. SCHALK: Form.

20 THE WITNESS: I have no knowledge what
21 SCE&G was thinking at the time, so...

22 BY MR. KEEL:

23 Q I'm not asking what they were thinking,
24 just: Was it your understanding that SCE&G could
25 dictate which subcontractors were necessary or

1 not --

2 MR. SCHALK: Form.

3 BY MR. KEEL:

4 Q -- during the course of the project?

5 A That was not my understanding, but I
6 believe they could object to somebody that was
7 proposed by the constructor.

8 Q Okay. And then if you turn to page 19 of
9 41, there's a paragraph 15 at the bottom.

10 A Uh-huh. Yes.

11 Q It says: "During the Interim Assessment
12 Period, the Debtors shall use commercially
13 reasonable efforts to provide information as
14 reasonably requested by the V.C. Summer Owners as is
15 necessary to perform the EPC, investigate the
16 completion status of the V.C. Summer Project, and
17 the financing and/or funding of the V.C. Summer
18 Project, including but not limited to the
19 following."

20 And then there's a list of the specific
21 types of information that the debtors were required
22 to make reasonable efforts to make available to the
23 owners. Do you see that?

24 A Uh-huh.

25 Q Yes?

1 A Yes.

2 Q Okay. And I'm paraphrasing, but in
3 general, a lot of these categories refer to the
4 specifics of agreements with subcontractors and
5 vendors for the project.

6 Do you see that?

7 MR. SCHALK: Take the time to read it.

8 THE WITNESS: (Witness complies with
9 request.) Yes.

10 BY MR. KEEL:

11 Q Now, is it your -- do you know one way or
12 the other whether SCE&G had a right to access this
13 list of information prior to entry of this interim
14 assessment agreement?

15 MR. SCHALK: Form.

16 THE WITNESS: I mean, there's a lot of
17 stuff here that I can't answer for sure yes or
18 no, that SCE&G had access to it or not.

19 BY MR. KEEL:

20 Q Was it common practice during the course
21 of the project, prior to the bankruptcy, to provide
22 this type of information to the owners?

23 MR. SCHALK: Form; asked and answered.

24 THE WITNESS: All right. So in my
25 estimation, all of this was provided in our

1 reporting requirements to SCE&G on a -- it
2 could have been on a monthly basis, at a
3 minimum.

4 So we would have had, you know -- you
5 probably wouldn't have seen the contracts
6 per se for some of the fixed price aspects
7 prior to. But, I mean, we could -- we'd be
8 discussing each one of these bullets in detail
9 about what was provided and what wasn't.

10 So I really can't answer in a blanket
11 statement one way or the other.

12 BY MR. KEEL:

13 Q Sure. And I understand the consortium
14 provided monthly updates on the status of the
15 project and provided various information to the
16 owners. I'm asking for some of these specific
17 categories, like copies of all contracts with
18 subcontractors, access to accounting related to
19 subcontractors and vendors. In those specific
20 things, were those the type of information reported
21 to the owners during the course of the project?

22 MR. SCHALK: Form. And just to be clear,
23 you're asking on just those two -- two
24 examples?

25 MR. KEEL: Yes.

1 THE WITNESS: I can't answer for all cases
2 on these.

3 BY MR. KEEL:

4 Q That's fine. I'm only asking what you
5 know.

6 A Right.

7 Q One other question. The second bullet
8 point down on that list says: "Information
9 presented by Fluor regarding EPC cost at completion
10 and any project schedule documentation."

11 Do you see that?

12 A Yes.

13 Q Are you aware of Fluor doing an EPC cost
14 at completion prior to March 29th, 2017?

15 A Well, they would have provided a cost
16 estimate, you know, based on, you know, projected
17 hours worked; so their cost estimate would have been
18 based on that. And that information, from a direct
19 dollar standpoint, would have probably -- that, I
20 believe, was related to SCANA.

21 But as far as all across the board,
22 subcontractors and vendors, and more than just
23 Fluor, I can't answer that.

24 Q Do you know when Fluor put together an EPC
25 cost at completion?

1 A They would have supplied that
2 information -- they would have supplied that
3 information as part of the ETC generation from
4 Westinghouse. So we had the Westinghouse portion of
5 the ETC, and then the Fluor portion of the ETC.

6 Q And do you know, roughly, when that
7 occurred?

8 A During the ETC preparation and completion,
9 which was -- I can't recall the month it was
10 completed.

11 Q Sometime in -- would it be fall of 2016?

12 A I can't remember. I can't remember.

13 Q It would have been in 2016, though?

14 A That's my belief, yes.

15 Q You were asked by Mr. Cox a few
16 questions -- you can set that aside. I don't have
17 any more questions on that.

18 A Okay.

19 Q Mr. Cox asked you various questions about
20 Bechtel. Do you recall those questions?

21 A Uh-huh.

22 Q And I believe it was your testimony that
23 you never saw any written engagement document for
24 Bechtel work; is that fair?

25 A Correct.

1 Q Were you aware of any agreement between
2 the consortium and the owners regarding Bechtel's
3 work?

4 A I believe we had something in place that
5 allowed us to provide support to Bechtel for the
6 assessment. I can't say definitively that there was
7 something, but I know that we had to have protocol
8 and working rules for us to provide support for
9 them.

10 Q But do you recall ever seeing that
11 document, that agreement between the owners and the
12 consortium regarding Bechtel's work?

13 MR. SCHALK: Form.

14 THE WITNESS: It's fuzzy. No, I -- I
15 can't really state definitively.

16 BY MR. KEEL:

17 Q And I believe your testimony -- and
18 correct me if I'm wrong -- was that you don't have
19 any personal knowledge about what Bechtel's scope of
20 work was; is that fair?

21 A Correct.

22 Q And you have no personal knowledge about
23 what Bechtel did for their assessment of the
24 project?

25 A Correct.

1 Q And you have no personal knowledge about
2 what Bechtel's conclusions were; is that correct?

3 A Well, I read the report when it became
4 public, so...

5 Q Prior to the public release of the report.

6 A Right.

7 MR. KEEL: If I could just have five
8 minutes, and I'll wrap up.

9 MR. SCHALK: Sure.

10 THE VIDEOGRAPHER: The time is 11:54 a.m.
11 We are off the record.

12 (Recess in the proceedings from 11:54
13 to 12:04.)

14 THE VIDEOGRAPHER: The time is 12:04 p.m.
15 We are back on the record. Please proceed.

16 BY MR. KEEL:

17 Q Mr. Magnarelli, I just have a couple
18 questions left for you.

19 I believe you testified, in response to
20 Mr. Cox's questioning, that you believe that SCE&G
21 did what it had to do to manage this project. Do
22 you recall that?

23 A Right. I think my words were that, you
24 know, SCE&G had their own plan on how to manage the
25 project, so yes.

1 Q Okay. Is it -- based on your testimony
2 here today, is it fair to say that you don't blame
3 SCE&G for the failure of this project?

4 MR. SCHALK: Form.

5 MR. COX: Object to the form.

6 THE WITNESS: I -- I think there's enough
7 to go around, that all parties have contributed
8 to the overall demise of the project. So
9 that's just my personal opinion.

10 BY MR. KEEL:

11 Q And that would include Westinghouse?

12 MR. SCHALK: Form.

13 THE WITNESS: Westinghouse could have done
14 some things better, yes.

15 BY MR. KEEL:

16 Q Based on your experience on the project,
17 do you believe that the parties involved acted in
18 good faith in an effort to make this project a
19 success?

20 A Yes, I thought everybody was working
21 toward a common goal to get the project built.

22 Q And that was throughout the time --
23 throughout the time of the project; is that fair?

24 A Correct.

25 MR. KEEL: I don't have any other

1 questions. Thank you for your time this
2 morning.

3 - - -

4 EXAMINATION

5 - - -

6 BY MR. COX:

7 Q Mr. Magnarelli, I just had a couple
8 follow-up questions.

9 Did you personally invite the ORS to the
10 monthly progress review meetings?

11 A I didn't personally invite. My
12 recollection is that they had attended several of
13 the meetings, and I thought they were on the invite
14 list. We didn't send out the invite list. It was
15 controlled by SCANA.

16 Q Okay. And regarding the scope of the
17 Bechtel assessment, were you told by Mr. Churchman
18 that part of the purpose of the Bechtel assessment
19 was to assess the schedule?

20 MR. KEEL: Object to the form; asked and
21 answered.

22 THE WITNESS: No. I didn't know what
23 Bechtel was there to perform an assessment on,
24 so we weren't privy to what the contract
25 requirements were between Bechtel and SCANA.

1 BY MR. COX:

2 Q Did Mr. Churchman tell you what the --
3 what was being assessed on the project by Bechtel?

4 MR. SCHALK: Asked and answered.

5 MR. KEEL: Same.

6 THE WITNESS: No. What we had was an
7 agreement to support Bechtel in their efforts
8 to conduct an assessment. Okay. We didn't
9 know what the details of the assessment that
10 they were to conduct were.

11 MR. COX: Understood.

12 Okay. No further questions. Thank you,
13 Mr. Magnarelli.

14 MR. SCHALK: This is Mike Schalk. We are
15 going to make a request to hold this transcript
16 as confidential under the order that's involved
17 in this case.

18 MR. COX: The whole transcript?

19 MR. SCHALK: Yes, Mr. Magnarelli's
20 testimony.

21 MR. COX: Will you be reviewing it later
22 to identify specific portions that are
23 confidential?

24 MR. SCHALK: Yes.

25 MR. COX: Do you know when you will finish

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that?

MR. SCHALK: No. We'll communicate with you.

THE VIDEOGRAPHER: Are there any further questions?

Hearing nothing further, this concludes the deposition. The time is 12:08 p.m. We are off the record.

- - -

(Witness excused.)

- - -

(Deposition was concluded at 12:08 p.m.)

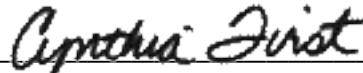
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CERTIFICATE OF REPORTER

I, Cynthia First, Registered Professional Reporter, do hereby certify:

That the foregoing deposition was taken before me on the date and at the time and location stated on page 1 of this transcript; that the deponent was duly sworn to testify to the truth, the whole truth and nothing but the truth; that the testimony of the deponent and all objections made at the time of the examination were recorded stenographically by me and were thereafter transcribed; that the foregoing deposition as typed is a true, accurate and complete record of the testimony of the deponent and of all objections made at the time of the examination to the best of my ability.

I further certify that I am neither related to nor counsel for any party to the cause pending or interested in the events thereof.



CYNTHIA FIRST
Registered Professional Reporter
Certified Realtime Reporter

Certificate of Notary Public

I Anthony Blanchflower, Notary Public for the state of Pennsylvania, do hereby certify that the deponent, Dan Magnarelli, was duly sworn to testify to the truth, the whole truth, and nothing but the truth.

Witness my hand this 12th (day) day of October (month), 2018 (year) at Pittsburgh 38th Floor One Oxford Center (location). Pittsburgh

Signature: Anthony Blanchflower
Print Name: Anthony Blanchflower
State: Pennsylvania
County of: Allegheny
My Commission expires: May 17th, 2019