

IN RE:

*Supplemental & Amending
Application of Entergy New Orleans,
Inc., et al*

Hearing - Public

December 18, 2017

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BEFORE THE
COUNCIL OF THE CITY OF NEW ORLEANS

SUPPLEMENTAL AND * UD-16-02
AMENDING APPLICATION *
OF ENTERGY NEW *
ORLEANS, INC. FOR *
APPROVAL TO *
CONSTRUCT NEW *
ORLEANS POWER *
STATION AND REQUEST *
FOR COST RECOVERY *
AND TIMELY RELIEF *
* * * * *

PUBLIC

Continuation of the evidentiary hearing
in the above-entitled matter before Honorable
Jeffrey S. Gulin, held at 601 Poydras Street,
11th Floor, Bayou Rooms 1 and 2, New Orleans,
Louisiana 70130, commencing at 8:30 A.M., on
Monday, the 18th day of December, 2017.

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18 SEALED CEII MATERIAL:

19 (None)

20 * * * * *

21 KATHY SHAW-GALLAGHER, certified

22 Court Reporter, State of Louisiana,

23 officiated in administering the oath to

24 the witness.

25

1 P R O C E E D I N G S

2 JUDGE GULIN:

3 Good morning, everyone. Today is
4 the continuation of our hearing, today
5 being December 18. It's about 8:30 in
6 the morning.

7 Hope you-all had a refreshing
8 weekend, had a chance to have some time
9 to yourself, for those of you coming in
10 from out of town, an opportunity to enjoy
11 the magnificent city as I did.

12 So we have a couple preliminary
13 matters this morning. Let me start with
14 Mr. Guillot. Any objection based upon
15 Mr. Long's review of Sierra Club's
16 exhibits? I think it was one through
17 four.

18 MR. GUILLOT:

19 No, Your Honor.

20 JUDGE GULIN:

21 All right. They are admitted into
22 evidence as substantive evidence.

23 And then the second matter, which
24 I'm hoping will be just as smooth, is the
25 written agreement I was hoping for

1 between Entergy and the joint
2 intervenors. Have we got that?

3 MR. ALFORD:

4 Your Honor, we were successful with
5 our homework assignment.

6 JUDGE GULIN:

7 That's wonderful.

8 MR. ALFORD:

9 We had a productive discussion.

10 JUDGE GULIN:

11 I thought I was going to hear
12 something about the dog or --

13 MR. ALFORD:

14 So what we've done, Your Honor, we
15 have a revised version of
16 Mr. Long's testimony that we worked
17 through that removes the areas at issue
18 with your ruling. What we've also done,
19 although I will --
20 Ms. Stevens Miller pointed out this
21 morning that our table of contents did
22 not carry over the changes, so we will
23 need to make that tweak, but, otherwise,
24 we have ready for the witness's testimony
25 this morning a revised version.

1 We also -- With respect to the other
2 witnesses that were at issue on the
3 motion, we have agreed that no changes
4 are required to the testimony of witness
5 Charles W. Long. With respect to
6 Dr. Losonsky, no changes will be needed
7 to his testimony, however, there is one
8 Q. and A. that will be removed from Mr.
9 Long's testimony and Dr. Losonsky will
10 adopt in the way of an affidavit that
11 will be submitted to the parties in
12 advance of his testimony.

13 And, finally, the testimony of Bliss
14 Higgins, there will be a couple of
15 corrections where she references both
16 Mr. Long's testimony and the CK technical
17 report and she'll make a correction when
18 she takes the stand.

19 JUDGE GULIN:

20 Thank you for that very much.

21 Intervenors all agree with that?

22 MS. MILLER:

23 Yeah, sure.

24 JUDGE GULIN:

25 So I ask you to, when you get all

1 that ironed out, please work with
2 Ms. Hand to get the chart reflecting what
3 you indicated.

4 All right. Any other matters we
5 need to deal with before we go to
6 cross-examination of Mr. Long?

7 MR. REED:

8 Your Honor, I would just note that
9 at the request of the court reporter, I
10 have just started to circulate a sign-in
11 sheet for the day for the various counsel
12 in attendance.

13 JUDGE GULIN:

14 Very good.

15 Mr. Edwards, is there any reason why
16 you seem to be going farther and father
17 away from me?

18 MR. EDWARDS:

19 My spot was taken when I came in
20 today, so I just moved down.

21 JUDGE GULIN:

22 Oh, okay.

23 MR. EDWARDS:

24 This way I can look straight at the
25 witness.

1 JUDGE GULIN:

2 I just wanted to make sure I did not
3 signal anything.

4 MR. EDWARDS:

5 No. You did not signal anything.

6 I'm very happy.

7 JUDGE GULIN:

8 All right. So with that, I invite
9 Mr. Long to take the witness stand.

10 If you would please remain standing,
11 Mr. Long, and face the court reporter,
12 raise your right hand, she will
13 administer the oath to you.

14 JONATHAN LONG,
15 after having been duly sworn by the
16 above-mentioned Certified Court Reporter, was
17 examined and testified as follows:

18 MR. ALFORD:

19 Your Honor, before Mr. Brown gets
20 started, Mr. Long does have a couple of
21 corrections to note to his direct.

22 JUDGE GULIN:

23 Has that been brought to the
24 attention of other parties?

25 MR. ALFORD:

1 Your Honor, we have not. There were
2 a couple of those that were previously
3 called to their attention, but there's
4 one that Mr. Long noticed just yesterday.

5 JUDGE GULIN:

6 I see. Have they been reduced to
7 writing?

8 MR. ALFORD:

9 Mr. Long has a copy of it. I don't.

10 JUDGE GULIN:

11 All right. Let's hear what they
12 are, and then if there's any objections,
13 we can deal with it. And I would ask
14 that they be reduced to writing and be
15 distributed to the parties. Doesn't have
16 to be done right now, but at some point.

17 So what have you got, Mr. Long?

18 MR. JONATHAN LONG:

19 Good morning, Your Honor.

20 There are three things that need to
21 be corrected. The first is that my
22 business address is now 639 Loyola
23 Avenue, New Orleans, Louisiana 70113. My
24 position with ESI is now vice president
25 capital projects, and the third item is

1 on page 22 of my direct, Lines 8 or 9, 8
2 through 9.

3 JUDGE GULIN:

4 I'm sorry. What page was that?

5 MR. JONATHAN LONG:

6 Page 22 of the direct testimony,
7 lines 8 through 9. I would like to
8 delete the sentence that reads, "Another
9 difference in the two contracts is
10 improved, in parentheses, higher,
11 performance liquidated damages for the
12 NOPS agreement as shown in the table
13 below," and replace that sentence with,
14 "The table below shows differences in
15 liquidated damages provisions among the
16 EPC contracts for Nine Mile 6" --

17 JUDGE GULIN:

18 Slow down.

19 MR. JONATHAN LONG:

20 -- Nine Mile 6, St. Charles Power
21 Station, and the New Orleans Power
22 Station CT."

23 JUDGE GULIN:

24 Okay. Let's let that be digested a
25 little bit. I don't think there was a

1 whole lot of controversial statements
2 there.

3 Any objections as to those errata?

4 MS. HAND:

5 Your Honor, could you please have
6 the witness read that one more time?

7 JUDGE GULIN:

8 Sure. That last sentence?

9 MR. JONATHAN LONG:

10 Yes. The last sentence, it should
11 read, "The table below shows differences
12 in liquidated damages provisions among
13 the EPC contracts for Nine Mile 6, St.
14 Charles Power Station, and the New
15 Orleans Power Station CT."

16 MS. HAND:

17 Thank you.

18 JUDGE GULIN:

19 All right. With that, Mr. Brown.

20 MR. BROWN:

21 Thank you, Your Honor.

22 For the benefit of the court
23 reporter, I think I'll try standing here
24 today.

25 EXAMINATION BY MR. BROWN:

1 Q. Good morning, Mr. Long.

2 A. Good morning.

3 Q. My name is Michael Brown. I'm an
4 attorney representing the Sierra Club in this
5 case. And you and I have met once before; is
6 that right?

7 A. That's true.

8 Q. We had a deposition on December the
9 8th?

10 A. That's correct.

11 Q. Mr. Long, you're Entergy -- you're
12 the only witness being offered in this case on
13 behalf of Entergy New Orleans as to the capital
14 costs of various generating resources; is that
15 correct?

16 A. Yes, that's correct.

17 Q. And in the course of this case,
18 you've looked at a variety of gas-fired peaking
19 power plant options; is that correct?

20 A. Yes, that's correct.

21 Q. Neither you nor your group at
22 Entergy Services, Inc., does cost estimates for
23 battery storage. That's Jim Schott's purview?

24 A. It's true that in my group, we have
25 not done estimates for battery storage. There

1 may be groups other than Mr. Schott's that
2 looks at that as well.

3 Q. But not your group?

4 A. That's right.

5 Q. And you weren't asked to look at
6 batteries in this case, were you?

7 A. I was not asked to look at batteries
8 in this case. I have at times read about
9 batteries. I'm familiar with batteries and
10 their cost, but in this case, I did not apply
11 that knowledge.

12 Q. Neither you nor your group at
13 Entergy Services, Inc., looks at demand
14 response options; is that correct?

15 A. That is correct.

16 Q. And you weren't asked to do that in
17 this case?

18 A. I was not.

19 Q. In this case, you were not asked to
20 look at solar power alternatives to the NOPS
21 generating resource, were you?

22 A. I was not. This was -- I was asked
23 to provide a peaking resource and I do not
24 consider -- we do not consider solar panels
25 capable of providing peaking resource.

1 Q. But you do have a staff member who
2 occasionally consults on solar projects; is
3 that correct?

4 A. We get engaged very often in the
5 project management of the various solar
6 projects that we consider, and, so, yes.

7 Q. No one asked you in this case to
8 look at the cost of doing transmission upgrades
9 as an alternative to a generating resource; is
10 that correct? That's Charles Long's purview?

11 A. That's correct.

12 Q. Or other folks who work underneath
13 Jim Schott, the transmission group at Entergy
14 Services, Inc.?

15 A. Would you restate your question?

16 Q. Sure.

17 A. I think I understood it, but I'm not
18 sure.

19 Q. So you answered my first question.
20 And my second question is just that, that would
21 be the purview of folks who work in the
22 transmission planning group at Entergy
23 Services, Inc.?

24 A. Estimates of transmission upgrades?

25 Q. Yes.

1 A. That is true.

2 Q. Okay. Thank you.

3 And although you occasionally --
4 your group has occasionally worked on solar
5 options, your primary focus is fossil fuel
6 units; is that correct?

7 A. That is correct.

8 MR. EDWARDS:

9 Mr. Long, could you pull that
10 microphone toward you? I can barely hear
11 you.

12 MR. JONATHAN LONG:

13 I apologize for that.

14 EXAMINATION BY MR. BROWN:

15 Q. Could we turn to page 10 of your
16 supplemental amending direct testimony? It's
17 going to be Focusing on Table 1.

18 A. Okay.

19 Q. Okay. And is it correct this is a
20 table that shows several alternative peaking
21 units that you examined and the company
22 considered?

23 A. That's correct.

24 Q. And the first row, the units listed
25 there, those are the seven RICE -- what we

1 refer to as the RICE units?

2 A. That's right. That's the Wartsila
3 reciprocating turbine combustion engine.

4 Q. And looking at all of these, it
5 looks like, five units that were analyzed here,
6 all of these are gas-fired units; is that
7 correct?

8 A. That's correct.

9 Q. Now, focusing back on the RICE
10 units, Mr. Seth Cureington, came to you about
11 three or four years ago first asking you to
12 look at these RICE units; is that correct?

13 A. Mr. Cureington and I would have had
14 discussions over the last several years prior
15 to getting to this point in early last year and
16 talking about options for power generation in a
17 peaking resource mode for Entergy New Orleans
18 in the hundred megawatt range. So we had had
19 prior discussions about that.

20 Q. And those discussions included these
21 RICE units?

22 A. They did. That's right.

23 Q. And then Mr. Cureington about ten
24 months ago, sometime in February of March of
25 this year, came back to you, is that correct,

1 concerning these RICE units?

2 A. He came back to me concerning
3 needing a power generation resource to serve in
4 a peaking role in the 100 to a hundred and
5 thirty megawatt range.

6 Q. Right. And he specifically asked
7 you for something in that hundred, hundred and
8 thirty megawatt range?

9 A. That's correct.

10 Q. In fact, he also said within that
11 range, more is better than less?

12 A. That is true.

13 Q. As a result of Mr. Cureington's
14 instructions, did you ever look at installing
15 fewer than seven RICE units?

16 A. Yes. We analyzed six units. Six
17 units would have also put us in the same range
18 from the hundred to 130.

19 Q. And do you still have the results of
20 that analysis of six units?

21 A. I believe that some of the
22 documentation that was provided in discovery
23 shows some of the analysis around the six-unit
24 configuration.

25 Q. Are you aware today of what the cost

1 would have been to do the six units?

2 A. I don't have here in front of me the
3 cost of these six units and I wouldn't remember
4 that off the top of my head, no.

5 Q. Would it be less than the cost of
6 doing seven units?

7 A. It would be less than the cost of
8 doing seven units, but it would be higher on a
9 dollar per kW basis. So there were benefits of
10 economies of scale on going to seven from six.

11 Q. And those results were not included
12 in this table or as part of your Entergy New
13 Orleans' application; is that correct?

14 A. To my knowledge, we didn't provide
15 that six-unit analysis in the application.

16 Q. And part of the reason for that was
17 Mr. Cureington said more was better than less
18 within that range of 100 to 130?

19 A. It's my understanding that the
20 resource that we needed in order to resolve the
21 reliability need in the region led us to seek
22 to maximize that within that range and it was
23 based on that that I believe Mr. Cureington
24 gave me that direction, yes.

25 Q. Now, looking at Table 1, the, I

1 guess, fourth column over from the left is the
2 installed cost in millions of dollars for each
3 set of units. Now, you have a footnote here
4 that notes that these are based on the Electric
5 Power Research Institute estimates. Is that
6 correct?

7 A. That's correct.

8 Q. And the figure listed for the RICE
9 units is a hundred twenty million three hundred
10 thousand dollars; is that correct?

11 A. That's correct.

12 Q. And, of course, the total cost that
13 you quote of the RICE units once installed
14 would be \$210 million and some change. As far
15 as we know right now, that would be the cost.
16 The reasons for that higher cost is that
17 there's specific factors in New Orleans that
18 require raising the cost estimates; is that
19 correct?

20 A. That's part of the explanation, yes.
21 One, I would characterize the information in
22 the piece model from EPRI as being
23 standardized. It allows us to make a
24 apples-to-apples comparison across the
25 different -- the cost of the different types of

1 technologies, the different units that we've
2 described.

3 In the piece model, they do not take
4 into account specific differences and, yes,
5 there are elements of that that would be
6 specific to this site in New Orleans. There
7 also would be different elements around their
8 assumptions in the estimate itself that could
9 be different than, let's say, an EPC contractor
10 would say the project could be built for.

11 So the answer to your question is
12 yes, that there are elements there that are
13 different because it's a standardized model.
14 It doesn't take into account the specific site,
15 the specific needs for that site, but there are
16 other elements there as well, such as the way
17 the estimate is put together.

18 Q. Okay. One of those specific factors
19 in New Orleans is the cost of flood insurance;
20 isn't that right?

21 A. Please ask your question again so I
22 make sure that I get this right.

23 Q. Sure. One of specific cost factors
24 associated with building in New Orleans is
25 flood insurance; is that right?

1 A. So the cost of insurance, which is
2 part of the builder's all risk policy which
3 would protect the cost of the project during
4 construction from flooding is an element of the
5 cost, and I wouldn't say that it was a major
6 factor in that, but it would be a factor.

7 Q. You have provided to the City
8 Council a specific figure for the flood
9 insurance cost for this plant?

10 A. I believe in my direct testimony, I
11 provide a figure for the CT project.

12 Q. For the RICE units?

13 A. For the RICE units, I have not.

14 Q. My next question would be for the
15 RICE unit?

16 A. So we provided a cost for the
17 builder's all risk policy insurance for the CT
18 and in my supplemental and amending, I state
19 that the insurance that we would place would be
20 similar to that and the pricing is similar, but
21 we have not provided a specific number to date.

22 Q. But Entergy New Orleans will ask New
23 Orleans ratepayers to pay the cost of flood
24 insurance; is that correct?

25 A. We will ask them to cover the cost

1 of builder's all risk insurance for the
2 project, yes.

3 Q. Do the site specific factors also
4 include the fact that in New Orleans, you have
5 to float a construction project on mud versus
6 building on bedrock?

7 A. Well, I believe that you're quoting
8 something I would have said during the
9 deposition as an example of the difference
10 between building a power plant in Colorado and
11 building one on the Gulf Coast. And the
12 foundation here in New Orleans requires
13 pilings, whereas in another area such as
14 Colorado, it wouldn't. So that's an example of
15 the difference. And, yes, if we're going to
16 build a power plant in Orleans Parish or near
17 Orleans Parish, this is a factor that we'll
18 have to take into account.

19 Q. And New Orleans ratepayers will pay
20 for those added construction costs?

21 A. It's a reasonable cost of
22 constructing a power plant in Orleans Parish.
23 (Witness nods head affirmatively.)

24 Q. Now, the RICE units have a
25 contingency budget of 6 percent; is that

1 correct?

2 A. My supplemental and amending
3 testimony provides an estimate of the --

4 Q. Sure. I believe that's on page 17,
5 line 12 -- sorry, line 13.

6 A. I'm sorry. What page did you --

7 Q. It's in your supplemental and
8 amending on page 17, line 13.

9 A. This document that I have in front
10 of me is numbered differently.

11 Q. Oh, I can read out what I've got
12 here. It's on Question 25 towards the end of
13 that answer. You say, The current project
14 estimate contains a contingency line item of
15 approximately 6 percent of the total project
16 costs. (As read.)

17 A. Yes, that's accurate.

18 Q. And that was determined using a
19 Monte Carlo analysis; is that correct?

20 A. To say that it was determined using
21 the Monte Carlo analysis is, you know, pretty
22 significantly understated how that process
23 works. So our risk management procedure, our
24 procedure for setting contingency, is that we
25 compile a register of risk that we identify

1 related to the development and construction of
2 the project. We characterize each of those
3 risks in terms of probability of occurrence and
4 impact to the project, both in terms of cost
5 and schedule.

6 Once we've characterized them, we
7 put them in a model that uses Monte Carlo
8 simulation to run iterations of those potential
9 essential risks. Based on the outcome of that,
10 we select a contingency level. So that is how
11 the Monte Carlo simulation plays into the
12 process.

13 Q. And in selecting the contingency
14 level, are there confidence intervals there
15 associated with the contingency interval that
16 you choose?

17 A. Yes.

18 Q. What was the competency interval
19 that applied to the 6 percent figure?

20 A. We target P50, and P50 means that
21 that that contingency should be sufficient by
22 our analysis to cover approximately half of the
23 outcomes that are created through that
24 simulation process.

25 Q. So there's a coin flip chance that

1 the contingency could go over?

2 A. No. I wouldn't state it that way.
3 We are always trying to balance out cost to
4 customers and mitigating the risk. So if these
5 risks occur and they're prudently incurred, it
6 would be a cost to customers. If we set -- If
7 we were to do something more risk adverse for
8 us and, say, select a P80, meaning that
9 80 percent of all the things that we've
10 identified and all those outcomes that are run
11 through that simulation were to occur, we'd be
12 subject to the argument that we are adding more
13 contingency than is needed. We're being too
14 risk adverse.

15 So our position is that P50 is a
16 reasonable level based on the notion that half
17 the things we've identified in that simulation
18 would be covered by our contingency.

19 MR. ALFORD:

20 Your Honor, can I make sure that the
21 witness has each version of his testimony
22 because it looked like he wasn't able to
23 find --

24 JUDGE GULIN:

25 Sure. Go ahead.

1 MR. BROWN:

2 Okay.

3 JUDGE GULIN:

4 And, Mr. Brown, while that's going
5 on, maybe you could be of some assistance
6 when you refer to testimony. Give a date
7 also of the testimony. That might be
8 helpful.

9 MR. BROWN:

10 Sure. I'm only going to be
11 referring there to his supplemental and
12 amending direct, which was July 2017. So
13 if that makes it easier, then --

14 MR. JONATHAN LONG:

15 Thank you.

16 MR. BROWN:

17 No problem.

18 EXAMINATION BY MR. BROWN:

19 Q. So one question then first. The
20 unused portion of the contingency budget, that
21 would be refunded to ratepayers; is that
22 correct?

23 A. Refunded is actually the wrong term.
24 We would just not apply for it in rates. So if
25 we don't spend it, the cost of the project is

1 never -- the cost is never incurred.

2 Q. And if you -- Generally speaking, if
3 you use a higher confidence interval, that
4 would generally mean a higher contingency
5 budget?

6 A. That's right.

7 Q. And if that budget was not exceeded,
8 the New Orleans ratepayers would not be charged
9 for it?

10 A. That is correct.

11 Q. But the project cost would look
12 higher. The estimate would be higher because
13 it would be a larger contingency?

14 A. That's true.

15 Q. Do you know what chance there is of
16 this project going over budget?

17 A. Would you restate your question
18 because I want to make sure I understand?

19 Q. Sure. My understanding is when you
20 use a 50 percent confidence interval, there's
21 an equal chance you'd be over budget as within
22 your budget; is that correct?

23 A. If you're referring -- Well, if you
24 refer to how we set the contingency, then
25 50 percent of those risk items, if they occur,

1 we would have sufficient contingency to cover.
2 That doesn't mean that there is any certainty
3 that any of those risk items would occur. So
4 to say that there's a 50 percent chance of us
5 going over the cost that we set, I wouldn't
6 agree with that.

7 JUDGE GULIN:

8 Did you ever use the word
9 "confidence" level in your testimony, in
10 your written testimony?

11 MR. JONATHAN LONG:

12 I do not believe I did.

13 JUDGE GULIN:

14 Okay. Confidence level refers to a
15 statistical analysis of some sort of
16 chances of something happening as opposed
17 to selecting a particular contingency
18 percentage; is that right?

19 MR. JONATHAN LONG:

20 So the confidence interval is purely
21 a statistical measure. When you take a
22 range of risk, you've assigned them
23 probabilities and impact -- potential
24 impact levels that allows you to say, you
25 know, "I want to be able to cover with

1 confidence that I've covered a percentage
2 of these," and so that's what's meant by
3 confidence interval. So if I say it's a
4 P50, that means that that number is equal
5 to 50 percent of the outcomes in the
6 simulation analysis.

7 JUDGE GULIN:

8 Thank you.

9 EXAMINATION BY MR. BROWN:

10 Q. Do you know what the contingency
11 budget would have been if you used a 95 percent
12 confidence interval?

13 A. I do not know off the top of my
14 head. Our model would have told us the answer
15 to that.

16 Q. But you chose not to select the
17 95 percent?

18 A. That's correct. And that is our
19 practice, by the way, on our other projects
20 that we have recently put forward as well.

21 Q. Will Entergy admit, Entergy New
22 Orleans, that if the price of units goes beyond
23 the contingency budget that it will hold
24 ratepayers harmless for that?

25 A. It's not our practice to do that.

1 We are on the hook to prove that all the costs
2 that we incurred are prudently incurred and
3 will be subject to that prudence review at the
4 end of the project.

5 Q. Is it your understanding that this
6 proceeding was delayed almost 5 months because
7 of Entergy New Orleans' requests for a stay?

8 A. Mr. Brown, I apologize. I'm not an
9 attorney. I'm not sure about the words you're
10 using, if it's right. I am aware that we asked
11 for the procedural schedule to be put on hold,
12 I guess, is the term that I would use not being
13 an attorney.

14 Q. Sure. And I'm not asking you to
15 answer as an attorney. If there's anything I'm
16 saying that's unclear, let me know. Okay?

17 And each of the engineering,
18 procurement, and construction, or EPC,
19 contracts, one for the combustion turbine, one
20 for the reciprocating engines, each has an
21 escalator clause, is that correct, in which the
22 contract price will go up if there's delay?

23 A. That is true. There are provisions
24 that provide additional cost for delay in the
25 project.

1 Q. Is Entergy New Orleans prepared to
2 hold ratepayers harmless for increases due to
3 triggering the escalator clause in the
4 contracts?

5 A. Mr. Brown, my role at the company is
6 to provide cost estimates and to provide
7 project management for these projects when we
8 build them and to do it prudently. It's not my
9 place to say what Entergy New Orleans is
10 willing to do with regard to rates.

11 Q. But you've already passed the
12 escalator clause trigger date for the
13 combustion turbine; is that correct?

14 A. That's correct.

15 Q. And that's going to add at least
16 \$3.1 million to the price; is that correct?

17 A. That's correct.

18 Q. We will pass the escalator date for
19 the reciprocating engines before this case is
20 decided, say February or March of 2018?

21 A. So the original date we were
22 planning for this process to be finished in
23 November. We know now that it's not going to
24 be finished in November, so we have negotiated
25 pricing through -- until March the 2nd. And so

1 the hundred and forty million number that we
2 have provided in my testimony about the EPC
3 cost of this project, it will hold true through
4 that date. After that date, there will be
5 additional escalation.

6 Q. Now, each of these contracts has
7 renegotiation clauses that would allow the
8 builder to negotiate new terms and potentially
9 a new price if the project is not approved by a
10 date certain; is that correct?

11 A. It's correct, and it is typical of
12 contracts. You cannot ask providers of
13 equipment or providers of EPC services to
14 indefinitely give you pricing, and that applies
15 to virtually everything we buy. So, yes, these
16 contracts, as every EPC contract, has a sunset
17 date at which the pricing has to be
18 renegotiated.

19 Q. And so if we pass those dates, the
20 contractor could raise the price?

21 A. If we pass those dates, we will have
22 to renegotiate the pricing.

23 Q. Now, the time from a notice to
24 proceed being issued to delivery for the
25 combustion turbine is 31 months; is that

1 correct?

2 A. No. Delivery of the combustion
3 turbine is an 18-month process. Completion of
4 the project is approximately 30 months.

5 Q. Okay. That's what I -- I may have
6 used the wrong term, but from the date of
7 notice to proceed to the combustion turbine
8 being in a position to come online would be at
9 least 31 months according to your testimony?

10 A. It's approximately 30 months from
11 notice to proceed.

12 Q. And that same time period for the
13 reciprocating engine units would be 24 months;
14 is that correct?

15 A. That's correct.

16 Q. So speaking hypothetically now, if
17 you were to gain the notice to proceed on
18 January 1st, 2019, either or both of the -- I
19 guess it would be either of those units would
20 be able to operate or be in a position to
21 operate before January 1st, 2022, three years
22 later; is that correct?

23 A. Just ask me that one more time just
24 to make sure that I'm clear before I do the
25 mental math.

1 Q. Sure. That was a complex question
2 so I'll break it down a little here.

3 Let's assume that the Council issues
4 a notice to proceed on January 1st, 2019, so
5 basically a year from today. Would you be able
6 to have the combustion turbine online by
7 January 21st, 2022, in that scenario?

8 A. So, in theory, if we're able to
9 retain the 30-month schedule, we would be
10 within that time frame.

11 Q. And for the reciprocating engine
12 units, which, of course, have a shorter time
13 frame, you would also be able to, assuming
14 notice to proceed is issued on January 1st,
15 2019, that they would be able to be constructed
16 and ready to be operated by January 1st, 2022?

17 A. Yes.

18 Q. Mr. Long, you're not aware of anyone
19 who has estimated how many times these units
20 will start up or shut down in a given year; is
21 that correct?

22 A. I don't believe that that's correct.

23 Q. Okay.

24 A. So your question to me was whether I
25 was aware that anyone has estimated the number

1 of times these units would start and stop?

2 Q. Uh-huh (indicating affirmatively).

3 A. We have spent a considerable amount
4 of time trying to estimate how many times these
5 units will start and stop. I believe what I
6 might have said previously was that it's not
7 possible to know how many times they will start
8 and stop. But we have forecasted them. In our
9 air permit applications, we modeled a certain
10 number of starts and shutdowns for both units
11 for -- for both projects, and in the economic
12 model, there would have been assumptions about
13 that as well. So we have and we have needed to
14 estimate that. But it is not actually possible
15 to know.

16 Q. What is the estimate for the
17 reciprocating engines? Can you tell me that
18 today?

19 A. We applied in our air permit based
20 on 400 starts, it's a combination of cold and
21 hot starts, and 400 shutdowns.

22 Q. So if we were averaging that over
23 the course of a year, that would be more than
24 one start up or shut down per day, 365 days a
25 year?

1 A. In the course of asking for air
2 permits, we look at what we believe would be
3 the highest possible number of starts. We want
4 to make sure that we'll allowed to do that if
5 it's needed. If it were needed, yes, it would
6 be more than one a day.

7 Q. And when you say "if it's needed,"
8 is part of that dependent on MISO?

9 A. Yes, in the sense that MISO
10 dispatches these units, and they dispatch them
11 for two reasons. First, are economics; second,
12 are for reliability. Economics based upon
13 locational marginal pricing and reliability
14 based on system situations.

15 Q. And would one of the reliability
16 reasons for dispatch and that has been talked
17 about in this docket -- I believe Mr. Charles
18 Long spoke to it -- is voltage support. Is
19 that your understanding?

20 A. Yes, that is one of my
21 understandings of why we dispatch it is for
22 reliability is to support voltage in a local
23 area.

24 Q. Do you know how frequently a unit
25 would need to be dispatched for voltage support

1 reasons?

2 A. I do not, no.

3 Q. Now, you may have touched on this,
4 but bear with me. In part of the determination
5 that MISO uses in determining when to dispatch
6 these units in addition to reliability is an
7 economic analysis; is that correct?

8 A. I'm sorry. I didn't follow the
9 question. Ask me again, please.

10 Q. Sure. In addition to reliability
11 reasons, another reason that MISO -- another
12 factor that MISO considers is whether it's
13 economic to dispatch the unit?

14 A. Yes. As I was saying, they look at
15 the locational marginal prices as bid in for
16 the unit and on the system and they dispatch
17 the unit to support the system.

18 Q. Now, you've -- It's the case, isn't
19 it, that the RICE units, the reciprocating
20 engine units, one of the reasons that this
21 technology was chosen is because they're
22 capable of being started and stopped daily; is
23 that correct?

24 A. I would characterize it slightly
25 differently.

1 Q. Sure.

2 A. Broader. These units were chosen
3 for their flexibility. As the interest in
4 having more renewables in the area and our
5 commitment to deliver more renewables and the
6 way that those renewables act on our system,
7 the need for flexibility is greater, will be
8 greater as that happens, and so these units
9 have greater flexibility, including the ability
10 to start and stop daily. The CT units can also
11 start and stop daily.

12 Q. And, in fact, the RICE units can be
13 started and stopped multiple times per day; is
14 that correct?

15 A. That is true.

16 Q. Now, just to be clear, as you define
17 the term "black start," the combustion turbine
18 does not have black start capability; is that
19 correct?

20 A. That's correct.

21 Q. One moment.

22 MR. BROWN:

23 This will be my last question. Just
24 want to make sure I've got the right
25 citation for it. Hold on one second.

1 (Whereupon a pause occurred in the
2 proceedings.)

3 EXAMINATION BY MR. BROWN:

4 Q. Mr. Long, is one of the construction
5 contractors in this case Burns and McDonnell?

6 A. Yes.

7 Q. Are you familiar with Burns and
8 McDonnell's website?

9 A. I'm sure I've been there more than a
10 few times, but I wouldn't say that I'm familiar
11 with it.

12 Q. Are you aware of the fact that Burns
13 and McDonnell on its website touts battery
14 options for their black start capability?

15 A. I'm not aware of that.

16 MR. BROWN:

17 I'll tender the witness, Your Honor.

18 JUDGE GULIN:

19 Thank you, Mr. Brown.

20 Ms. Stevens Miller.

21 MR. EDWARDS:

22 Your Honor, before she starts, I'd
23 like to confirm that whatever changes
24 they've agreed to in the testimony of the
25 Entergy witnesses will be provided to

1 counsel for the rest of the parties to
2 the proceeding.

3 JUDGE GULIN:

4 Absolutely.

5 MR. EDWARDS:

6 Thank you.

7 EXAMINATION BY MS. MILLER:

8 Q. Good morning, Mr. Long.

9 A. Good morning.

10 Q. I'd like to start out with asking
11 you a few questions from your initial testimony
12 dated June 2016, I believe. On page 10,
13 starting around lines 7 and 8, you discuss how
14 CB&I was selected to provide the CT. According
15 to your testimony, CB&I was selected through a
16 competitive solicitation process; is that
17 correct?

18 A. Yes.

19 Q. And the process was finalized in
20 September of 2015?

21 A. Yes.

22 Q. When did the process start?

23 A. In May of 2015.

24 Q. So that entire process took
25 approximately four or five months?

1 A. That's correct.

2 Q. You also state that your project
3 team solicited four contractors to participate;
4 is that correct?

5 A. Four contractors participated. We
6 spoke with more. Those are the four that
7 agreed to provide proposals.

8 Q. How many more did you talk to?

9 A. There were at least two others who
10 declined to participate.

11 Q. How did you choose these six
12 contractors to talk to?

13 A. Our first consideration was whether
14 these contractors were in the business of
15 building plants such as the CT project. They
16 were contractors that we had confidence had the
17 capability, and this is not, I believe -- Well,
18 anyway, that's how we did it. We went out to
19 companies that we were aware of that did this
20 sort of work. We're in this market place a
21 lot. We're aware of these folks. We talk to
22 them frequently, and so based on that
23 knowledge, we selected a range of companies to
24 speak to.

25 Q. How did you determine that you had

1 confidence in their capability?

2 A. We looked at their track record for
3 similar projects.

4 Q. Had all of these companies done work
5 for Entergy in the past? Not necessarily
6 Entergy New Orleans, but Entergy?

7 A. Ms. Miller, Entergy is a very large
8 company. We do a lot of business with this
9 range of contractors. In my group, in building
10 new power generation, we had not worked with
11 all of these contractors in the past, but I
12 couldn't sit here and speak for the entirety of
13 Entergy.

14 Q. So this wasn't an open, competitive
15 solicitation in the way that term is generally
16 thought of where anybody who had an interest
17 could look at the RFP and put forth a proposal;
18 is that correct?

19 A. That's correct.

20 Q. And the RFP was specifically for a
21 generator of a certain size or a certain range
22 of size?

23 A. Our request for proposals were to
24 build a peaking resource utilizing the
25 Mitsubishi 501GAC gas turbine and a simple

1 cycle application.

2 Q. So you had already selected the
3 turbine you wanted before soliciting proposals
4 from the contractors; is that right?

5 A. That's correct.

6 Q. How did you select the turbine you
7 wanted?

8 A. We've been through an extensive
9 process over more than two years prior to this
10 to identify what the best turbine for our fleet
11 would be. We were purchasing the same turbine
12 for the St. Charles Power Station, which are
13 currently being constructed today, for the Lake
14 Charles Power Station, and the Montgomery
15 County Power Station, and it was also based
16 upon our history with suppliers.

17 Mitsubishi had previously provided
18 excellent service, whereas with -- well,
19 superior service to the other suppliers. It
20 was a belief that since we were going to build
21 a fleet of these machines that there would be
22 benefits from an O&M perspective of having the
23 same turbine at this unit and we believe it is
24 the best gas turbine on the market for this
25 purpose today.

1 Q. When you say fleet of machines,
2 you're talking about Entergy broadly, not in
3 New Orleans; correct?

4 A. That's correct.

5 Q. But Entergy never put out requests
6 for proposals that essentially were broader
7 that said, "We have a need for reliability help
8 and generation help in this area. Come to us
9 with your ideas of how to resolve those
10 concerns"?

11 A. Ms. Miller, I'm not in the business
12 of procuring resources for Entergy. It's my
13 understanding that we didn't. There was some
14 very specific reasons for not doing it, but I
15 believe other witnesses in this case, such as
16 Ms. Lovorn-Marriage, has put forward. I
17 apologize to her now if I mispronounced her
18 name.

19 Q. Is CB&I headquartered in Louisiana?

20 A. No. They have significant
21 operations in Louisiana. Their predecessor to
22 this group, the Shaw Group, was headquartered
23 in Baton Rouge. CB&I acquired Shaw in 2014.

24 Q. Can you turn to page 16 of your
25 direct testimony?

1 A. Okay.

2 Q. This is the milestone list for the
3 CT project; is that correct?

4 A. That's correct.

5 Q. And for all of these milestones, all
6 these dates have passed; is that correct?

7 A. That's correct. Well, August 2018
8 hasn't, but the beginning ones have.

9 Q. Thank you.

10 So you did not receive an air permit
11 for the CT on January 2017; is that correct?

12 A. That is correct.

13 Q. Where does the air permit stand now?

14 A. We applied for the air permit back
15 in August for both of these units. We had --
16 In early last year when the procedural schedule
17 here was suspended or stayed, we were in the
18 process of scheduling public comment period for
19 the air permit for the CT. Knowing we were
20 likely to amend that, we halted that process,
21 put together a application that would cover
22 both projects, which we submitted in August.
23 We are well along in that process of pursuing
24 that application today.

25 Q. Has the LDEQ set a new public

1 comment date on that?

2 A. I'm not aware of that, no.

3 Q. Who issues the coastal permit?

4 A. The coastal use permit, which is a
5 collection of documents that are provided by a
6 range of parties in a joint permit application
7 process, is administered by the Corps of
8 Engineers. There are multiple parties that are
9 involved in issuing that coastal use permit
10 suite of documents.

11 Q. Does the main permit ultimately come
12 from one of those agencies, or is it a
13 combination of agencies?

14 A. It's a combination. The U.S. Army
15 Corps of Engineers manages that process for us.

16 Q. And has the CT received its coastal
17 use permit?

18 A. It did, June of 2016.

19 Q. 2016?

20 A. I believe that's correct.

21 Q. That's the same month that you filed
22 your application with the City Council?

23 A. So sitting here at the moment, I
24 could be inaccurate about the year, but I
25 believe it was June 2016.

1 Q. Okay. Has Entergy purchased the
2 turbines listed in the milestones here?

3 A. No. We will wait for the City
4 Council to approve or disapprove -- approve
5 before we'd make purchases.

6 MR. EDWARDS:

7 Your Honor, could I ask the counsel
8 to speak up? I can't hear her when I'm
9 behind her voice.

10 MS. MILLER:

11 Sure. I'll give it a try.

12 MR. EDWARDS:

13 Thank you very much.

14 EXAMINATION BY MS. MILLER:

15 Q. Approximately how long would it take
16 if the CT is approved by the City Council, when
17 you receive that approval and you purchase the
18 turbines?

19 A. It will be a matter of days. We
20 would -- Once we have the order from the
21 Council, we would issue notice to proceed.
22 Depending on which project gets approved, that
23 EPC vender would then move to issue the
24 procurement for those -- either the turbine in
25 the case of the CT project, or the Wartsila

1 engines in the case of the RICE project.

2 Q. Where are the CT turbines
3 manufactured?

4 A. Savannah, Georgia.

5 Q. On page 22 of your direct, you state
6 that the contracts allow the owner to suspend
7 or terminate for convenience.

8 The owner there refers to Entergy
9 New Orleans; is that correct?

10 A. That's correct.

11 Q. So you would have to pay CB&I for
12 any expenses or other -- that they would have
13 already incurred at the time of termination?

14 A. Under the EPC agreement, while we
15 have executed that agreement, the services
16 under that agreement don't start until we issue
17 notice to proceed. We never issue notice to
18 proceed, we never incur any liability. In the
19 two years now that we've been developing this
20 project, CB&I has had some expenses. We have
21 not talked about this because we still consider
22 the CT to be a viable option. There may be
23 some costs that they ask us to reimburse them
24 for.

25 Q. So you didn't suspend the CT project

1 in light of your filing for an alternative
2 project?

3 A. There was no reason to suspend the
4 project. We had never issued notice to
5 proceed. They were not providing any services
6 under the contract.

7 Q. And if the City Council selects the
8 RICE alternative, then you would have to
9 terminate the CT contract; is that correct?

10 A. Since this is a situation that we
11 didn't actually anticipate happening, the
12 contract is not entirely clear about what
13 happens if we never issue notice to proceed,
14 and I haven't yet taken legal advice on whether
15 I should formally terminate it or just let it
16 sit on the shelf for eternity. There are no
17 obligations under that agreement today.

18 Q. If you could go to your supplemental
19 amending testimony dated July 2017, at page 6.
20 Here it states that the commercial operation
21 date of the CT would have been November 2020 if
22 the NTP had been issued before November 1st";
23 is that correct?

24 A. Yes.

25 Q. Since that date has passed, what

1 would the new COD be for the CT?

2 A. It will be 24 months -- For the CT
3 project?

4 Q. Yes, sir.

5 A. It will be approximately 30 months.
6 There's a specified number of days that
7 approximates to about 30 months from the day we
8 issue notice to proceed, which we would do
9 within days of approval by the Council.

10 Q. Now, turning to the RICE generators.
11 It's my understanding that a RICE generator can
12 be either dual fuel or natural gas. Is Entergy
13 intending on purchasing the dual fuel units or
14 the natural gas units?

15 A. Natural gas units.

16 Q. And it's also my understanding that
17 RICE units can be either two stroke or four
18 stroke; is that correct?

19 A. That is a very interesting question,
20 particularly coming from a lawyer, and I have
21 to say that I had not ever been asked that or
22 ever wondered it before. I don't know the
23 answer.

24 Q. Do you know if the ones that Entergy
25 purchased are two stroke or four stroke?

1 A. So the answer to your question is
2 no. It's not particularly relevant. I'm
3 sorry. Relevance probably isn't the issue
4 here. It's not been relevant to me whether it
5 was or wasn't.

6 Q. So you're not aware of what --
7 Whether it's four stroke or two stroke, you're
8 not aware of the difference in the air
9 emissions between a two stroke or a four stroke
10 unit?

11 A. I'm very aware of the air emissions
12 of the units we selected. The difference --
13 Since I didn't know that there was a
14 difference, no, I'm not aware of it.

15 Q. On page 12 and 13 of your
16 supplemental testimony, you discuss the fast
17 start capability of the RICE units. My
18 understanding is RICE units can be turned on
19 and get up to full power or full speed, for
20 want of a different term, within approximately
21 five minutes or so; is that correct?

22 A. That's correct.

23 Q. How are the emissions controls
24 affected by this fast start capability?

25 A. The emission controls begin working

1 immediately. There is a warm-up time with the
2 catalytic converters before they become fully
3 effective. It's a matter of minutes, depending
4 on what temperature they were when the start
5 was commenced.

6 Q. With Mr. Brown, you described a hot
7 start and a cold start. Can you explain the
8 difference between those two, please?

9 A. The difference is the temperature of
10 the unit when you start and whether it has --
11 If it has operated during the day, the next
12 start will be a hot start. So it's purely the
13 temperature of the engine when you ask it to
14 start.

15 Q. How long after you've shut a unit
16 down can it remain in, say, hot start mode
17 before it would actually have cooled down so
18 much that it's actually a cold start again?

19 A. Ms. Miller, that information is
20 contained within the documents that I've seen,
21 but I do not recall exactly how long that is.
22 But be certain that the ambient temperature and
23 other factors would play a significant role in
24 that, so that any number I would give you would
25 not be entirely accurate.

1 Q. Now, I think you just testified to
2 Mr. Brown that you -- in your air emissions
3 permit, you provided that you would do a
4 hundred and thirty-three cold starts a year
5 approximately?

6 A. I testified that there were 400
7 combination of cold and hot starts. I do not
8 remember what the breakdown between the two
9 were. The total was 400 is what I testified to
10 earlier.

11 MS. MILLER:

12 May I approach, Your Honor?

13 JUDGE GULIN:

14 Please.

15 MS. MILLER:

16 This is J2D of your air permit
17 application.

18 JUDGE GULIN:

19 Is this already in evidence,
20 Ms. Stevens Miller?

21 MS. MILLER:

22 No, it's not.

23 JUDGE GULIN:

24 Okay. Do you wish to have it
25 marked?

1 MS. MILLER:

2 Yes, please.

3 JUDGE GULIN:

4 Let's mark it as AAE/350 No. 1.

5 MS. HAND:

6 Your Honor, it should be No. 2. We
7 already have a No. 1.

8 JUDGE GULIN:

9 Oh, my apologies. Number 2. I'm
10 sorry.

11 MS. HAND:

12 Thank you.

13 (Whereupon a pause occurred in the
14 proceedings.)

15 EXAMINATION BY MS. MILLER:

16 Q. Mr. Long, my understanding of this
17 chart -- and I admit I use that term loosely --
18 is that it lists a hundred thirty-three cold
19 starts for the unit as part of Entergy's air
20 permit; is that correct?

21 A. Yes. That is what the chart says, a
22 hundred and thirty-three cold starts. And
23 these would have been the assumptions that they
24 used to estimate the amount of emissions from
25 the unit and taking that into consideration for

1 a air permit.

2 Q. So this assumes that less than half
3 the year, you will be doing a cold start for
4 these units, assuming 365 days on a hundred and
5 thirty-three cold starts?

6 A. As I described earlier, we're
7 permitting here for what we think the highest
8 case might be. So in that highest case, we are
9 using the assumption that we will start a
10 hundred and thirty-three times in a cold start.

11 Q. So -- But in order to achieve that,
12 the units would have to be operating fairly
13 frequently in order to be doing more hot starts
14 than cold starts and to not be shut off at all
15 for significant periods of time; is that
16 correct?

17 A. I think you asked me more than one
18 question there.

19 Q. Okay. I'll try again.

20 In order to achieve only doing a
21 hundred and thirty-three cold starts a year,
22 the units would have to be running fairly often
23 and running fairly continuously so that they
24 wouldn't be shut down long enough to have to do
25 another cold start; is that correct?

1 A. No. I disagree with your analysis.
2 They could be started up 133 times during the
3 year and have no hot starts. So it does not
4 assume that the unit would be running more than
5 that. So for you to have a hot start, you
6 would have had to have started the unit, but to
7 have a cold start, you wouldn't -- it does not
8 assume that you would have run the unit. In
9 fact, it assumes the opposite.

10 Q. But the air permit assumes that they
11 will already be in hot start mode for a
12 significant portion of the year to only need a
13 hundred and thirty-three cold starts; is that
14 correct?

15 A. No. It doesn't assume that. As I
16 say, we could have a hundred and thirty-three
17 cold starts and only run those hundred and
18 thirty-three times.

19 Q. But that isn't how Entergy envisions
20 using the units, is it, only using them a
21 hundred and thirty-three times a year?

22 A. As I described previously, we have
23 attempted to model the market and reliability
24 concerns that would lead us to a number of
25 starts. In the range of potential outcomes

1 over the life of this unit, it's foreseeable
2 that it could only operate a few times a year.
3 It's also foreseeable that it could operate as
4 often as this implies in this permit. So we
5 would consider the whole range to be possible.

6 Q. Now, if it ends up only operating
7 several times or a few times a year, the
8 ratepayers still pay for those units sitting
9 there not being used; is that correct?

10 A. The role of this unit is for peaking
11 and reserve capacity. It has value whether
12 it's actually running or not.

13 Q. With regard to the RICE units, they
14 actually need a starting unit to start them up
15 from a black start capability; is that correct?

16 A. The RICE units are started with
17 compressed air. So, no, they have that
18 capability built into the plant. There is a
19 500 kW emergency diesel generator that provides
20 control power. As I describe in my testimony,
21 if the grid went down, that emergency diesel
22 generator would come on to provide that control
23 power.

24 Q. And that control power is what
25 enables the RICE unit to black start?

1 A. That control power is what enables
2 the unit to be controlled as it starts up. The
3 air actually starts the unit.

4 Q. On page 15 of your supplemental
5 direct --

6 JUDGE GULIN:

7 Are you finished with this exhibit,
8 No. 2?

9 MS. MILLER:

10 Yes, sir.

11 JUDGE GULIN:

12 Okay. You've not offered it for any
13 purpose, so I'm just going to go ahead
14 -- I always give an opportunity for
15 counsel for the witness, since it was
16 used during cross, do you want to have it
17 admitted for cross purposes to give
18 context to the cross-examination? It's
19 up to you.

20 MS. MILLER:

21 I'm sorry, Your Honor. That was an
22 error on my part. I would like to have
23 it admitted as substantive evidence.

24 JUDGE GULIN:

25 As substantive evidence?

1 MS. MILLER:

2 Yes, sir.

3 JUDGE GULIN:

4 Any objection to that?

5 MR. ALFORD:

6 Your Honor, can we verify this on
7 break and then we'll --

8 JUDGE GULIN:

9 Okay. But you have no objection
10 subject to verification?

11 MR. ALFORD:

12 That's correct, Your Honor.

13 JUDGE GULIN:

14 Okay. Very good.

15 MS. MILLER:

16 Thank you, Your Honor.

17 EXAMINATION BY MS. MILLER:

18 Q. On page 15 of your supplemental
19 direct testimony, you state that after the
20 suspension of the procedural schedule, your
21 project team was asked to select alternative
22 technology and select essentially a contractor
23 for this alternative technology; is that
24 correct?

25 A. That's right.

1 Q. On what date did this process
2 actually start?

3 A. I'm not certain exactly what date it
4 started. It would have been approximately
5 around the same time or shortly after the
6 decision was made to suspend the procedural
7 schedule.

8 Q. And did this process start with your
9 project team trying to figure out which
10 alternative technology Entergy should look
11 into?

12 A. As I've communicated previously,
13 there was an ongoing process where we were
14 looking at technology options in this size
15 range previously and we also previously had a
16 competitive EPC process. So we began
17 revisiting that technology selection. We
18 engaged with WorleyParsons to renew the
19 information they provided previously in their
20 analysis. And at the same time, we began to
21 explore with both CB&I and Burns and McDonnell,
22 who were two top bidders from our previous
23 competitive process in this contractor
24 selection process. So all of that would have
25 begun approximately at the same time.

1 Q. With regard to WorleyParsons, how
2 did your project team select them to do the
3 study in the first place?

4 A. We've been using WorleyParsons to do
5 this type of study since 2006, 2008 time frame
6 and they have supported us on this type of
7 selection process. I believe the individual
8 there that we use to be the best in the
9 industry for this type of analysis, and so we
10 have a process at Entergy where we select
11 owners, engineers, companies that provide these
12 services. We have standard agreements with
13 them, general services agreements with them,
14 and we engage them under that agreement.

15 Q. But you only sought solicitations or
16 proposals from two entities for the alternative
17 project; is that correct?

18 A. We went back to the two entities
19 that were identified during the CT project as
20 the top two bidders, yes.

21 Q. When CB&I was selected for the CT
22 project, was it the lowest cost project?

23 A. Yes, it was.

24 Q. And for the alternative project,
25 Entergy did not look at any other options other

1 than generators; is that correct?

2 A. I'm not going to speak to what
3 Entergy did. My team and I only looked at the
4 generators that are identified in the
5 testimony.

6 Q. So approximately how long did this
7 new selection process take?

8 A. It took -- I'm trying to recall back
9 to last year, a fairly hectic period as we were
10 working our way through this. It took
11 approximately two to three months to work
12 through that, to get proposals from those
13 parties, to evaluate them, and then make a
14 selection.

15 Q. In your testimony, your supplemental
16 testimony on page 22, you state that at the
17 time of filing of this testimony, you didn't
18 have a final contract for the RICE units. Has
19 that contract been finalized?

20 A. The contract has not been executed.
21 We've been under intensive negotiations ever
22 since we made the selection back in the spring
23 and if we needed to conclude it, we could. So
24 I'm very confident that by the time the Council
25 considers this matter and they would issue --

1 if they were to select this issue, a decision
2 on that, we would have the contract in place
3 under the terms and conditions and pricing as
4 indicated.

5 Q. I believe you indicated to Mr. Brown
6 that there is a clause in each of the contracts
7 that provides that if the NTP isn't issued by a
8 certain date, the contract is renegotiated; is
9 that correct? Can be renegotiated?

10 A. That's right.

11 Q. Is there a deadline for when the
12 contractor can ask for it to be renegotiated?
13 It might be easier if I give an example.

14 Let's say the contract date for it
15 to be renegotiated was January 1st. Is there a
16 time period within which they have to assert
17 that they want to execute that right, or is it
18 open ended that they can execute it essentially
19 up until the time the NTP is issued?

20 A. The way these provisions work, if we
21 go to issue notice to proceed, there would be a
22 reset of the price at that time. So they
23 wouldn't be coming to us. We would be going to
24 them to issue notice to proceed. If we passed
25 the date, then we would have to reach agreement

1 on the price.

2 Q. So at this point in time, the price
3 that the ratepayers will pay for the
4 alternative, either alternative really, could
5 change if the contractor exercises its right
6 under that provision?

7 A. Would you rephrase your question?
8 I'm not sure I follow you.

9 Q. Essentially I believe the price that
10 you have, let's say for the RICE units, is
11 approximately \$210 million, but if the
12 contractor should exercise their right to
13 renegotiate, that price could change; is that
14 correct?

15 A. If the decision in this process is
16 delayed past those sunset dates, then the
17 pricing will change.

18 Q. On page 17 of your supplemental
19 testimony, lines 2 through 3, you describe an
20 exchange rate factor and a European producer
21 price index. Can you explain those provisions
22 to me and what their effect is?

23 A. Just let me review that paragraph to
24 make sure I've got the context for this.

25 Q. Oh, sure.

1 (Whereupon a pause occurred in the
2 proceedings.)

3 MR. JONATHAN LONG:

4 Okay. Would you would you repeat
5 your question now that I've read that?

6 EXAMINATION BY MS. MILLER:

7 Q. Okay. You describe in those
8 sentences an exchange rate factor and European
9 producer price index. Can you explain those
10 terms to me, what effect they would have on the
11 price?

12 A. Escalation provisions in this
13 contract are based upon market verifiable
14 indices. This is referring to the way the
15 indices are structured in the escalation
16 provision of this contract. So just like the
17 U.S. producer price index is based on one
18 that's for Europe and there is an exchange rate
19 index between the euro and the dollar that
20 would come into effect.

21 Q. So the \$210 million is the price in
22 American money essentially and that price could
23 alter based on what the exchange rate is
24 with -- I'm not sure what currency is used?

25 A. Only if we exceed the date on which

1 that becomes effective.

2 Q. So that price factor in and of
3 itself could cause the ultimate cost to go up?

4 A. In this case, only if we go past the
5 dates in the contract. We have certainty up
6 until those dates.

7 Q. Was your program team involved in
8 the recent RFPs for the renewable units that
9 Entergy is contracted for?

10 A. Are you speaking of the Entergy New
11 Orleans RFP renewables?

12 Q. That's correct.

13 A. I have one individual who has been
14 involved as a project manager as -- assisting
15 with the contract in that case and that's been
16 the extent of our involvement.

17 Q. Now, I'm just going to ask you a
18 couple of questions about the flooding issues.

19 Can you explain what overtopping is?

20 A. My understanding of the use of that
21 term as it applies in this case is when a storm
22 surge goes over the top of a levee, spills over
23 the top of a levee.

24 Q. During Hurricane Katrina, the levees
25 at Michoud were not breached; is that correct?

1 A. That's correct.

2 Q. They were just overtopped?

3 A. That's correct.

4 Q. Does FEMA still designate the
5 Michoud site as a critical flood zone despite
6 the Army Corps of Engineers' recent upgrades or
7 construction with regard to levees?

8 A. Ms. Miller, I'm not sure what you
9 mean by "critical flood zone." Could you
10 explain that?

11 Q. FEMA designates certain areas as
12 critical flood zones and it has certain
13 regulatory requirements for zones that have
14 been designated as critical flood zones. Is
15 Michoud still designated a critical flood zone?

16 A. If you've got a document you could
17 refer to me that explains that --

18 JUDGE GULIN:

19 If you don't know, you can just say
20 you don't know.

21 MR. JONATHAN LONG:

22 Well, I know a lot about the
23 flooding at the site. I'm not familiar
24 with the terminology that she's using,
25 and so I don't know.

1 MS. MILLER:

2 That's fine.

3 EXAMINATION BY MS. MILLER:

4 Q. In your November 20th supplemental
5 testimony, you describe insurance writers
6 conducting a site visit to the Michoud site; is
7 that correct?

8 A. That's correct.

9 Q. At the time they visited, the old
10 Michoud units were still in operation; is that
11 correct? It's on page 18 and 19 if you need to
12 check.

13 A. Yes, that is correct.

14 Q. Now, with regard to the flood
15 insurance itself, you haven't purchased it for
16 either project yet; is that correct?

17 A. That's correct.

18 Q. What would the flood insurance
19 actually cover?

20 A. So as I described earlier, we would
21 procure a builders all risk policy for the
22 construction period, and so that insurance
23 covers the -- both Entergy New Orleans as owner
24 and whichever contractor as contractor for a
25 named -- a list of named perils. Flooding

1 would be one of those named perils.

2 Q. But that insurance would only cover
3 the construction period. The insurance would
4 no longer be applicable once the construction
5 is completed?

6 A. The insurance that I referred to in
7 my testimony applies to the construction
8 period.

9 Q. Do you know if Entergy intends to
10 purchase flood insurance for the operational
11 period of the unit?

12 A. That's not an area that pertains for
13 me. No, I don't know.

14 MS. MILLER:

15 Your Honor, I have a few other
16 questions, but they're confidential
17 information.

18 JUDGE GULIN:

19 Okay. Then at this point, I'm going
20 to ask those who have not -- What
21 level of confidentiality are you talking
22 about here?

23 MR. GUILLOT:

24 The minimum one?

25 MS. MILLER:

1 Yeah, I think it's lower one.

2 MR. GUILLOT:

3 HSPM.

4 JUDGE GULIN:

5 Okay. Those who have not signed the
6 confidentiality agreement, I would ask to
7 please leave the room at this time, and
8 we'll let you know when you can come back
9 in. I don't anticipate it being too
10 long.

11 (Whereupon a pause occurred in the
12 proceedings.)

13 JUDGE GULIN:

14 All right. Everyone remaining in
15 the room has signed the confidentiality
16 agreement; is that correct?

17 MR. EDWARDS:

18 Yes, Your Honor.

19 JUDGE GULIN:

20 Please proceed.

21 And it at this point, we'll be
22 segregating the transcript.

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MS. MILLER:

That's all I have, Your Honor.

Thank you, Mr. Long.

JUDGE GULIN:

Okay. Thank you.

I believe this is a propitious time
for a break. Why don't we take a
ten-minute break and come back at 10:15?

(Whereupon a recess was taken.)

JUDGE GULIN:

All right. Let's go back on the
record. We will now go back into general
session. And the prior session of the
transcript, which was segregated, will be
sealed and we'll start again in general
session. And we'll move to the Center

1 for Environmental Justice, Ms. Harden.

2 MS. HARDEN:

3 Thank you, Your Honor.

4 Good afternoon, Mr. Long.

5 MR. JONATHAN LONG:

6 Good afternoon -- Good morning.

7 EXAMINATION BY MS. HARDEN:

8 Q. In your earlier responses to
9 questions asked of you by Ms. Susan Miller, you
10 said that you don't anticipate or envision
11 contractors changing contracts. Would this
12 take away from your prior testimony that
13 contract prices can go up if timelines are not
14 met?

15 A. So I should clarify what I said
16 earlier in light of your question. I think
17 what Ms. Miller was asking me about was
18 wouldn't the contractors be motivated and come
19 back and basically, having an upper hand in
20 negotiations, insist on significantly higher
21 cost. And I gave my view about why there would
22 be an offsetting motivation on their part not
23 to do that.

24 But the testimony about the fact
25 that the longer this goes, you know, escalation

1 in these contracts is real. These costs do
2 actually go up. So I would -- The difference
3 between the day before the option that they --
4 the renegotiation date and the day after is
5 that before that, we have a formula for
6 figuring it out. After that, the formula
7 doesn't apply, but we have to renegotiate the
8 pricing. So the fact that escalation would
9 still be present hasn't changed.

10 Q. Thank you.

11 Who owns the Michoud site property?

12 A. It's my understanding that Entergy
13 New Orleans owns the Michoud site property.

14 Q. And would you happen to know what
15 Entergy would plan to do with the property if
16 it doesn't get approval to build the gas plant?

17 A. That's not in the purview of my
18 responsibility.

19 Q. I want to go to your supplemental
20 testimony. We know that it's gone through a
21 revision, so I'm going to refer to the new page
22 numbers and line sets of that revision of
23 today's date, December 18th, 2017. And if I
24 can refer you to page 18, lines 12 through 14.

25 A. Okay.

1 Q. Okay. So in this testimony, you
2 state that the elevation selected in the
3 building design plan for the proposed CT gas
4 plant is 3.5 feet above sea level; is that
5 correct?

6 A. That's correct.

7 Q. And in your deposition, you said
8 that this elevation of 3.5 feet above sea level
9 would also apply for the construction plan for
10 the proposed RICE gas facility?

11 A. That's correct.

12 Q. Now, looking back to your
13 supplemental testimony, we're still around
14 page -- going back to page 17 through 18. This
15 is in response to Question No. 5 where you
16 describe the working analysis performed on
17 selecting this elevation level. Is it true
18 that according to your testimony, the elevation
19 of 3.5 feet above sea level was determined by
20 the Entergy project team to be the proper
21 elevation required for mitigating flood risk?

22 A. It's fair to say that the project
23 team landed on that elevation difference based
24 upon our experience of the historic flooding of
25 2005 related to Katrina. It is true that it is

1 in excess of what we believe the FEMA guidance
2 to be for flood mitigation in that region and
3 that it is above the level at which we saw
4 flooding in Katrina in that area. We also had
5 our insurer's underwriters take a look at that
6 and verify that they agreed that that was the
7 appropriate height for the top of concrete.

8 Q. Thank you.

9 And on page 18, lines 4 through 6,
10 take a look at that. I just want to verify
11 with you that it's your testimony that the
12 elevation of the administration building at 1.5
13 feet above sea level is the highest point of
14 the Michoud site; is that correct?

15 A. Well, what I'm referring to is the
16 highest point of elevation identified in that
17 survey that we took in October of 2015, that it
18 was identified as the highest site in that
19 survey.

20 Q. Do you know if the October 25th site
21 survey measured roadways on the Michoud site to
22 determine that they were higher or what their
23 elevation might be?

24 A. I do not know specifically if they
25 measured the roadways. We were very interested

1 in the area where we intend to put the CT unit
2 or the RICE unit. There is a roadway adjacent
3 to that, but I believe that the survey would
4 have focused on the land adjacent to the
5 roadway not the roadway.

6 Q. So to arrive at the elevation level
7 of 3.5 feet, Entergy's project team -- correct
8 me if I'm wrong -- did three things according
9 to your testimony on page 18, lines 4 through
10 14. The three things that they added up was
11 1.5 feet, which was the top of concrete
12 elevation where the administrative building
13 sits?

14 A. That's right.

15 Q. They added that 1.5 feet to another
16 one foot that would be the flood height that
17 was adjusted up from Hurricane Katrina?

18 A. That's right.

19 Q. And then they added an extra foot
20 above that flood height to arrive at 3.5 feet;
21 is that correct?

22 A. That's correct.

23 Q. Do you know whether or not the
24 Entergy project team followed the New Orleans
25 city ordinance on flood damage prevention to

1 determine elevation?

2 A. I haven't provided any testimony
3 about that, and I, sitting here today, am not
4 -- I don't know the answer to your question.

5 Q. Okay. Do you know when the work of
6 the project team concluded? Was it before or
7 after May 2016?

8 A. It would have been before May of
9 2016. We brought this project forward in 2016.
10 We would have determined the scope of the
11 project, this height, well before then. And so
12 we would have had to have known what the top of
13 the concrete is to be able to do that.

14 Q. Now, I'd like to go to your direct
15 testimony, Mr. Long, on page 5, lines 6 through
16 8.

17 A. I'm sorry. Would you repeat the
18 page number again?

19 Q. Sure. Page 5 of your direct
20 testimony and I'm looking at lines 6 through 8.

21 A. Okay.

22 Q. All right. So in this part of your
23 direct testimony, you state that the originally
24 proposed CT gas plant was -- which is, of
25 course, the alternative one in this second

1 application. You state that the conditions are
2 such that you would expect the CT gas plant to
3 generate 226 megawatts based on summer
4 conditions of 97 degrees and 59 percent
5 relative humidity; is that correct?

6 A. Yes.

7 Q. When the temperature's as hot as
8 97 degrees in New Orleans, is it realistic to
9 expect 59 percent relative humidity?

10 A. If I may, I want to explain these
11 statistics. Gas turbines take air and can
12 compress it and combust it with gas. The
13 amount of power that's generated is highly
14 correlated to the density of the air as it goes
15 into the gas turbine. As the air becomes less
16 dense, the power output by the turbine is less.
17 As the air is more dense, the output goes up.

18 What this is simply indicating is
19 that at what Entergy considers to be standard
20 summer conditions for the Gulf Coast region at
21 97 degrees out and 59 percent relative
22 humidity, this is the output that we'd expect.
23 If it's 90 percent humid, like it normally is
24 around here, which I think is your point, it
25 would actually give us additional output

1 because the air would be more dense because it
2 has a lot of water vapor in it. So the
3 59 percent relative humidity is actually a
4 conservative case because, as you point out,
5 it's not usually like that when it's 97
6 degrees.

7 Q. I wish it could be.

8 A. I'm with you on that one. I would
9 enjoy that as well.

10 Q. So could you just give us the logic
11 of why you would go down on the humidity
12 than --

13 A. Yes.

14 Q. -- what you'd expect to find in New
15 Orleans?

16 A. So when you state the output of a
17 gas turbine, you have to state the
18 environmental conditions because as the
19 environmental conditions change, the output
20 changes. We've chosen 97 degrees and
21 59 percent relative humidity as a data point to
22 state performance. Nothing else. It's not
23 that we expect it to be that temperature. In
24 fact, we expect it would very seldom be exactly
25 that temperature, but if we were to say -- This

1 is a little bit different than the RICE units,
2 which are not affected as much by atmospheric
3 conditions. So we just have to add that
4 qualifier when we say how many megawatts it is.
5 And if you notice in the table below, we talk
6 about the maximum --

7 Q. Just --

8 A. Excuse me.

9 Q. I'm sorry. I just want to flag that
10 that's HSPM.

11 A. A portion of it is.

12 Q. Okay.

13 MR. JONATHAN LONG:

14 I'm right in saying that, that a
15 portion of it is? The output numbers are
16 not HSPM; is that correct?

17 MR. ALFORD:

18 (Nods head affirmatively.)

19 MR. JONATHAN LONG:

20 So what I identify as ISO
21 conditions, this is an international
22 standard, which is 59 degrees Fahrenheit,
23 you can see that under those
24 conditions -- it's 59 degrees Fahrenheit
25 and I believe 57 percent relative

1 humidity -- the output of the unit is
2 245.5 megawatts.

3 So what I'm trying to illustrate
4 here is that under different atmospheric
5 conditions, you'll get a different output
6 out of this turbine. And so, unlike with
7 the RICE units where we can say it's a
8 hundred and twenty-eight megawatts and we
9 don't have to qualify it, with gas
10 turbines, you have to qualify it with a
11 temperature because it changes over a
12 range.

13 EXAMINATION BY MS. HARDEN:

14 Q. Sticking with your direct testimony,
15 Mr. Long, going to your page 40, lines 2
16 through 7, if I could get you to take a look at
17 that.

18 A. Okay.

19 Q. So in this testimony, you say that
20 there are no other environmental issues that
21 were looked at beyond archeological historic
22 resources and endangered species; is that
23 correct? This is for purposes of your
24 discussion of the environmental regulatory work
25 that was underway.

1 A. Okay. So I'm following you here.
2 I'd like to hear your question again to make
3 sure I understood it.

4 Q. Sure. I just want to know if it's
5 correct that your testimony says that no other
6 environmental issues beyond archeological and
7 historical resources and endangered species
8 were analyzed.

9 MR. ALFORD:

10 Counsel, can you provide the witness
11 a page and line number?

12 JUDGE GULIN:

13 Speak up, please. Speak up.

14 MR. ALFORD:

15 I'm sorry. Could you reference a
16 page and line number that you're reading
17 from?

18 MS. HARDEN:

19 Sure. Again, it's page 40, lines 2
20 through 7.

21 MR. JONATHAN LONG:

22 The purpose of this Q. and A. is to
23 identify what has been considered in
24 addition to the other areas that are
25 identified in the testimony with regard

1 to -- you know, to air permitting that
2 came before that. So it's not that these
3 are the only things. These are the other
4 things in addition to what has come
5 before it.

6 MS. HARDEN:

7 Thank you for that clarification.

8 EXAMINATION BY MS. HARDEN:

9 Q. So does this mean that there was no
10 analysis of the environmental impacts on
11 surrounding neighborhoods performed before or
12 on behalf of Entergy when it initially filed
13 the application for the proposed gas plant in
14 east New Orleans?

15 A. I want to make sure that I'm careful
16 in how I answer you so I'm just taking a moment
17 to --

18 The permitting process that we go
19 through with the State of Louisiana, which is
20 based on EPA regulations, place -- we provide
21 information into that as to what the emissions
22 are, and the standards that we comply with
23 assess whether they exceed the emissions that
24 would, in the view of the LDEQ and the EPA,
25 impact the local community. So we did not

1 perform any studies other than what we would
2 have normally done to go through the permitting
3 process.

4 Q. So with regards to that, does that
5 mean like impacts to quality of life, impacts
6 to people who may be asthmatic, those kind of
7 particular analyses were not part of what took
8 place here?

9 A. Those type of analysis are not
10 normal in our process. What is normal is for
11 us to take a look at the community and for us
12 to assess and take into account what the
13 construction and location of that power plant
14 might affect on that community. Here in this
15 case, you know, there are not residential
16 neighborhoods at the fence line, which is a bit
17 unusual. Many of our plants do have
18 residential neighborhoods at the fence line of
19 the project. And so we want to engage with the
20 community and make sure we understand their
21 concerns. Doing the kinds of studies that you
22 talk about would not be normal for developing a
23 project like this.

24 Q. When you said you looked at the
25 community and you engaged with the community,

1 can you explain or elaborate on what that was
2 prior to the filing of the application?

3 A. So it's extraordinarily important to
4 us that we engage with the community. So we
5 have customer service representatives in that
6 area. And we -- And what I'm not so sure at
7 about prior to the filing piece of it, we have
8 community engagement meetings and we've engaged
9 with those communities and we plan to continue
10 that through the life of the project, which is
11 the part that I'm primarily involved in.

12 Q. So is it your testimony that during
13 the environmental application preparations,
14 that there was community engagement also taking
15 place?

16 A. And I'm using that in the broadest
17 of sense. I'm not saying that we had held
18 forums. I don't -- I don't actually remember
19 exactly what forms this would have taken into
20 account, but my team and the owners of these
21 plants always take into account what the
22 construction project is going to have on those
23 neighbors, and we seek to pursue that through
24 the process.

25 As part of the air permit

1 application process, there was a decision made
2 to hold a public comment period to the air
3 permit process and we were in the process of
4 scheduling that. First it was delayed by the
5 tornadoes in New Orleans East, and then when
6 the procedural schedule was delayed and we
7 determined that we would need to amend the
8 application, that was put on hold until we get
9 through the process with the amended
10 application. And it has not been scheduled to
11 date, but there was a plan to have a public
12 hearing about the air emissions early this
13 year, early in 2017.

14 Q. Do you think that there was at least
15 one community meeting at the time that you were
16 preparing the application? Would you be
17 surprised that there were no community meetings
18 at the time you were preparing the application?

19 A. So how would you describe a
20 community meeting?

21 Q. Meeting with members of the
22 community, that every community member has
23 notice, is aware of, to talk about the gas
24 plant and talk about the potential impacts.

25 A. I am not aware of the timing of

1 those meetings. I'm not.

2 Q. And when you say "the timing," does
3 that mean that you're not aware if it happened
4 as the applications for air permits and other
5 environmental permits were being prepared?

6 A. We did not have community meetings
7 related to the air permit until --

8 Q. Any other environmental permit?

9 A. I don't recall.

10 Q. Thank you.

11 MS. HARDEN:

12 Your Honor, I have no further
13 questions.

14 JUDGE GULIN:

15 Okay. Thank you, Ms. Harden.

16 And I guess we go now to

17 Mr. Edwards.

18 MR. EDWARDS:

19 Yes, Your Honor.

20 EXAMINATION BY MR. EDWARDS:

21 Q. Mr. Long, can you hear me from back
22 here?

23 A. I can, yes.

24 Q. Good. I seem to be a little lax on
25 the history of the project, but in reading your

1 testimony, it appears that you were the
2 chairman or the leader of the team that was
3 asked to look for alternate technology that
4 ultimately led to the choice of the RICE unit;
5 is that correct?

6 A. That's correct.

7 Q. Was Mr. Cureington a member of your
8 team?

9 A. Mr. Cureington is, in a sense, an
10 internal customer of mine in that process. So
11 he participated in discussions, but it was my
12 job to bring him analysis that showed my
13 recommendations for that selection based on the
14 requirements that he identified.

15 Q. So, then, did you bring to him the
16 analyses that were done of the reports that the
17 company has on demand needs over a period of
18 time and what the implication of either the CT
19 unit or the RICE units would provide?

20 A. I'm not sure I follow your question.
21 I'm not sure what you meant by the "demand
22 needs."

23 Q. Well, load studies?

24 A. Load studies wouldn't have been
25 something that I participated in.

1 Q. Do you know whether Mr. Cureington
2 did or not?

3 A. That's not something that I would
4 have been engaged in. I don't know. I'm sure
5 he can testify about that.

6 Q. Were you provided with any
7 information of that nature that would show if
8 you adopted and put in the RICE units what the
9 level of reliance would be in terms of if you
10 add the hundred and twenty-eight megawatts and
11 it does or does not take care of the load flow
12 study shows was needed to be generated on site
13 within the City of New Orleans?

14 A. Mr. Cureington asked me to provide a
15 generating resource, a recommendation on a
16 generating resource that could provide between
17 a hundred and a hundred and thirty megawatts of
18 peaking capacity, and as I described earlier
19 today, we have made forecasts of what we
20 thought the operating regime would be in terms
21 of starts, in terms of how that unit would
22 operate. In terms of whether that met the need
23 or not wouldn't have been something that I
24 would have been involved in.

25 Q. Okay. I gather just from the stack

1 of testimony that I carry back and forth from
2 my house every morning that a lot of work went
3 into the generation of the initial proposal to
4 put the CT, the 226 megawatt unit in at
5 Michoud; correct?

6 A. That's correct.

7 Q. Then there's a period of -- All of a
8 sudden with all of that work, why were you
9 asked or why was the company asking people on
10 your committee to tell them about a new
11 technology? After everything was filed and we
12 were moving forward on that, then you were
13 asked to look at something else; right?

14 A. Well, as I've testified previously,
15 there's been ongoing conversation between
16 myself, my group, and Mr. Cureington about
17 smaller resources than a 226, resources in the
18 100 megawatt range. And so it's my
19 understanding that there was a determination
20 that a smaller unit might be a better fit, a
21 smaller unit with different features, and so he
22 came and asked that we analyze what would be
23 the appropriate resources to meet the need as
24 he described it and so I provided that
25 information.

1 Q. Would you look at your supplemental
2 testimony, please, at page 15, lines 10 through
3 14?

4 A. Is this the supplemental and
5 amending?

6 Q. Yes.

7 A. Okay. I'm sorry. I'm going to have
8 to get you to --

9 Q. That's all right. I find it
10 confusing myself because they made some sort of
11 agreement to leak some of your testimony and I
12 don't know whether that's -- I'm just going to
13 go back to what we were provided originally,
14 which is the supplemental and amending
15 testimony, July 2017 --

16 A. Okay.

17 Q. -- page 15, lines 10 through 14.

18 A. Okay.

19 Q. It provides that following the
20 suspension in the procedural schedule in this
21 docket, the project team, which I led, was
22 asked to, one, select an alternative technology
23 and, two, to select an EPC contractor to
24 construct the alternate unit. (As read.)

25 This suggests that there wasn't

1 really any discussion about the alternate until
2 the interruption in the schedule. Is that
3 correct? That's what I read.

4 A. Well, as I've testified previously,
5 the discussions around --

6 Q. May I ask you to just answer my
7 question. If you need to explain it, that's
8 fine. Either yes, what you said on here is
9 correct or no, it's not. Now, I'm welcome to a
10 selection, but first I want a yes or no answer.

11 A. Fine. Would you ask your question
12 again, please?

13 Q. The question is, is what's stated on
14 your testimony, lines 10 through 12, accurate?

15 A. Yes, it is accurate, but you're
16 drawing a conclusion from it that there was no
17 other work that happened before that. It's
18 describing what happened at the time.

19 Q. Were you discussing the RICE units
20 at the same time you were trying to decide
21 whether to put in the CT, 226 megawatts?

22 A. In fact, we were. As we worked
23 towards making selections, as the team was
24 working through the question about, you know,
25 what is the need for the city, as I've said, we

1 also had been considering for some time a unit
2 in the 100 megawatt range. So we had been
3 pursuing those in parallel.

4 Q. Why seven RICE units?

5 A. The range that I was asked to
6 provide was between 100 and 130 megawatts.
7 Providing seven Wartsila units gets you to
8 approximately a hundred and twenty-eight
9 megawatts. As testified earlier, the direction
10 that I was given was to be in the higher end of
11 that range to meet the need. Well, so and the
12 issue why there is a range to begin with is
13 that power generation units come in discrete
14 units. We can't just say, "Give me a hundred
15 and thirty megawatts" necessarily. We have to
16 work with what's out there. So in this case,
17 seven units, seven Wartsila units provided a
18 hundred and twenty-eight megawatts and that met
19 the need.

20 We also looked at six because it
21 also fell in the range of 100 to 130, but the
22 128 using seven units best fit the requirement
23 as described by Mr. Cureington to me.

24 Q. The seven Wartsila units are
25 modular, right, so that they don't have to all

1 be operated at one time?

2 A. There are seven discrete units that
3 can be operated in any combination, yes.

4 Q. Is it anticipated in so choosing the
5 RICE that there would be times when you
6 wouldn't be operating all seven?

7 A. Earlier I was describing the way in
8 which these units are dispatched. There's
9 dispatch for economic reasons because it's the
10 low-cost provider providing -- you know, for
11 the local marginal price, and there's dispatch
12 for reliability. All these units have the same
13 efficiency. And so, generally, if these units
14 are in the money, as we've describe them, that
15 they would all come on and they would all run.
16 For reliability, it would depend on what was
17 needed. And so we designed this plant so they
18 could run in all the possible combinations.

19 And so the short answer to your
20 question is yes, we could run one through seven
21 independently.

22 Q. Okay. Have you seen any analysis
23 that shows that you didn't have to run all
24 seven to reach the level that you thought you
25 needed as a peaker, alternate peaker?

1 A. I have not seen any analysis to that
2 effect, no.

3 Q. If you would look at page 10,
4 please, of your supplemental and amending
5 testimony, may I assume that these numbers are
6 not confidential on this chart?

7 A. Yes.

8 Q. For the RICE units on line 1, the
9 installed cost is shown as a hundred and twenty
10 point three million dollars; correct?

11 A. Yes.

12 Q. And then on page 11, your testimony
13 is -- on line 6, your testimony is that the
14 cost estimate is \$210 million; is that right?

15 A. That's correct.

16 Q. What makes up the \$9 million
17 difference between your testimony that the cost
18 of the RICE unit installed is hundred and
19 twenty million and yet the total price for the
20 RICE unit is 210 million?

21 MR. ALFORD:

22 Your Honor, this is highly sensitive
23 here.

24 JUDGE GULIN:

25 Okay. That is highly sensitive

1 material, Mr. Edwards. You want to
2 continue with that and I'll ask the room
3 to be cleared for executive session?

4 MR. EDWARDS:

5 I mean his answer is -- He's got to
6 refer to highly sensitive material to
7 give me the answer to explain between 210
8 million and a hundred twenty that's his
9 testimony? I don't see how it is, but I
10 hate for everybody to just get up and
11 leave the room just to give me an answer
12 to that one question.

13 MR. ALFORD:

14 Counsel, he can try. I just wanted
15 to alert both you and the witness that to
16 give you a complete answer to your
17 question, you may well have to head
18 there.

19 JUDGE GULIN:

20 Mr. Long, do you think you can
21 navigate that without getting into
22 sensitive material, the answer to that
23 question?

24 MR. JONATHAN LONG:

25 I will try to do that. And I'll ask

1 my attorneys to -- if they see me going
2 wrong with that to give me the
3 indication.

4 So, first, I want to explain what
5 the \$120 million, the source of that.

6 MR. EDWARDS:

7 Thank you.

8 MR. JONATHAN LONG:

9 The \$120 million was provided by
10 WorleyParsons. They get that number from
11 -- as the Footnote No. 3 describes, as
12 every piece model and those estimates are
13 used here to compare across units. So
14 those estimates that you see in that
15 column called "Installed Costs" were
16 estimated on exactly the same basis
17 across all those units and it gives us
18 the ability to give a comparison.

19 The assumptions within those -- that
20 cost estimate were developed using
21 standardized information. These are what
22 I would call standardized costs and they
23 do not include anything related to site
24 specific issues with projects. They do
25 not take into account any regional

1 differences in cost. They also don't
2 take into account differences related to
3 owner expenses, owner costs. And so they
4 are not -- They're used here for a
5 comparison basis.

6 The \$140 million price that we got
7 from Burns and McDonnell, and have from
8 Burns and McDonnell, is based on their
9 contract to engineer, procure, construct
10 this plant, and so there will be
11 differences in things like the foundation
12 design, regional labor rates, and the
13 amount of risk that they're taking on in
14 their contract.

15 So since we do not have that kind of
16 pricing for all of the units, we use the
17 piece model, this everyday, the
18 standardized data to be able to compare
19 among the units. What we have is a
20 competitively bid price from the
21 contractor. To get from the hundred and
22 forty higher, which I believe is highly
23 sensitive protected materials --

24 MR. ALFORD:

25 (Nods head affirmatively.)

1 MR. JONATHAN LONG:

2 -- requires us to add cost beyond
3 the EPC contract, such as the cost of
4 these proceedings, the cost of my
5 management team, the cost for allowance
6 for funds used during construction,
7 AFUDC, and that's -- how you get to the
8 difference of 210 is, one, is the
9 contractor specific costs, and, secondly,
10 the owner's cost.

11 EXAMINATION BY MR. EDWARDS:

12 Q. If we use 210 million as the total
13 installed cost for the seven units, my math
14 shows that each unit is basically worth
15 \$30 million; is that right?

16 A. (Witness nods head affirmatively.)
17 On a gross basis, yes.

18 Q. Thank you.

19 And as an Entergy New Orleans
20 ratepayer, I know you're obligated to try to
21 get recovery for that \$210 million, right, in
22 rates?

23 A. The company would be doing that, not
24 me personally, but, yes.

25 Q. Sure. You're absolutely correct.

1 So if we put in less than seven
2 units for the time being, for example, it's
3 roughly \$30 million less than I and other
4 ratepayers, residents of New Orleans, would
5 have to pay until you installed the additional
6 unit or two; right?

7 A. Well, I don't -- I don't agree with
8 your math in that context. So if we were to
9 reduce it to where there were six units, most
10 of -- it is true we wouldn't have to buy the
11 equipment associated with that unit. But the
12 rest of the infrastructure in the plant is not
13 that different. So I don't want you to believe
14 from your math that if you take the total and
15 divide it by seven and you reduced it by one
16 unit that you would get a full \$30 million
17 reduction. It wouldn't be as significant as
18 that.

19 Q. It wouldn't be significant?

20 A. It wouldn't be as high as a
21 \$30 million reduction.

22 Q. How high do you think it would be?

23 A. I haven't done the math on that. It
24 would be less than 30 million.

25 Q. Over 17 million?

1 A. I haven't sat down and thought
2 through the cost of the engines and cost of the
3 equipment associated with it, so I'd struggle a
4 little bit to give you a number off the top of
5 my head.

6 Q. Do you have any recollection of what
7 you -- what the company paid for each of the
8 independent seven Wartsila units?

9 A. We bought them as a package of
10 seven, so I do not recall now what they were
11 per unit.

12 Q. Well, is that what the testimony of
13 the cost of them being a hundred and twenty, is
14 that -- I'll rephrase that.

15 On page 10 in your Table No. 1, you
16 put down the installed cost of each of the
17 Wartsila units, Wartsila by seven of a hundred
18 and twenty million. So it would be at least a
19 hundred and twenty divided by seven; wouldn't
20 it?

21 A. The hundred and twenty is not the
22 cost of the equipment. Like I say, if I knew
23 what the cost of the machines and the equipment
24 was, I could total that up and try to give you
25 a number, but I do not have that information

1 available.

2 Q. Would you at least agree that if you
3 put in less than seven, you would be saving
4 some money for me and the other ratepayers in
5 the city?

6 A. It would cost less.

7 Q. At the time this matter was opened
8 and your original testimony was filed, most of
9 us would have thought you wanted to stay with
10 what you proposed, which is a 226 megawatt CT
11 technology. Would you agree with that? When
12 you started this, that's what you had decided
13 was the thing to do? You, the company?

14 A. It is what we decided to do and when
15 we amended our application, we said it still
16 was -- in our view, we supported that option
17 still.

18 Q. Then why did you go into the
19 difficulty of coming up with another unit that
20 wasn't in the original consideration, not part
21 of the original filing? Something had to have
22 happened to cause the company to want to go to
23 this smaller unit, whether it was politics or
24 it could be done cheaper?

25 A. There are other witnesses that are

1 going to attest to this in more detail, but
2 it's my understanding that we had a load
3 re-forecast and the load re-forecast resulted
4 in a perception of a lower need, and that's
5 what drove us to take a look at a smaller unit.

6 Q. That's basically what I thought your
7 testimony said that I read to you. You have
8 stated that, which was, Following the
9 suspension in the procedural schedule in this
10 docket, the project team, which I led, was
11 asked to select an alternative. (As read.)

12 Is that when you really began to
13 look at the -- using the Charles RICE units, or
14 something else?

15 He's going to really get me some day
16 for me teasing him about this.

17 A. As I described, we had ongoing
18 conversations with Mr. Cureington prior to this
19 around a smaller option and we reengaged on
20 that, and so I don't think I would change
21 anything I said previously.

22 Q. I'm sorry?

23 A. I don't believe I would answer the
24 question any differently than I did previously.
25 What my testimony says is that after procedural

1 schedule was put together, we were asked to
2 take a look at it, but that was not the first
3 time we had looked at it.

4 Q. Did politics have anything to do
5 with making the change or looking at the
6 alternate proposal?

7 MR. ALFORD:

8 Objection, Your Honor. There's no
9 foundation for that question to this
10 witness.

11 JUDGE GULIN:

12 Say it again so the court reporter
13 can hear you.

14 MR. ALFORD:

15 I object, Your Honor. There's no
16 foundation laid with this witness to
17 support that question.

18 MR. EDWARDS:

19 Your Honor, the foundation lies in
20 his testimony and the fact that the lower
21 forecast of need generated a lot of
22 different attitudes about how this
23 project should go forward and even after
24 they put forward the idea of an alternate
25 peaker, the company's position was still

1 favored, the 226 CT technology unit. I'm
2 just asking what factors went into making
3 this decision, and one of them could have
4 been politics.

5 JUDGE GULIN:

6 Well, I think the scope of his
7 testimony is simply he was asked to do
8 it. You're asking him what the
9 motivation was behind him being asked.
10 I'll allow you to ask the question in
11 that way.

12 If you know, Mr. Long.

13 MR. JONATHAN LONG:

14 I believe it's simply as I stated.
15 The load forecast went down and they
16 wanted to revisit and present an
17 alternative, and --

18 EXAMINATION BY MR. EDWARDS:

19 Q. Are there any other witnesses for
20 Entergy that had more involvement in the
21 decision to convert to a lower output unit than
22 yourself that will appear in this testimony?

23 A. Yes. Yes.

24 Q. Who are they?

25 A. Mr. Cureington.

1 Q. Thank you.

2 Did you look in making the decision
3 or making a recommendation for the alternate
4 peaker at something other than the seven
5 individual Wartsila units?

6 A. So the table that we were looking at
7 previously lays out the -- you know, the
8 combinations of equipment configurations that
9 we considered. This is what I would call the
10 short list. The long list was actually quite a
11 bit more extensive for this. And in this list,
12 you will see air derivative gas turbines and
13 one frame industrial gas turbine. So in
14 addition to reciprocating internal combustion
15 engines, we looked at three different
16 configurations of air derivative technology and
17 one of industrial gas turbine technology.

18 Q. Thank you very much.

19 Another factor that fits into this
20 generally speaking is -- I don't have it with
21 me where I showed -- the City Council passed a
22 resolution requiring Entergy to construct at
23 least a hundred and twenty megawatt unit within
24 the City of New Orleans. Do you recall that?

25 A. I'm aware of that, yes.

1 Q. Do you know what led to that
2 resolution?

3 A. I don't. That's not an area that I
4 would typically get involved in.

5 Q. Do you know whether that resolution
6 led, in part, to the decision to look at an
7 alternate technology to the CT, 226 megawatt
8 unit?

9 A. I do not have knowledge of that. I
10 wasn't present in those conversations.

11 Q. Who would? Do you know?

12 A. Mr. Cureington.

13 Q. Mr. Cureington.

14 Is in here today?

15 A. He is.

16 Q. He's the next witness. I know.

17 Please tell me what in the load
18 forecast that came out that resulted in the
19 suspension of this proceeding, what came out of
20 the technology that said we need to put in a
21 lower unit, whether it's the three or four that
22 you've got or the one you actually adopted,
23 which is the RICE units?

24 A. I'm sorry. I didn't follow your
25 question.

1 Q. I'm asking you what was it in the
2 reduced load study that led you to going to the
3 smaller output unit, the RICE units, the seven
4 Wartsila units?

5 A. What led me to do it was
6 Mr. Cureington asking me to come up with a
7 alternative proposal. He would be better
8 placed to describe what in the load forecast
9 changed. That's not something that I would get
10 involved in.

11 Q. Is that a handoff or a pass?

12 A. Are you a rugby fan? Have you heard
13 of hospital passes?

14 Q. In doing the analysis that you did
15 do, did your team give any consideration to
16 less than seven Wartsila units?

17 A. Yes. We considered six. It fits
18 within the range that I was asked to meet.
19 And, however, we chose the larger one because,
20 as I said earlier, the direction given was that
21 being in the higher end of that range was
22 better than in the lower end.

23 Q. Why is the specific need for up to a
24 hundred and thirty megawatts when you have
25 226? What's the -- Why the smaller units as an

1 alternate? It isn't going to be a supplement.
2 It would be an alternate. Either you're going
3 to get approval to do the original CT or
4 approval to do -- hopefully from your
5 perspective, do the RICE units?

6 A. Yeah. I really don't -- I really
7 feel bad that I'm passing everything off to
8 Mr. Cureington here, but, you know, we selected
9 the 226 based on the fact that we believe that
10 was the, you know, most economical way to meet
11 the need that we identified. And it's my
12 understanding that as the load forecast
13 changed, the perception of what that need was
14 or the estimate of that need changed as well.
15 But there's been testimony by others, including
16 Mr. Charles Long, about the need, the
17 reliability need that he's much better suited
18 to describe to you than I am.

19 Q. I gather that the original thought
20 was you wanted as much reliability as you could
21 get, which 226 would be much more reliable from
22 being left as an island than 128; right?

23 A. You've made a statement that makes
24 logical sense. That's really not something
25 that -- That's not a decision that I would be

1 involved in, but 226 is larger than 128. I
2 would agree with that.

3 Q. Is it more reliable for purposes of
4 needing an alternate peaker or an alternate way
5 to take care of the needs in New Orleans in the
6 event that transmission lines were cut off by
7 hurricane, etc.?

8 A. Yeah. I believe that Mr. Charles
9 Long has testified to that fact that it is more
10 reliable. Again, that's not something that --
11 That's really a transmission system issue that
12 I'm not an expert on.

13 Q. Okay. No problem. Thank you.

14 (Whereupon a pause occurred in the
15 proceedings.)

16 MR. EDWARDS:

17 I thank you, sir. I have no other
18 questions.

19 MR. JONATHAN LONG:

20 You're welcome.

21 JUDGE GULIN:

22 Thank you, Mr. Edwards.

23 Let's take a very quick five-minute
24 break before we proceed to the advisors.

25 So we will return at 11:15. Very quick.

1 (Whereupon a recess was taken.)

2 JUDGE GULIN:

3 Back on the record.

4 We'll go to the advisors. Mr. Reed.

5 EXAMINATION BY MR. REED:

6 Q. Mr. Long, Presley Reed for the
7 Council advisors. Just a couple of questions.

8 In the cross-examination that was
9 presented by Ms. Harden, you made a statement
10 with reference to the fact that the residences
11 around the Michoud site is not up against the
12 fence line; is that correct?

13 A. Yes, I did.

14 Q. Do you know how far away the closest
15 residence or business is from the Michoud site?

16 A. I don't know that piece of data. I
17 do know that if you drop a pen in the center of
18 the site, and you draw a one mile radius, you
19 will not cross any residence.

20 Q. Okay. So the closest residence
21 and/or business is at least one mile away?

22 A. From the center of the site, that's
23 right.

24 Q. From the center of the site.

25 All right. In talking with

1 Mr. Edwards, he asked you a question regarding
2 a Council resolution. And in that particular
3 question, the way he phrased it, it says that
4 the Council issued a resolution that required
5 ENO to build a hundred -- at least a hundred
6 and twenty megawatt unit in New Orleans. And I
7 think, if I remember correctly, your answer was
8 yes; is that correct?

9 A. I answered that -- My understanding
10 what I was answering, that I was aware that
11 there was a resolution broadly to that effect.

12 Q. Okay. If I am not mistaken, and
13 this is obviously subject to check on your
14 part, the Council's resolution was directing
15 Entergy New Orleans to consider building a
16 facility of that size in Orleans Parish, not
17 requiring Entergy New Orleans to build a
18 facility of that size. And you appreciate the
19 distinction I'm making?

20 A. I can appreciate the distinction.

21 Q. Would you agree with me that my
22 explanation of the resolution is that they were
23 required to consider not to build?

24 A. That actually --

25 MS. HARDEN:

1 Your Honor, I have to object here.
2 Instead of -- Why won't you just read the
3 resolution? It would be a proper way to
4 ask the question.

5 MR. BROWN:

6 I thought we already established
7 that this is a legal conclusion as to
8 what this resolution means.

9 MR. REED:

10 I understand, but Ms. Harden was the
11 one who raised the question and asked the
12 question specifically and incorrectly
13 described the resolution. I'm sorry.
14 Mr. Edwards. So I just wanted to clarify
15 the record. That's really all I'm trying
16 to do in that regard.

17 JUDGE GULIN:

18 Okay. I suspect --

19 MS. HARDEN:

20 I think you're adding a correction
21 to it.

22 JUDGE GULIN:

23 Mr. Long, are you sufficiently
24 familiar with this resolution to be able
25 to recall what, in fact, the resolution

1 provided so that you are able to answer
2 the question of Mr. Reed?

3 MR. JONATHAN LONG:

4 I am not.

5 JUDGE GULIN:

6 All right. Thank you.

7 MR. REED:

8 Those are all my questions, Your
9 Honor.

10 JUDGE GULIN:

11 That gives us a little time before
12 lunch. Is there any redirect?

13 MR. ALFORD:

14 Very few, Your Honor.

15 JUDGE GULIN:

16 Okay.

17 EXAMINATION BY MR. ALFORD:

18 Q. Mr. Long, a moment ago you mentioned
19 a one mile radius drawing from a pen at the
20 center of the site. Were you referring to
21 residents within --

22 A. Yes.

23 Q. Okay. Ms. Harden had previously
24 asked you some questions about potential
25 community impacts. Do you recall those

1 questions?

2 A. I do.

3 Q. What did you know about the site
4 throughout the development that related to
5 potential community impacts?

6 A. Well, as I said earlier, there are
7 no residentially zoned properties or residences
8 at the fence line of this site, which is
9 actually unusual in my experience in developing
10 plants in this region. This site has a number
11 of things that are very attractive about it.

12 I understand from Mr. Charles Long
13 that there's a need for power for reliability
14 at this site. The infrastructure that is there
15 in terms of fuel supply, water supply, and
16 transmission interconnection are excellent.
17 And, also, we've owned and operated on this
18 site for at least 50 years and our knowledge of
19 this site is also excellent, which is very much
20 a risk reducing factor. So as sites for new
21 power plants go, all of those things taken into
22 account, this is an excellent site.

23 Q. Ms. Stevens Miller asked you a
24 series of questions concerning different
25 provisions in the EPC contracts. Do you recall

1 those questions?

2 A. I do.

3 Q. Just so the record is clear, is
4 there an opportunity for either contractor to
5 renegotiate if full notice to proceed is issued
6 within the deadline specified in those
7 contracts?

8 A. No, there isn't. So if we issue a
9 full notice to proceed or a notice to proceed
10 prior to that expiry date, there is no
11 opportunity to renegotiate.

12 Q. Mr. Edwards asked you a series of
13 questions about Table 1 on page 10 of your
14 supplemental and amending direct. Do you
15 recall those questions?

16 A. I do.

17 Q. Do you have that table before you?

18 A. I do.

19 Q. One of the questions that
20 Mr. Edwards asked concerned consideration of
21 less than seven RICE units. When you looked at
22 six versus seven, did you find any economies of
23 scale?

24 A. Yes. So as I was saying earlier,
25 when you reduce by a single unit, the reduction

1 in price is not equal to the total price
2 divided by seven minus the total. And so you
3 do get economies of scale as you make the unit
4 bigger, and it's because, as I said earlier,
5 you are there establishing the infrastructure,
6 you have the work crews involved. And so there
7 are economies of scale of going from six to
8 seven.

9 Q. And at this date prior to Council
10 approval, the company hasn't actually purchased
11 any of those units; correct?

12 A. That's correct.

13 Q. If the company were not to deploy
14 the full seven, would you expect there to be
15 additional costs if you needed to add
16 additional units later?

17 A. So if we were to build a unit with
18 fewer Wartsila units in it -- So if we were to
19 build a plant with fewer Wartsila units, first
20 of all, the total cost of that smaller plant on
21 a per kilowatt installed basis would be higher.
22 And then, secondly, the incremental add one or
23 two units later would cost more than a dollar
24 per kW of the seven unit plant initially.

25 MR. ALFORD:

1 Your Honor, if you give me just a
2 second.

3 JUDGE GULIN:

4 Sure.

5 MR. ALFORD:

6 Thank you, Mr. Long. Those are all
7 the questions I have for you.

8 JUDGE GULIN:

9 Okay. Mr. Brown, any recross within
10 the scope of redirect?

11 MR. BROWN:

12 No, Your Honor.

13 JUDGE GULIN:

14 Ms. Stevens Miller?

15 MS. MILLER:

16 No, sir.

17 JUDGE GULIN:

18 Ms. Harden?

19 MS. HARDEN:

20 Not for me, Your Honor.

21 JUDGE GULIN:

22 Mr. Edwards?

23 MR. EDWARDS:

24 Yes, Your Honor. I have one
25 question.

1 RE-EXAMINATION BY MR. EDWARDS:

2 Q. I only have a public education, but
3 it seems to me that the cost of putting in
4 seven units is X. Putting in one less unit or
5 two less units doesn't make it cost more.
6 Maybe if you have to put them later, but if you
7 put them originally, which is what the question
8 is, I can't image that it would cost any more
9 money to just put in five to six instead of
10 seven when you put it in in the beginning.

11 MR. ALFORD:

12 Your Honor, I didn't hear a question
13 there.

14 MR. EDWARDS:

15 Okay. I'll make it a question.
16 Easier for you to follow, Counselor.

17 MR. ALFORD:

18 Thank you.

19 EXAMINATION BY MR. EDWARDS:

20 Q. I asked you a question -- Your
21 counsel after meeting with you outside came
22 back and asked you would it cost more money to
23 put in just six than to put in seven initially.
24 Is that a correct statement that it would cost
25 more money to put in one less or two less than

1 the total seven at the beginning when you first
2 put the project on the ground?

3 MR. ALFORD:

4 Your Honor, I'm going to object.

5 That is --

6 JUDGE GULIN:

7 Sustained.

8 MR. ALFORD:

9 It's a mischaracterization.

10 JUDGE GULIN:

11 You can rephrase if you like.

12 MR. EDWARDS:

13 Okay. I'll try one more time.

14 EXAMINATION BY MR. EDWARDS:

15 Q. You're building a plant that has
16 seven separate Wartsila units; correct?

17 A. That's correct. Yes, that's
18 correct.

19 Q. Oh, I'm sorry. I didn't hear you.

20 And if for whatever reason, you
21 didn't need all seven, you only needed five or
22 six units to begin with, is it your testimony
23 that it would cost more money initially to put
24 in five instead of seven?

25 A. My testimony, which I appreciate is

1 confusing, is that it would cost more on a per
2 unit basis for the five than it would on a per
3 unit basis for the seven. It would not cost
4 more in total for five than it would for seven.

5 I've also testified if you added
6 that additional generation later, that would
7 also cost more on a per unit basis.

8 Q. And the need of five or seven
9 depends upon load forecast; correct?

10 A. Again, that's not my area of
11 expertise. And I will say, though, that my
12 understanding is that reliability is a huge
13 play in there, not just load forecast. So as I
14 believe Mr. Long -- the other Mr. Long has
15 testified, a big driver of that capacity number
16 is transmission system reliability, not just
17 the load forecast, if you will.

18 MR. EDWARDS:

19 I'm sorry. Could you read the
20 answer from the witness back, please,
21 Madam Court Reporter?

22 (Whereupon the following was read
23 back by the court reporter.)

24 A. Again, that's not my area of
25 expertise. And I will say, though, that

1 my understanding is that reliability is a
2 huge play in there, not just load
3 forecast. So as I believe Mr. Long --
4 the other Mr. Long has testified, a big
5 driver of that capacity number is
6 transmission system reliability, not just
7 the load forecast, if you will.

8 EXAMINATION BY MR. EDWARDS:

9 Q. How are you using the term
10 "reliability" in response to those questions?

11 A. It's my understanding, per my
12 colleague, Charles Long, that in order to
13 prevent cascading outages on the system, the
14 system has to be designed for a certain
15 capability and that if you don't have that
16 capability, it forces reliability issues or
17 cascading outages and the amount of generation
18 that we have at that location affects that.
19 That's what I mean by reliability.

20 MR. EDWARDS:

21 Okay. Thank you.

22 That's all I have, Your Honor.

23 JUDGE GULIN:

24 Thank you, Mr. Edwards.

25 Mr. Reed?

1 MR. REED:

2 No questions, Your Honor.

3 JUDGE GULIN:

4 Mr. Long, I thank you very much for
5 your testimony, and you're excused at
6 this time.

7 MR. JONATHAN LONG:

8 My pleasure. Thank you.

9 JUDGE GULIN:

10 All right. It's 11:30. Any
11 thoughts on whether we should go to
12 Mr. Cureington or go right to lunch?

13 MR. BROWN:

14 Your Honor, Michael Brown on behalf
15 of Sierra Club. I think I'll be going
16 first. It's a fairly lengthy cross, so
17 I'd ask for either a short break before
18 or go straight to lunch and do it after.

19 JUDGE GULIN:

20 That being the case, why don't we
21 just take an early lunch? Come back at
22 12:15, please.

23 (Whereupon the lunch recess began at
24 11:28 A.M., and the proceedings
25 reconvened at 12:17 p.m.)

1 JUDGE GULIN:

2 Let's go on the record.

3 Welcome, Mr. Cureington.

4 SETH CUREINGTON,

5 after having been duly sworn by the

6 above-mentioned Certified Court Reporter, was

7 examined and testified as follows:

8 JUDGE GULIN:

9 Mr. Brown.

10 MR. BROWN:

11 Your Honor.

12 Hello, Mr. Cureington.

13 MR. CUREINGTON:

14 Good afternoon.

15 MR. BROWN:

16 Afternoon.

17 MR. CUREINGTON:

18 Can you hear me?

19 MR. BROWN:

20 Yes.

21 EXAMINATION BY MR. BROWN:

22 Q. My name is Michael Brown. I'm an
23 attorney representing the Sierra Club in this
24 case. And you and I met for a deposition
25 before; is that correct?

1 A. Correct.

2 Q. That was December 7th?

3 A. Correct.

4 Q. You're currently employed by Entergy
5 New Orleans; is that right?

6 A. That is correct.

7 Q. You worked there since 2011?

8 A. That's correct.

9 Q. Before that, you worked for Entergy
10 Services, Inc., starting in 2006?

11 A. That's correct.

12 JUDGE GULIN:

13 The court reporter needs a minute.

14 (Whereupon a pause occurred in the
15 proceedings.)

16 EXAMINATION BY MR. BROWN:

17 Q. And you filed testimony in New
18 Orleans City Council proceedings before; is
19 that right?

20 A. That's correct.

21 Q. And that testimony has always been
22 on behalf of Entergy New Orleans; is that
23 right?

24 A. Correct.

25 Q. In this proceeding, you're not

1 testifying as an expert in transmission
2 reliability. Am I right about that?

3 A. That's correct.

4 Q. You're not testifying as an expert
5 in restoring an electrical system following a
6 hurricane or a major storm?

7 A. I'm sorry. Could you clarify what
8 you mean by restoring the electrical system?

9 Q. Sure. Bringing the service back
10 online after disruptions from a storm?

11 A. No, I'm not testifying to that.

12 Q. And you're not here to testify as to
13 how best to site a power plant to avoid damage
14 from storms; is that correct?

15 A. I'm not testifying to that effect.

16 Q. I want to get a couple of points out
17 just about the production cost modeling in this
18 case. First, in the course of this docket,
19 you've never run any production cost model that
20 includes these two things; one is the 2 percent
21 load forecasts as it reflects the Council's
22 2 percent demand-side management target and the
23 transmission upgrades required in the absence
24 of the New Orleans Power Station?

25 A. So in this proceeding, we've run a

1 number of analyses, including analysis that
2 includes the Council's 2 percent goal, but I
3 did not specifically request an analysis that
4 included a 2 percent goal and no transmission
5 simply because I had no reason to believe that
6 the cases that included the 2 percent goal were
7 feasible in the first instance as a basis to
8 evaluate those transmission upgrades.

9 Q. And just now before we get too far
10 in, I think I may invoke the Lanny Edwards
11 rule, which is just that I'd prefer it if you
12 could give me the yes-or-no answer. You can
13 clarify as you need to see fit, but when it's a
14 yes-or-no question, first give the yes or no if
15 you can.

16 You never did a production cost
17 model in this case in which -- that involved
18 installing battery storage at Michoud, but no
19 gas plant also being installed?

20 A. Actually in the IRP, we conducted
21 analysis that included just looking at
22 batteries.

23 Q. And I'm talking about in this case,
24 this docket.

25 A. Right. So we attached the IRP, you

1 know, as a part of my testimony, but in the
2 subsequent analysis since the batteries were
3 screened out in the IRP as not as cost
4 effective nor capable of meeting the identified
5 needs, no, we did not evaluate them
6 independently, but we did include batteries in
7 Case 4 of the supplemental analysis conducted
8 last fall.

9 Q. And we'll get to Case 4 in a moment,
10 but outside of Case 4, in this docket, you did
11 not run a production cost model that included
12 battery storage; is that right?

13 A. I'm sorry. We did not run a case
14 that just included battery storage simply
15 because it couldn't meet the identified needs.

16 Q. Okay. Thank you.

17 You've never done in the course of
18 this case a production cost analysis of
19 installing a resource of less than 100
20 megawatts at Michoud?

21 A. No. The needs that were identified
22 were significantly higher than that. So I
23 would have no basis to evaluate in the
24 production cost model resources smaller than
25 what would meet the need.

1 Q. And what you're talking about here,
2 the need identified, are you referring to the
3 need in the IRP that the company identified?

4 A. Actually I'm talking about both the
5 IRP and in this proceeding because we've
6 consistently identified both an overall
7 capacity need and a peaking and reserve need
8 that has persisted through all of those
9 evaluations and continues to exist today.

10 Q. And that need at the IRP stage was
11 approximately 300 megawatts of capacity; is
12 that correct?

13 A. So I'm sorry. I don't know if you
14 could cite me specifically to what you're
15 referring to.

16 Q. You know, we'll get into it later.
17 Well, actually, you know what? Might as well
18 just do it now.

19 If you turn to your deposition,
20 which I have a copy here.

21 MR. BROWN:

22 May I approach, Your Honor?

23 JUDGE GULIN:

24 Please.

25 EXAMINATION BY MR. BROWN:

1 Q. Page 24, lines 9 through 11.

2 A. I'm sorry. Can you just say, where
3 are the page numbers?

4 Q. Twenty-four.

5 A. No. Where are the page numbers?

6 Q. Oh, they're at the top left.

7 A. The top left. Yeah. Sorry. I
8 didn't see them.

9 Q. Been there.

10 A. Okay. I'm on page 24.

11 Q. Yeah. And you talk about -- so the
12 peaking -- On lines 9 through 11, you say, So
13 peaking and reserve capacity need has
14 consistently been -- has been consistently over
15 300 megawatts. (As read.) This is in the
16 course of our discussion of the 2015 IRP.

17 A. I see the reference.

18 Q. So you would agree with that
19 testimony that you gave just a few days ago?

20 A. So what this is referring to is how
21 our peaking and reserve deficit has
22 consistently been over 300 megawatts throughout
23 both the IRP and this proceeding.

24 Q. Thank you.

25 Do you agree on -- And you were

1 here, Mr. Cureington, when Jonathan Long
2 testified a little earlier today; is that
3 right?

4 A. Correct.

5 Q. Do you agree with his -- that he
6 presented you the option of a -- using six
7 reciprocating engine units as opposed to seven?

8 A. I did not specifically request that
9 he look at that. I simply asked him to conduct
10 an evaluation of the technologies that were
11 available within a range around the needs that
12 we had identified.

13 Q. Are you aware that Mr. Charles
14 Long -- Let me step back for a second.

15 Mr. Jonathan Long testified that you
16 said within that range, more is better than
17 less. And one of the reasons he gave for that,
18 he cited, was reliability concerns. Was that
19 one of the reasons you were asking him to get
20 something on the higher end of the range?

21 A. So the range was identified for
22 several reasons, but the upper end of the
23 range, as I understand from Charles Long, is
24 what -- is the minimum to meet the transmission
25 reliability constraints that he identified over

1 his planning horizon, which is the first ten
2 years of my planning horizon.

3 Q. And, Mr. Cureington, were you aware
4 at the time that Charles Long had run load flow
5 analyses in this case that have been part of
6 the record in this case assuming a hundred ten
7 megawatt unit at Michoud?

8 A. While I don't specifically know all
9 of the evaluations that he conducted, I am
10 aware that he looked at different scenarios,
11 but I can't say specifically, you know, all of
12 the different scenarios that he looked at.

13 Q. But you never ran a production cost
14 model analysis of that six-unit RICE peaker?

15 A. No. As I said earlier, the needs
16 that we identified exceeded the six-unit
17 configuration. The minimum that Charles Long
18 identified for the transmission constraints to
19 be addressed set effectively a floor, if you
20 will, and the needs I identify through the
21 planning process far exceeded that.

22 Q. Did Mr. Long just not tell you that
23 he was running a hundred ten megawatt peaker
24 through the load flow model?

25 A. I'm sorry. I don't know

1 specifically what you're referring to. If you
2 could point me to something.

3 Q. We'll move on.

4 Okay. I'd like to show you
5 Mr. Joseph Rogers' testimony, and it's already
6 in the record so I'll hand you a copy and the
7 judge, but I believe all the attorneys
8 should -- I'd like you to turn to page 9,
9 Figure 1.

10 A. Okay.

11 Q. And this is a graph that shows the
12 various load forecasts Entergy New Orleans has
13 used from the IRP through where we are today as
14 its reference scenarios.

15 Now, I'd like to ask you, would you
16 agree that the last two reference load
17 forecasts you used, the 2015 IRP forecast as
18 shown here, and the business plan '16 update
19 forecast that's also shown here, both of those
20 have had to be revised downward in the
21 subsequent year?

22 A. So the chart is not in color, so
23 it's a little hard for me to track exactly
24 which one of these lines you're referring to.
25 But I'm sorry, more generally, could you just

1 restate the question to make sure that I
2 understand?

3 Q. Sure. Let's start with the 2015 IRP
4 forecast. It's that one that looks basically
5 as if it's just a straight slope that's just
6 going straight up at an even rate. That's that
7 one.

8 I'll represent to you, even though
9 it's not in color, that the second forecast
10 there is the 2016 DP update. And the one
11 that's the lowest is the 2017 business plan
12 update forecast.

13 Now, do you agree that starting in
14 the out years from 2021 out, the business plan
15 '16 update forecast is lower, is now lower
16 than -- was lower than the 2015 IRP forecast?

17 A. Yes. The business plan '16 load
18 forecast is lower in the years after 2021 based
19 on the updated inputs.

20 Q. And that's despite adding the
21 Algiers transfer, despite adding large hospital
22 customers to Entergy New Orleans customer
23 rolls, is it not?

24 A. Yes. The impacts of other changes
25 in the underlying load have offset the

1 increases after 2021 that you referred to.

2 Q. And the decreases in the underlying
3 load you're referencing, your testimony in your
4 rebuttal is that a major reason for those
5 revisions was energy efficiency and
6 behind-the-meter solar?

7 A. I think my testimony was -- I'm
8 sorry.

9 MR. OLSON:

10 Objection. There was no question
11 there.

12 MR. BROWN:

13 I think there was.

14 JUDGE GULIN:

15 I think I heard the inflexion at the
16 end of his statement, so I believe it was
17 a question.

18 MR. CUREINGTON:

19 Could you restate it just to make
20 sure I understand what you're asking?

21 MR. BROWN:

22 Sure.

23 EXAMINATION BY MR. BROWN:

24 Q. That a major reason for the downward
25 revisions -- not necessarily the only reason,

1 but a major reason was more energy efficiency
2 and behind-the-meter solar than had been
3 projected?

4 A. No. I wouldn't agree with that.
5 The revisions I discussed in my testimony were
6 with respect to the changes from BP '16 update
7 to BP '17 update where I described that
8 90 percent of the change was driven by a
9 decline in usage for customer among our
10 residential and commercial classes.

11 Q. I'd like you to turn to page 55 of
12 your supplemental and amending testimony,
13 lines 8 through 11.

14 MR. EDWARDS:

15 I'm sorry, Counsel. What page?

16 MR. BROWN:

17 Page 55 --

18 MR. OLSON:

19 Fifty-five?

20 MR. BROWN:

21 -- of his supplemental and amending.

22 I'm sorry. His rebuttal testimony.

23 MR. CUREINGTON:

24 Page 55?

25 MR. BROWN:

1 Yes.

2 EXAMINATION BY MR. BROWN:

3 Q. I want to make sure I got this
4 right. I'll read to you what you wrote here.
5 You said, As Mr. Rogers points out -- I believe
6 we're referring to the same witness whose
7 testimony we're looking at -- the company's
8 forecast of the load has declined since the
9 final 2015 IRP due to decreases in customer
10 demand associated with historical energy
11 efficiency needs and behind-the-meter rooftop
12 solar. (As read.)

13 Do you agree with that?

14 A. Yes, I agree with that. I thought
15 your question was with respect to the BP '16
16 update to the BP '17 update, which is a
17 separate reference in my testimony.

18 Q. And you would say -- So getting us
19 from the 2015 IRP to now the BP '17, you would
20 agree with that statement, that those --

21 A. Yes. As I indicated in the
22 testimony, I think there's a general trend that
23 we've recognized has impacted the load forecast
24 from these factors, and so that's accounted for
25 in the load forecast, even though going

1 forward, we don't actually know if those trends
2 will continue.

3 Q. But, in fact, in last February, your
4 company had stayed these proceedings for over
5 four months in part because of these downward
6 revisions in the load forecast; is that
7 correct?

8 A. So I can't speak to all of the
9 reasons why it took as long as it did. You
10 characterize it as just solely because of the
11 downward revisions in a load forecast, so I
12 wouldn't agree with that.

13 Q. That was the cause, though, of
14 seeking -- that was the reason, the impetus for
15 seeking the stay?

16 A. Certainly that was the reason why we
17 asked the Council for approval to stay the
18 proceeding, so that we could evaluate the
19 impacts that that would have on our load.

20 Q. Now, I know that a load forecast --
21 making a load forecast, you don't have a
22 crystal ball, but it's fair to say that you've
23 in these prior forecasts underestimated the
24 energy efficiency in behind-the-meter solar
25 that was actually attained in the City of New

1 Orleans; is that correct?

2 A. No, I wouldn't agree with that.
3 Effectively the load forecasting process is
4 designed to identify the expected value for
5 load over the planning horizon, but we also
6 include an upper and a lower bound that
7 statistically captures 90 percent of the
8 possible outcomes. And so the changes that
9 we're talking about here are certainly within
10 those statistical boundaries, and the idea
11 behind the load forecast, specifically the
12 reference case, is not to exactly pinpoint
13 every single hour, but, instead, give you some
14 certainty around what the -- you know, the load
15 could be within those boundaries.

16 Q. Now, the load forecast that is the
17 most current, that would be the BP -- business
18 plan '17 update; is that correct?

19 A. That is still the current forecast,
20 yes.

21 Q. That was prepared by Entergy
22 Services, Inc.; is that correct?

23 A. Yes, it was prepared by the system
24 planning organization that works under the
25 Entergy Services, Incorporated, company.

1 Q. But you've reviewed it. Do you
2 agree with it?

3 A. Yes, I support the forecast in my
4 testimony.

5 Q. That referenced forecast does not
6 reflect the Council's 2 percent energy
7 efficiency goal; is that correct? And before
8 I -- Maybe I'll step back before I ask that
9 question just to define the terms here.

10 When I say "2 percent goal," I mean
11 the goal of reducing customer sale -- reducing
12 energy consumption in the city by .2 percent
13 annually incrementally until it reaches a level
14 of 2 percent per year. This business plan
15 update forecast does not include the effects of
16 that program; is that correct?

17 A. As I indicated in testimony, it does
18 not simply because we have no basis to include
19 that in our reference case. The analysis
20 conducted by Navigant led me to conclude that
21 that was neither cost effective nor achievable
22 and the idea behind a referenced case load
23 forecast is to provide the Council with a
24 forecast that we are certain includes the
25 information that we can rely on.

1 Q. It does not -- The forecast does not
2 also include Navigant's forecast achievable
3 .85 percent annual reductions; is that correct?

4 A. I'm sorry. Which analysis are you
5 referring to?

6 Q. The Navigant study that you just
7 referenced as the basis for your decisions in
8 this regard also reference a scenario in which
9 the company could achieve .85 percent annual
10 reductions in customer sales. That's not
11 included in this business plan '17 forecast, is
12 it?

13 A. It sounds like you're referring to
14 Navigant's high case --

15 Q. Yes.

16 A. -- which was the first of three
17 cases that they evaluated --

18 Q. Uh-huh (indicating affirmatively).

19 A. -- to establish effectively the
20 upper bound to what might be possible over the
21 planning horizon, but as Navigant indicated,
22 they had to make very aggressive assumptions
23 even in that case in order to get to .85, as
24 you referenced, of average annual savings per
25 year.

1 So, no, that's not included in the
2 reference case simply because we have no basis
3 to conclude that that is achievable or
4 sustainable based on our experience with the
5 first six years of Energy Smart, which is our
6 energy efficiency programs that we administer
7 here in the city.

8 Q. And that would be -- The forecast
9 does include -- only includes Energy Smart
10 programs up until year six?

11 A. That's correct, because we can rely
12 on the fact that we've been able to achieve
13 approximately between 0.3 and 0.4 percent
14 annual savings each year through Energy Smart,
15 and that's important because that's despite --
16 and we have not been able to achieve more than
17 that despite increasing the funding for Energy
18 Smart. The Council has approved an increase of
19 an average of 21 percent over the last three
20 years and yet we still have not been able to
21 achieve more than .4 percent.

22 Q. And, Mr. Cureington, I will get into
23 some of the assumptions and your opinions later
24 on in this testimony. Right now I'm just
25 asking some yes-or-no questions.

1 MR. OLSON:

2 Your Honor, the witness needs an
3 opportunity to be able to respond to the
4 question without these preemptory
5 instructions from counsel when he's
6 talking.

7 JUDGE GULIN:

8 I don't think there's any harm in
9 him simply indicating he's asking
10 yes-or-no questions.

11 If you have an explanation, you
12 simply don't have to answer yes or no.
13 You can explain your answer.

14 MR. CUREINGTON:

15 Thank you.

16 EXAMINATION BY MR. BROWN:

17 Q. There is no assumption of
18 incremental additional programs beyond year six
19 in this business plan '17 update forecast?

20 A. I'm sorry. Could you define what
21 you mean by "incremental"?

22 Q. Additional program year in energy
23 efficiency saving programs beyond those that
24 are up until year six.

25 A. So I guess let me just clarify what

1 I mean by annual incremental savings that we
2 have achieved today through Energy Smart. When
3 I say "annual incremental savings of
4 .4 percent," that's incremental to what we
5 saved in prior year. So that incremental
6 growth is baked into the business plan '17
7 update load forecast. But, no, we're not
8 assuming that that growth rate increases over
9 time, but we are assuming that we'll be able to
10 sustain that incremental level that we've
11 achieved today over the 20-year planning
12 horizon.

13 Q. Right. And those would be the
14 programs that had -- Year six roughly would
15 correspond to programs that had been adopted up
16 until about 2016 by the Council?

17 A. Yes. Program year six ran through a
18 portion of 2016.

19 Q. Okay. Thank you.

20 Mr. Cureington, you believe that
21 Entergy New Orleans cannot meet the 2 percent
22 energy efficiency target or cannot likely meet
23 it; is that correct?

24 A. I don't have any basis to conclude
25 that it's either cost effective or achievable,

1 which is what I need in order to include that
2 in my long-term plans. That doesn't mean that
3 we aren't trying to, but I just have no basis
4 upon which to conclude that it is at this
5 point.

6 Q. Okay. Mr. Cureington, you would
7 agree that as a regulated utility, Entergy New
8 Orleans must comply with the orders of its
9 regulator, the New Orleans City Council?

10 MR. OLSON:

11 Objection, Your Honor. That calls
12 for legal conclusion.

13 JUDGE GULIN:

14 I think he can answer that question.
15 I don't think that requires --

16 MR. BROWN:

17 I think we'd have a problem if he
18 could not answer that question.

19 MR. CUREINGTON:

20 I'm certainly not going to suggest
21 that we would not comply with the
22 Council's directions.

23 EXAMINATION BY MR. BROWN:

24 Q. And as you take it, those orders are
25 generally expressed in the form of City Council

1 resolutions?

2 A. That's my understanding.

3 Q. You're aware that in April of 2017,
4 the Council passed a resolution approving the
5 Energy Smart programs for years seven through
6 nine?

7 A. I am aware that they passed a
8 resolution that approved the programs and the
9 savings levels that we identified for program
10 years seven through nine, but they deferred on
11 specific budgets necessary to get there.

12 Q. And, in fact, just last week, they
13 approved the budgets?

14 A. That is correct. They did approve
15 the budgets.

16 Q. So it's fair to say now the programs
17 and the budgets have been approved?

18 A. Yes, as of today, that's correct.

19 Q. And you agree that the years seven
20 through nine programs, if implemented
21 effectively by Entergy New Orleans, would
22 roughly double the program's energy savings; is
23 that correct?

24 A. I would agree that if we could
25 achieve it, it would roughly double the savings

1 rate that we've achieved to date, however, that
2 is a very aggressive target. And as I
3 indicated, we've been at this for six years now
4 and have been unable to exceed .4 percent
5 savings per year. And so while we've targeted
6 to achieve that and will do our best, just
7 because the program design group has identified
8 a plan to try to get there doesn't mean as the
9 long-term planner, I can assume that's
10 achievable for the next 20 years.

11 Q. And you'd agree that those years
12 seven through nine, the specific programs that
13 the Council approved, were the ones that were
14 consistent with meeting or being on the road to
15 meet that 2 percent energy efficiency goal?

16 A. So you referred to the Council's
17 orders earlier and my understanding is the
18 Council has ordered us to increase -- target an
19 increase in the savings rate of 0.2 percent per
20 year, and so that's what the plan that we
21 proposed attempts to do, but, again, it's not a
22 guarantee. It's just being consistent with the
23 Council's directive.

24 Q. Gotcha. And I was only asking you
25 about what the plan says, not -- I think you've

1 already made clear the caveats as to what you
2 think is achievable.

3 And you'd agree that this resolution
4 was passed in April of 2017, which was three
5 months before Entergy New Orleans filed its
6 supplemental and amending application in this
7 case in July of 2017?

8 MR. OLSON:

9 The application of which?

10 MR. BROWN:

11 The one that we're here -- This
12 docket is all about the application to
13 build a New Orleans Power Station.

14 MR. OLSON:

15 Fair enough. Energy Smart
16 applications?

17 MR. BROWN:

18 Yes.

19 EXAMINATION BY MR. BROWN:

20 Q. And my question, just to go back,
21 was that that resolution that we were just
22 discussing, you and I, about the program years
23 seven through nine, that was passed three
24 months before Entergy filed its supplemental
25 and amending application in this docket; is

1 that correct? And you filed your supplemental
2 testimony in this docket?

3 A. Yes. Just to be clear, the
4 resolution you're referred to was in a separate
5 docket, but, yes, it was passed prior to us
6 filing our supplemental application in this
7 docket.

8 Q. And that in April of 2017 when that
9 resolution was passed, this is the resolution
10 relating to the years seven through nine
11 programs, this document was, in fact, stayed
12 precisely so that, in part, you could consider
13 the implications of your declining load
14 forecast. Is that correct?

15 A. I'm sorry. It's a little hard
16 without the resolution to be sure what you're
17 referring to. I don't know if you have a --

18 Q. I do have a copy. I don't think we
19 need to get into that.

20 I'm just asking you April 2017, what
21 was going on at that point was that you were
22 considering the implications of your declining
23 load forecast. This docket was stayed, was it
24 not, in April 2017? Or do you not know?

25 JUDGE GULIN:

1 You're asking a bunch --

2 MR. CUREINGTON:

3 Yeah. I'm confused.

4 JUDGE GULIN:

5 -- of different questions. Let's
6 stick with one question. Start from the
7 beginning. What is your question?

8 EXAMINATION BY MR. BROWN:

9 Q. In April of 2017, do you agree that
10 this docket was stayed?

11 A. I don't recall the exact date, but I
12 know that it was earlier this year when the
13 Council stayed this docket.

14 Q. We don't need to get into this for
15 right now.

16 And that when the case was stayed,
17 it was stayed, in part, so that you could
18 consider the implications -- Entergy New
19 Orleans asked for the stay to consider the
20 implications of its declining load forecast?

21 A. I'm sorry. Are you asking me?

22 Q. Yes. That was the reason it was
23 stayed?

24 A. Yeah, that was the reason why we
25 asked the Council for the stay.

1 Q. And if you had wanted to, you could
2 have included program years seven through nine,
3 those demand-side management reductions, in
4 your application that you filed in July; is
5 that correct?

6 A. I'm sorry. What do you mean by
7 "include"?

8 Q. You could have included in your load
9 forecast, your referenced load forecast,
10 assumptions that reflected decrements to load
11 due to implementing effectively the program
12 years seven through nine targets?

13 A. So as I've described earlier, we've
14 already included decrements associated with the
15 savings rate we've been able to achieve today,
16 so I don't have a basis --

17 Q. And I'm not asking about those.

18 A. Right. But I don't have a basis to
19 have included the decrements that you asked
20 specifically about.

21 Q. But you could have at that point?

22 A. Well, as a responsible resource
23 planner, I need to include things that I know
24 we can rely on. And at this point, while we
25 will target to achieve those savings, I can't

1 rely on that, and, more importantly, I can't
2 say that it's achievable for the next 20 years.

3 Q. But if the City Council had
4 specifically asked you to include those, you
5 could have?

6 A. I'm sorry. I'm still confused by
7 your question.

8 Q. We'll move on. We'll move on.

9 By the way, do you expect the -- Let
10 me step back.

11 Entergy Services, Inc., comes out
12 with annual updates to its load forecast; is
13 that correct?

14 A. That's correct.

15 Q. And these load forecast updates
16 generally occur in the early part of the year?

17 A. Generally speaking, that's correct.

18 Q. Do you expect the business plan 2018
19 updates to reflect the energy savings from the
20 program years seven through nine?

21 A. I don't yet know what it will
22 include because I have not had those
23 discussions yet with the load forecasting
24 group.

25 Q. Will you commit today to provide

1 that load forecast, the business plan 2018
2 update, to the Council when it is issued the
3 same way you did with the business plan '17
4 update?

5 MR. OLSON:

6 Objection. That's a confusing
7 question.

8 JUDGE GULIN.

9 Overruled.

10 If you can, answer the question.

11 MR. CUREINGTON:

12 So I'm not sure what you mean by
13 "provide," but we certainly are
14 transparent about our load forecasting
15 process as indicated earlier when we, you
16 know, asked for permission to stay this
17 proceeding and shared the updated load
18 forecast. So I have no reason to believe
19 that we would do anything different going
20 forward. I just don't know when that
21 forecast may be available.

22 EXAMINATION BY MR. BROWN:

23 Q. But it's your testimony that when it
24 comes out, you will attempt to -- you will
25 disclose it to the City Council?

1 A. Well, I can't testify to that
2 personally, but I have no reason to believe
3 that once a new forecast is available, that we
4 would not share that with our regulator.

5 Q. Did the City Council, to your
6 knowledge, ever order Entergy New Orleans to
7 run a production cost model of -- that
8 included -- that reflected the 2 percent
9 demand-side management target and the
10 transmission upgrades required in the absence
11 of the gas plant, NOPS?

12 A. I'm not aware of any Council order
13 that requires us to do such.

14 Q. In November 2016, you filed
15 supplemental testimony in this case; is that
16 right?

17 A. That's correct.

18 Q. And you testified that the purpose
19 of that -- the main purpose of that testimony
20 was to provide production cost modeling results
21 of four portfolios that the City Council had
22 ordered Entergy New Orleans to run; is that
23 correct?

24 A. My memory is a little gray in that
25 respect, but, generally speaking, I do recall

1 that what the Council's advisors recommended we
2 evaluate was ultimately, I believe, included in
3 one of the Council's resolutions.

4 Q. And do you recall the details of
5 those four portfolios that you had been ordered
6 to run?

7 A. I'm sorry. The details? What
8 details are you referring to?

9 Q. The specific parameters of those
10 four portfolios, what inputs you were supposed
11 to have made in the production cost model?

12 A. So there were a number of inputs.
13 So, no, I can't recall all of them off the top
14 of my head here.

15 Q. Do you recall that they were
16 contained in a letter from the City Council
17 advisors dated September 19th, 2016?

18 A. I don't recall the letter
19 specifically.

20 Q. I'd like to turn to your testimony
21 from November 2016, page 2, and line 7 is where
22 I'd like to start. And I'd like you to just
23 read those first two sentences to yourself.
24 You don't have to read them aloud.

25 A. I'm sorry. Which page?

1 Q. Page 2 of your November 2016
2 testimony.

3 A. I'm sorry. What references?

4 Q. I'm sorry. It's -- Line 7 is where
5 we start and go to line 14.

6 A. Okay.

7 Q. And specifically I want to draw your
8 attention to lines starting on line 13 through
9 14. You say -- or starting on line 12, you
10 say, The four proposed Aurora XMP electric
11 market modeling production runs requested by
12 the Council's advisors on September 19th, 2016.
13 (As read.)

14 A. I see the reference.

15 Q. Does that refresh your recollection
16 as to where these production -- these four
17 portfolios, these four portfolios you were
18 asked to run, came from from the advisors'
19 September 19th, 2016, communication?

20 A. Yes, that's what I understand.

21 Q. And, Mr. Cureington, I'd like to
22 show you what is the Council advisors' response
23 to the Alliance for Affordable Energy's
24 discovery request.

25 MR. BROWN:

1 We'll mark this as Sierra Club 5. I
2 believe that's the number we're on.

3 JUDGE GULIN:

4 Just give him a moment.

5 EXAMINATION BY MR. BROWN:

6 Q. And I'm going to have you turn to
7 the last page.

8 JUDGE GULIN:

9 Identified and marked as SC No. 5.

10 EXAMINATION BY MR. BROWN:

11 Q. Now, this chart was provided to --
12 The Alliance for Affordable Energy asked
13 specifically for that communication, that
14 September 19th, 2016 communication. I'd like
15 you to turn to the last page, which shows a
16 chart that says, Alternate runs to inform
17 counsel on pending and upcoming decisions. (As
18 read.)

19 A. I'm there.

20 Q. Have you seen this chart before?
21 And take your time to look at it just to make
22 sure.

23 A. Well, I don't recall whether I've
24 seen this chart specifically. There was an
25 exhibit to my testimony that looked similar to

1 this that summarized the request that the
2 advisors made.

3 Q. Would you agree -- I'd like to turn
4 your attention to Case No. 2, which as you'll
5 see in the subheading is meant to -- informs
6 Council decision on the combustion turbine.
7 I'd like you to review Case 2 for me, please.
8 And when you're done, just poke your head up.

9 A. Okay.

10 Q. Is it fair to say included in Case
11 No. 2 are the assumptions related to the -- Let
12 me rephrase that. I'm sorry.

13 Is it fair to say that this case,
14 Case 2, asked you to do a production cost model
15 of a portfolio that would include the following
16 items, and I'm going take all of them one by
17 one and just yes or no to each.

18 Transmission upgrades to remain NERC
19 compliant absent NOPS?

20 A. I see the reference.

21 Q. The 100 megawatts of renewable
22 capacity?

23 A. I see that reference, too.

24 JUDGE GULIN:

25 I'm a little confused now. What

1 question are you answering when you say
2 that you see the reference? Are you
3 saying that this is accurate, that this
4 is an accurate representation of what
5 was, in fact, requested? Or are you
6 merely saying that you're reading the
7 chart?

8 MR. CUREINGTON:

9 I'm merely reading the chart.

10 JUDGE GULIN:

11 I'm sorry. I just wanted to be
12 clear on that. So you can proceed.

13 MR. BROWN:

14 Yes, Your Honor, and at this point,
15 that's all I'm asking him for.

16 JUDGE GULIN:

17 Okay. That's what I wasn't sure of.
18 Thank you.

19 EXAMINATION BY MR. BROWN:

20 Q. It also includes, towards the
21 bottom, any likely power purchase agreement or
22 combined heat and power resources?

23 A. Yes, I see the reference.

24 Q. And at the very bottom, it says,
25 Including, as appropriate, battery storage?

1 (As read.)

2 A. Yes, I see the reference.

3 Q. And in the middle of the chart, it
4 says, The demand reductions from meeting the
5 Council's 2 percent energy efficiency target?

6 (As read.) That would be the sixth, I believe
7 the sixth row down.

8 A. Yes, I see the reference.

9 Q. And you never ran this particular
10 production cost model run, did you?

11 A. I can't say specifically if all of
12 these factors were addressed, but as I
13 indicated earlier, I summarized in the
14 testimony what was included in the runs that we
15 conducted.

16 Q. In fact, let's take a look at that
17 testimony, Exhibit SEC-8.

18 JUDGE GULIN:

19 Are you finished with this exhibit?

20 MR. BROWN:

21 Not quite yet, Your Honor.

22 JUDGE GULIN:

23 Okay.

24 MR. CUREINGTON:

25 I don't know if I have a copy of

1 Exhibit 8.

2 MR. BROWN:

3 This is in your November 2016
4 testimony that we were just referring to
5 earlier.

6 MR. CUREINGTON:

7 Okay.

8 MR. BROWN:

9 It's one of your exhibits.

10 MR. CUREINGTON:

11 Okay. I'm there.

12 EXAMINATION BY MR. BROWN:

13 Q. Now, this is a similar looking chart
14 to the one that we just looked at; is that
15 correct?

16 A. Similar in what respect?

17 Q. In that it lays out four portfolios
18 that you ran or intended to run?

19 A. No. I wouldn't agree with that. It
20 just simply summarizes the request that was
21 made and we certainly modeled four cases in
22 this particular piece of analysis. But I just
23 don't know if this is consistent with
24 everything I outlined in the table in my
25 testimony that --

1 Q. And you'll agree at the bottom right
2 corner below the chart, it says "Revision 01";
3 is that correct?

4 A. I see the reference.

5 Q. And if you look at Case No. 2, it
6 does not include the 2 percent energy --
7 Council's 2 percent energy efficiency goal; is
8 that correct?

9 A. I do not see a reference to the
10 goal. That's correct.

11 Q. And it does not -- Case No. 2 did
12 not include battery resources; is that correct?

13 A. I do not see a reference to battery
14 resources.

15 Q. Mr. Cureington, were you ever given
16 the document that we read through first, the
17 one that's marked Sierra Club Exhibit 5?

18 A. I'm sorry. I don't know that it's
19 marked. Is that what you handed to me earlier?

20 Q. Yes. Have you ever seen that chart
21 that we read through first?

22 A. As I indicated earlier, I can't say
23 specifically whether I had or not. It looks
24 similar to what was attached to my testimony,
25 but --

1 Q. But it's not the same as the one in
2 your testimony?

3 A. It does not appear to be.

4 Q. Somewhere along the line, it could
5 have gotten changed?

6 A. Well, so the only thing that I can
7 testify to is what's attached to my testimony.
8 So this was provided, I believe, you said
9 through discovery; is that correct?

10 Q. Yes.

11 A. Yes. So I don't know that I ever
12 saw this.

13 Q. And I'm not asking you right now to
14 authenticate that document since you haven't
15 seen it.

16 MR. BROWN:

17 I'd just like to mark that for cross
18 purposes at the moment. That's subject
19 to potential revision.

20 JUDGE GULIN:

21 Okay. So right now, it's being
22 admitted for cross purposes only.

23 Ms. Hand, did you need
24 clarification?

25 MS. HAND:

1 I do. Was that marked for purposes
2 of cross-examination or admitted?

3 JUDGE GULIN:

4 It's admitted for cross purposes
5 only at this point.

6 MR. BROWN:

7 Thank you, Mr. Cureington.

8 EXAMINATION BY MR. BROWN:

9 Q. Now, I do want to get back to the
10 question that we had started a little
11 discussion on earlier about battery storage.
12 You did run one case in this docket where you
13 paired a battery with the combustion turbine
14 portfolio; is that correct?

15 A. I recall that we included batteries
16 in Case 4.

17 Q. I want to turn -- And, actually,
18 before we get there, it was a hundred megawatt
19 battery as far as you recollect; right?

20 A. That sounds consistent.

21 Q. You never looked at doing a battery
22 on its own without the gas-fired peaker?

23 A. So --

24 Q. And, again, I should clarify, in
25 this docket after you got through the IRP

1 screening, you never looked at it?

2 A. Well, I'm sorry, this Case 4
3 includes batteries, but your question was --
4 I'm sorry. Could you restate specifically?

5 Q. Yeah. Battery as an alternative to
6 the gas-fired peaker rather than as a
7 supplemental resource, that is, an addition to
8 that?

9 A. No. As I discussed earlier, we
10 don't believe that batteries are an alternative
11 to NOPS simply because they're nothing more
12 than a way to store electricity. They still
13 require a source of generation, and once the
14 battery has been discharged, you no longer have
15 any energy unless you have another source of
16 generation to charge it. So it would not have
17 met the identified needs.

18 Q. I'd like to turn to your Table 2 on
19 page 8 of your -- again, we're still on your
20 November 2016 testimony.

21 MR. EDWARDS:

22 I'm sorry. What page?

23 MR. BROWN:

24 Page 8, Table 2 of the November 2016
25 testimony of Mr. Cureington.

1 EXAMINATION BY MR. BROWN:

2 Q. Okay. And I want to look at Case 4.
3 This has the levelized real cost summaries.
4 Now, in Case 4, is it correct that the battery
5 storage option is estimated at a cost of
6 \$142 million?

7 A. So that reference is to a levelized
8 real discounted value --

9 Q. Yes.

10 A. -- not a nominal installed cost
11 value?

12 Q. Exactly, yeah.

13 And you'd agree that that's what
14 that represents, a hundred forty-two million
15 dollars?

16 A. In levelized real NPV terms,
17 correct.

18 Q. And that the combustion turbine was
19 \$182 million in levelized real terms, two rows
20 above it?

21 A. Yes. I see the reference.

22 Q. Are you aware of the levelized real
23 cost of the reciprocating engine units, the
24 similar figure for that?

25 A. I'm sorry. What similar figure?

1 Q. For the levelized real cost of
2 installing the reciprocating engines in this
3 case?

4 A. I mean, we --

5 Q. They were not evaluated in the
6 table, were they? Right?

7 A. That's what I was going to say is
8 that, yeah, the reciprocating engines were not
9 contemplated at the time we filed this piece of
10 testimony.

11 And I should also clarify that the
12 reference you made earlier to the difference
13 between the installed cost of NOPS and
14 batteries is a function of when you assume
15 those batteries and the generator were
16 installed, which were different. And so the
17 discounting process, the time value to money,
18 is such that there were a variety of things
19 that were different around the assumptions for
20 those two resources.

21 Q. I appreciate that clarification. I
22 would like to turn -- You have Joseph Rogers'
23 testimony in front of you, I believe. If you
24 turn to Table 1, which is on page 28. Okay?

25 A. Okay.

1 Q. And do you agree that just looking
2 at Case 1, it lists the RICE alternative fixed
3 cost as \$214 million net present value?

4 A. I see the reference.

5 Q. Do you have any reason to dispute
6 that figure?

7 A. No, I do not.

8 Q. Now, Mr. Cureington, it's part of
9 your job, is it not, to follow developments in
10 the utility sector?

11 A. Generally speaking.

12 Q. Technological developments, new
13 projects?

14 A. General speaking, I would agree with
15 that.

16 Q. Entergy New Orleans tries to be
17 current with what other utilities around the
18 country are doing; is that correct?

19 A. I'm sorry. What do you mean by
20 "tries to be current"?

21 Q. Tries to stay up to date, to be
22 informed as to what other utilities around the
23 country are doing?

24 A. Yes. We certainly do our own review
25 of what is happening, naturally, but we also

1 rely on our service company and the planning
2 organization to do a lot of that work on our
3 behalf as well.

4 Q. Okay. And have you heard of the
5 Aliso Canyon case in California in which
6 Southern California Edison earlier in this year
7 installed 70 megawatts of energy storage in
8 less than six months?

9 A. I'm sorry. It sounded like there
10 were several questions.

11 Q. I was just asking --

12 A. You first asked it --

13 Q. -- are you aware of that case, the
14 Aliso Canyon case in which in January of this
15 year, Southern California Edison installed 70
16 megawatts of storage capacity in six months?

17 MR. OLSON:

18 Objection; assumes facts not in
19 evidence.

20 JUDGE GULIN:

21 He's just asking him if he's aware
22 of it.

23 You can state if you're aware of it
24 and agree with every premise to the
25 question.

1 MR. CUREINGTON:

2 So while I don't know the specific
3 details of what you described, I'm
4 generally aware of the Aliso Canyon issue
5 that arose in California and then the
6 California Public Utility Commission's
7 storage mandate that arose as a result of
8 that.

9 EXAMINATION BY MR. BROWN:

10 Q. Are you aware of Tesla's recent
11 installation of a hundred megawatt -- hundred
12 twenty-nine megawatt hour battery in Australia
13 that it completed in just 100 days?

14 A. I'm not specifically aware of that
15 project.

16 Q. Are you aware of Duke Energy in
17 Florida which recently committed to build
18 50 megawatts of storage, along with
19 700 megawatts of solar to replace a nuclear
20 power plant?

21 A. Well, I'm not aware of the specific
22 numbers you cited. I was aware that they were
23 evaluating their options as a result of
24 canceling the nuclear facility.

25 Q. Are you aware that Duke Energy in

1 North Carolina is installing two separate
2 battery systems at present?

3 A. I'm sorry. Which specific battery
4 systems?

5 Q. It's installing two different
6 systems in the State of North Carolina. Are
7 you aware of it or not?

8 A. Generally speaking, I have seen
9 things in the trade press about that, but I
10 don't know the specifics of those projects.

11 Q. Are you aware of the fact that
12 Tucson Electric Power recently purchased a
13 hundred megawatt solar ray and a 30 megawatt
14 battery at one of the lowest costs ever
15 recorded, 1.5 cents per kilowatt hour for the
16 storage portion?

17 MR. OLSON:

18 Again, objection; assumes facts not
19 in evidence, of all the specifics of this
20 case --

21 JUDGE GULIN:

22 Okay. I think the witness is doing
23 a good job of indicating whether he's
24 even heard of these things. And then, if
25 he has heard of it, he's certainly not

1 endorsing all the specifics that are part
2 of the question.

3 So you can continue answering the
4 questions in that manner.

5 MR. CUREINGTON:

6 Yes, that was a well publicized
7 announcement and I am aware of the
8 announcement, but I'm just not aware of
9 the specifics.

10 MR. BROWN:

11 And I should just clarify, if you
12 object to any of the specifics or if
13 you're not aware of them, feel free to
14 make that clear. I'm not asking you to
15 agree with everything I say.

16 EXAMINATION BY MR. BROWN:

17 Q. Are you aware of the fact that
18 Portland General Electric is planning to
19 install 39 megawatts of storage at a cost as
20 low as \$50 million?

21 A. I'm not aware of the cost, but I was
22 aware that they have been evaluating storage
23 alternatives.

24 Q. Have you reviewed the December 2016
25 Lazard study of the cost of storage?

1 A. I'm sorry. Do you have that study
2 here today? I don't know specifically --

3 Q. I don't have a copy of it. It was
4 referenced in Robert Fagan's testimony, but I'm
5 just asking if you've read it?

6 A. I have reviewed Lazard studies
7 previously. I just didn't know in the case of
8 the 2015 study, if I reviewed that exact study.

9 Q. But you never looked at doing
10 batteries or battery plus solar as a standalone
11 option in this case?

12 MR. OLSON:

13 Objection; asked and answered.

14 MR. BROWN:

15 I'll move on, Your Honor.

16 EXAMINATION BY MR. BROWN:

17 Q. Okay, Mr. Cureington, you project
18 a -- In the latest -- In the supplemental and
19 amending application, you project a capacity, a
20 total capacity need for Entergy New Orleans of
21 99 megawatts in 2026; is that correct?

22 A. That would be the first half of the
23 planning horizon, approximately 99 megawatts of
24 an overall capacity need, but that does not
25 include our supply role needs.

1 Q. Do you know what would happen, how
2 that 99 megawatt capacity need would change if
3 you had used the 2 percent DSM assumption in
4 your load forecast?

5 A. We provided a load forecast that
6 assumed the Council's 2 percent goal was
7 achievable.

8 Q. And -- Sorry. I didn't mean to cut
9 you off.

10 A. I was just going to say, so that's
11 already evidence in the case. I don't recall
12 exactly, if your question is in 2026, what that
13 impact was.

14 Q. Okay. We'll get to that in one
15 second.

16 That 99 megawatts does not yet
17 assume the installation of the hundred
18 megawatts of planned solar; is that correct?

19 A. No, that's not correct. It does
20 include.

21 Q. It does?

22 A. Yes. The load and capability
23 forecast that we produced includes the planned
24 resource -- I'm sorry. You mean before any
25 planned resources?

1 Q. (Nods head affirmatively.)

2 A. Subject to check, if your reference
3 does not include any planned resources, then,
4 no, it would not include solar.

5 Q. And I don't believe it does.

6 A. Right.

7 Q. And so the hundred megawatts of
8 solar for resource adequacy purposes are
9 assumed at a capacity factor of 50 percent?

10 A. Yes.

11 Q. Of a nameplate capacity?

12 A. Yes. We assumed 50 percent capacity
13 credit towards solar in the load and capability
14 forecast consistent with MISO's assumptions.

15 Q. And so assuming that they were
16 installed --

17 A. That was --

18 Q. -- by 2026 --

19 A. I'm sorry. I was just going to say
20 that's for purposes of resource adequacy --

21 Q. Yes.

22 A. -- and I wouldn't want folks to
23 think I'm offering an opinion on whether or not
24 that's adequate for transmission plans.

25 Q. No. And I know Mr. Long has a

1 different impression of that and you've already
2 said you're not testifying to transmission
3 planning in these hearings, so I'm not assuming
4 that.

5 So that would be -- For resource
6 adequacy purposes, that would be an additional
7 50 megawatts that could be subtracted from the
8 total capacity need in 2026?

9 A. You could certainly do that math,
10 but, again, solar resources wouldn't meet the
11 identified need, so I don't agree that that's
12 the right way to look at it.

13 Q. Okay. Noted. And if you did that
14 math, though, you'd end up with 49 megawatts of
15 capacity need?

16 A. So, again, you're looking at the
17 first half of the planning horizon --

18 Q. Yes.

19 A. -- and as a resource planner, I need
20 to be looking at a long-term horizon consistent
21 with both the life span of all of these
22 alternatives, not just NOPS, so that you have a
23 consistent starting point for the evaluation.

24 Q. But you'd agree for that first half?
25 We get into the second half later, but the

1 first half, that effective capacity of 50
2 megawatts would be subtracting that from 99
3 megawatts would leave a total capacity need of
4 49 megawatts?

5 A. So, again, you could do that math,
6 but I don't agree with that approach.

7 MR. BROWN:

8 Your Honor, I would like to get into
9 one HSPM exhibit. This probably would be
10 the time to clear the room.

11 JUDGE GULIN:

12 Okay. We are going to get into now
13 some highly sensitive materials, and I
14 have to ask those who have not signed the
15 confidentiality agreement to please leave
16 the room at this time. We don't
17 anticipate it to be too long, and we will
18 call you back after we've completed this
19 section of the examination.

20 Okay. We'll mark this as SC No. 5
21 -- No, No. 6.

22 MR. BROWN:

23 Actually, Your Honor, before we do
24 that, this is actually attached to an
25 existing exhibit, Victor Prep's direct

1 testimony --

2 JUDGE GULIN:

3 Oh, okay.

4 MR. BROWN:

5 -- one of the Council advisors.

6 JUDGE GULIN:

7 We don't need to mark it.

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Q. Okay.

MR. BROWN:

Your Honor, I think we can bring folks back in.

JUDGE GULIN:

Okay. If we someone would do that for us, we'd appreciate it. And that will end the executive session and the segregation and sealing that section of the transcript.

EXAMINATION BY MR. BROWN:

Q. Mr. Cureington, if the company overestimates its load, one possible outcome of that is it may have or build more capacity than it needs to serve that load?

A. Yes. However, the opposite's true as well. If we underforecast, we could also be short. And that's the point behind the load forecasting process is to try to forecast the

1 load so that you minimize the likelihood of
2 that occurrence.

3 Q. Certainly. But your load forecasts
4 have been off previously?

5 A. I'm sorry. What do you mean by
6 "off"?

7 Q. They came in higher than the actual
8 load proved to be?

9 A. So the forecasts we've referred to
10 earlier were 20-year forecasts. The
11 information we received through historical
12 sales and peak load certainly changed and that
13 influenced additional forecasts that were
14 produced as a result of that.

15 Q. And that Entergy New Orleans
16 customers will have to pay for the capital
17 costs of new capacity projects, regardless of
18 how much those resources are used by Entergy
19 New Orleans?

20 A. I'm not following your question.
21 I'm sorry. Can you restate it?

22 Q. Sure. Entergy New Orleans customers
23 have to pay for the company's capital cost of
24 building generating resources regardless of how
25 much those generating resources are actually

1 used; is that right?

2 A. By "used," what do you mean
3 specifically?

4 Q. Dispatched.

5 A. So there are fixed and variable
6 costs with all resources, and so my
7 understanding is that the fixed costs would go
8 into rates and the variable costs would flow
9 through different mechanisms, but I'm not a
10 rate expert. And what I would say is that the
11 usefulness of a resource is defined by whether
12 we need it or not. And so you referenced
13 whether MISO dispatches it, which is something
14 that changes hour to hour, day to day, and what
15 I've identified is a long-term capacity need.

16 Q. Yes. And my question was about
17 Entergy New Orleans customers. It was not
18 about how much Entergy needs the resource.

19 A. Well, no. When I say Entergy New
20 Orleans, I mean Entergy New Orleans customers.

21 Q. I'd like you to turn to SEC-15
22 attached to your July 2017 testimony. I'm
23 sorry. Your rebuttal testimony. A lot of
24 testimonies filed in this case. This would
25 have been in November of this year.

1 A. I'm sorry. Which page?

2 Q. Page 16.

3 A. I'm sorry?

4 Q. Page 16.

5 A. Sixty?

6 Q. Sixteen?

7 A. Oh, 16?

8 Q. Yeah. It would be page 38 of the
9 PDF, the numbering in the top margin.

10 A. I'm sorry. Which exhibit?

11 Q. This is your Exhibit SEC-15 attached
12 to your testimony.

13 A. I believe those are not in the
14 document I have. I think they're on a CD.

15 (Mr. Guillot tenders document to
16 witness.)

17 MR. CUREINGTON:

18 Okay. I'm on page 16.

19 EXAMINATION BY MR. BROWN:

20 Q. Now, on this page -- This is a
21 report, is it not, that was issued by the MISO
22 market, independent market monitor? Is that
23 correct?

24 A. That's correct.

25 Q. And you've reviewed this report? It

1 was attached to your testimony?

2 A. That's correct.

3 Q. On page 16, the IMM, the independent
4 market monitor, says, if you look at the third
5 paragraph, first sentence, Under a vertical
6 demand curve, the cost of surplus must entirely
7 be borne by the load-serving entities' retail
8 customers because load-serving entities will
9 generally receive very little capacity revenue
10 to offset the cost that they incurred to build
11 the resources. (As read.)

12 Now, Mr. Cureington, would you agree
13 that what the market monitor is pointing to
14 here is a risk, that ratepayers will bear the
15 risk of overbuilding resources because the
16 price that they can expect to receive on the
17 capacity market is very low?

18 A. No, that's not my interpretation.
19 My interpretation is the market monitor is
20 simply talking about the inefficiencies of the
21 existing one-year capacity market. But he also
22 talks in here about how the reason that you
23 typically don't see utilities wait until they
24 are short is because there's a such a large
25 penalty for being short when you have a

1 vertical demand curve. And so the point is
2 that the market is simply inefficient, and that
3 doesn't mean, though, that resources that we've
4 identified here in this case, NOPS, are
5 necessary just because of an inefficient
6 market.

7 Q. But you'd agree that the independent
8 market monitor, which is in charge of
9 monitoring that market, is describing the
10 market as it currently exists?

11 A. Yes, I think he is describing it as
12 it currently exists, but, I'm sorry, I just
13 don't think it's appropriate to draw the
14 conclusion that simply because you have an
15 inefficient capacity market, that the resource
16 needs that we've identified to support NOPS are
17 somehow in question.

18 Q. In your production cost modeling of
19 the combustion turbine and the reciprocating
20 engine units, you're projecting that they will
21 make capacity sales?

22 A. I'm sorry. When you say "capacity
23 sales," could you clarify?

24 Q. Yes. You're projecting that they
25 will sell some portion of their capacity on the

1 MISO market; is that correct?

2 A. I'm sorry. Who is "they"?

3 Q. Those resources, Entergy New Orleans
4 will sell a portion of their capacity on the
5 MISO capacity market. You're projecting that
6 they will be receiving a payment for their
7 capacity?

8 A. So we bid all of our resources into
9 the capacity market and so to the extent they
10 clear the market, yes.

11 Q. And that would be the same market
12 that's being described here?

13 A. Yes.

14 Q. Okay. Thank you.

15 And you'd agree at some point, would
16 you not, that there's a risk of overbuilding
17 capacity? For instance, you're not proposing
18 to build 800 megawatts of peakers at Michoud,
19 are you?

20 A. No, we're not.

21 Q. And there would be a risk to doing
22 that?

23 A. So -- We wouldn't propose to build
24 more than our needs would support. So I would
25 agree that if a utility were proposing to build

1 more than their needs would justify, that that
2 would be unreasonable.

3 Q. Now, this gets us a little bit into
4 the MISO capacity market. To be clear, in your
5 modeling in this case, your assumption is that
6 the MISO capacity market purchase resource
7 auction price will approach equilibrium in
8 2022?

9 A. So our assumption is that it would
10 approach equilibrium, but that's based on the
11 information that I rely on from MISO, OMS
12 survey, NERC's long-term resource assessment,
13 IHS, SERA, and our own planning organization's
14 evaluation.

15 Q. So you would disagree with the
16 independent market monitor that there's a
17 substantial risk that the price would be low?

18 A. No. I wouldn't disagree with that.
19 What I'm trying to say is, is that an
20 inefficient market doesn't mean that you won't
21 approach equilibrium. It simply means that as
22 long as there is surplus, it will put downward
23 pressure on prices, but equilibrium is -- when
24 it happens is going to be very unpredictable,
25 and so all we know is that the existing

1 resources that are committed today are retiring
2 faster than new resources are coming online.
3 And so with that trend, you would expect that
4 prices would rise.

5 Q. But you are not considering a
6 scenario that -- Let me step back.

7 There's a scenario that you -- your
8 assumption that the market will rise to
9 equilibrium by 2022?

10 A. That's consistent with the
11 information from MISO, NERC, and IHS.

12 Q. You also have run a sensitivity in
13 which the capacity price would be at 60 percent
14 of that price, in other words, 60 percent of
15 the equilibrium price?

16 A. That's correct, as recommended by
17 the advisors, consistent with, I understand,
18 Patrick Luckow's analysis.

19 Q. You've never -- In your modeling in
20 this case, you've never run a scenario in which
21 the capacity price would be below 60 percent of
22 equilibrium price?

23 A. No. I wouldn't have a basis to do
24 that. All of the indications we have continue
25 to indicate that the projected surplus will

1 decline. And if you defer action until you
2 figure out whether it actually does and it does
3 occur, then you'll be reacting at a time when
4 the price is much higher, possibly as high as
5 the cost of new entry, and at that point, it's
6 too late. As the IMM indicates, the costs of
7 that deficiency are large.

8 Q. To be clear, though, in a
9 statistical sense, you've assigned the
10 probability of the market reaching a clearing
11 price that is less than 60 percent of
12 equilibrium, you've assigned that a zero
13 percent chance?

14 A. I wouldn't agree with that because
15 we didn't do a statistical evaluation.

16 Q. You didn't even evaluate it?

17 A. Well, no. As I indicated, we don't
18 have a basis to evaluate it.

19 Q. And you didn't evaluate it?

20 A. Correct. We did not evaluate it
21 simply because the information we have would
22 not lead us, you know, to conclude that that's
23 necessary.

24 Q. Let's be clear about something,
25 Mr. Cureington. The MISO planning resource

1 auction capacity price has not reached
2 equilibrium in the past, has it?

3 A. I'm sorry. What MISO capacity
4 market are you referring to? There's a
5 clearing price for each zone.

6 Q. Load Zone 9.

7 A. For Load Zone 9, we have not reached
8 the cost of new entry or equilibrium, however,
9 historical auction clearing prices are not an
10 indication of future auction clearing prices.
11 They are just an indication of the dynamics of
12 the market in the year in which that auction
13 was conducted.

14 Q. In Load Zone 9, the MISO purchase
15 resource auction capacity price has never
16 reached 60 percent of the equilibrium price; is
17 that correct?

18 MR. OLSON:

19 Your Honor, just to be clear, he's
20 referring to the purchase resource
21 auction. I'm not sure that's correct.

22 MR. BROWN:

23 I apologize. The planning resource
24 auction.

25 MR. CUREINGTON:

1 Okay. No. Zone 9 has not
2 reached -- I'm sorry. Your question was
3 whether it reached the cost of new entry?

4 EXAMINATION BY MR. BROWN:

5 Q. First I asked you before about cost
6 of new entry, you said no, it hadn't. And I'm
7 asking you now about the 60 percent
8 sensitivity, has it ever reached that price?

9 A. Since we joined MISO in 2013, no,
10 the clearing price has not reached 60 percent
11 of the cost of new entry because there is a
12 surplus today. And because of that surplus,
13 market prices are depressed.

14 Q. And so to be clear, the most
15 likely -- what you're considering the most
16 likely scenario is one that has never occurred
17 before?

18 A. So what I'm considering is all of
19 the information available from all of the
20 entities that focus on resource adequacy and
21 all of those entities indicate that the surplus
22 is projected to decline. And our forecast that
23 prices will increase as you approach
24 equilibrium is consistent with that.

25 Q. In the year and a half that this

1 docket has unspooled, you have not changed your
2 analysis of the MISO capacity market; is that
3 correct?

4 A. I'm sorry. What was the word you
5 used? The what?

6 Q. In the year and a half in which the
7 proceedings in this docket have taken place,
8 you have not changed your forecast of the MISO
9 capacity market?

10 A. We've had no basis upon which to do
11 that despite more recent surveys and
12 assessments from MISO and NERC that continue to
13 indicate the surplus is expected to decline.

14 Q. I'd like you to turn to, again,
15 Mr. Rogers' testimony, Table 3, page 33.

16 A. Okay.

17 Q. And you agree that Table 3 shows the
18 MISO planning resource auction clearing price
19 for Load Zone 9 both in dollar figures and as a
20 percentage of cost for new entry?

21 A. Yes.

22 Q. And would you agree that that price
23 in the years listed here has never risen above
24 7 percent of cost for new entry?

25 A. Yes, as I indicated, that's because

1 there is a surplus today.

2 Q. And the latest price was 1 percent
3 of cost of new entry?

4 A. I see the reference.

5 Q. And it has remained at 1 percent the
6 last three years?

7 A. I see the reference.

8 Q. And we are now -- Since this case
9 started, we are now a year and a half closer to
10 the doomsday equilibrium date in 2022.

11 MR. OLSON:

12 Objection; argumentative.

13 JUDGE GULIN:

14 Rephrase.

15 MR. BROWN:

16 I appreciate it, Your Honor.

17 EXAMINATION BY MR. BROWN:

18 Q. We are now a year and a half closer
19 to 2022; is that correct?

20 A. With respect to the auction before
21 the most recent. Is that your question?

22 Q. Yes.

23 A. Yes.

24 Q. And you have not changed your
25 forecast?

1 A. The information that I rely on to
2 support the forecast has not changed, so, no, I
3 have not changed the forecast.

4 Q. I'd like to turn back to your
5 SEC-15, the page before the one we were looking
6 at, which was page 15.

7 A. Okay.

8 Q. Okay. And, again, this is the MISO
9 independent market monitor in this section
10 discussing features of the planning resource
11 auction capacity market. Do you agree with
12 that?

13 A. I'm sorry. What specific --

14 Q. In Section F?

15 A. Okay.

16 Q. You've reviewed this report; that's
17 correct?

18 A. Correct.

19 Q. And in this section, the independent
20 market monitor is discussing features of the
21 planning resource auction; is that correct?

22 A. I believe he's explaining what he
23 thinks is the reasons why a slope to demand
24 curve would be more appropriate than the
25 current vertical demand curve.

1 Q. And just if you look at that
2 section, slope to demand curve, the sentence
3 that begins "The implication" there. The
4 independent market monitor states, The
5 implication of the vertical demand curve is
6 that the last megawatt -- Oh, I'm sorry. I'd
7 actually like to go up. Let's do the second
8 sentence.

9 The marginal cost of selling
10 capacity for most units is close to zero, so a
11 vertical demand curve will predictably
12 establish clearing prices close to zero if
13 supply is not withheld. (As read.)

14 Would you agree that that statement
15 by the independent market monitor is saying
16 under current market design with a vertical
17 demand curve, prices will predictably be close
18 to zero?

19 A. So his analysis is based on the fact
20 that there is a surplus, and so in that
21 circumstance, I would agree that's why we find
22 ourselves where we're at today. However, he
23 also goes on to say that the market doesn't
24 reflect the true reliability value of capacity
25 because of that in advocating for a slope

1 demand curve.

2 Q. Exactly. And if the market is
3 undervaluing capacity, doesn't that make it a
4 good deal?

5 A. I'm sorry. What do you mean "good
6 deal"?

7 Q. If Entergy New Orleans is seeking to
8 buy capacity and there's a market that is
9 undervaluing that good, doesn't that make it a
10 bargain?

11 A. Well, if your objective was to only
12 meet needs one year at a time, that might be
13 the case, but I don't agree that that's a good
14 bargain to meet long-term needs.

15 Q. If the market remained at that
16 level, if you could predict that the market
17 will remain at that level for more than a year,
18 would that change your answer?

19 A. No, it wouldn't.

20 Q. Mr. Cureington, is Entergy New
21 Orleans willing to guarantee to ratepayers that
22 the MISO capacity price will reach equilibrium
23 if the Council approves this project? Will it
24 hold ratepayers harmless if the MISO capacity
25 clearing price does not reach equilibrium?

1 A. I'm sorry. When you say "hold
2 harmless," what do you mean specifically?

3 Q. Will the company assume the risk
4 that the capacity market will not reach
5 equilibrium?

6 A. So I can't -- I can't specifically
7 discuss what the company might agree to, but
8 generally speaking, we don't guarantee those
9 types of things. We simply plan to meet
10 long-term needs based on the best available
11 information that we have.

12 Q. Mr. Cureington, in this application,
13 you did not include any production cost
14 modeling portfolio or any portfolio in your
15 production cost modeling that incorporated a
16 demand response option; is that correct?

17 A. So I'm sorry. Production cost
18 modeling on demand response? That's not --

19 Q. Yeah. It would be a portfolio that
20 included demand response to meet a portion of
21 the peaking capacity need.

22 A. So we've evaluated a demand response
23 at several different steps starting with the
24 IRP.

25 Q. If you have that --

1 A. I'm sorry. But the reason I wanted
2 to clarify your question is because demand
3 response will reduce the peak, but it doesn't
4 have energy value. So you mentioned production
5 cost modeling. So those two things don't
6 really comport.

7 Q. Yeah. And when I use that in this
8 case, I mean just sort of an economic analysis,
9 the total cost of --

10 A. We certainly have looked at the
11 impact a demand response could have on our
12 long-term needs, however, we just don't have a
13 basis based on those evaluations to conclude
14 that we can use demand response to meet the
15 need that exists today because you have to
16 understand, the demand response takes time to
17 accumulate. And all of the studies that have
18 been conducted for us show that while there is
19 potential, it would take a very long time to
20 achieve -- more specifically, 10 to 20 years in
21 order to get to the level of demand response
22 that we need to even get close to the needs
23 we've identified.

24 Q. Well, let's start with this. Let's
25 start with the IRP. In the IRP, it's correct

1 that we found that about 50 megawatts of
2 incremental demand response potential could be
3 achieved in Entergy New Orleans service
4 territory by 2019; is that correct?

5 A. I believe you're referencing
6 something from my direct testimony; is that
7 correct?

8 Q. Where I'm referencing it from is we
9 discussed it in your deposition.

10 A. Okay. So assuming that's what I was
11 referring to, which is where I recall the
12 reference, that was in reference to what ICF --
13 which is the consultant we've hired in the IRP
14 proceeding -- to conduct a DSM potential study.
15 That's what ICF indicated might be achievable
16 by 2019, but that's in isolation, looking just
17 at demand response.

18 And the Council's own requirements
19 and our planning objectives dictate that we
20 look at both DSM and supply-side alternatives
21 on an equal footing, and so I made that
22 reference just to make it clear that even if we
23 ignored supply-side alternatives, there's not
24 enough demand-side management available in time
25 to meet this need within a reasonable time

1 frame.

2 I just think it's important to
3 understand that ICF was hired to look solely at
4 DSM in isolation and the Council's IRP
5 requirements require that we then take those
6 results and put them on an equal footing with
7 supply-side alternatives. And the IRP did not
8 conclude that 50 megawatts was available by
9 2019.

10 Q. But ICF concluded that?

11 A. Yes, which is -- I wanted to just
12 provide a conservative reference in the
13 testimony to make clear that if you ignored
14 supply-side alternatives, DSM in and of itself
15 couldn't meet this need within a reasonable
16 time frame.

17 Q. Well, if we assume that the capacity
18 need is, say, more than 50 megawatts -- is that
19 correct?

20 A. I'm sorry. What capacity need?

21 Q. If the capacity need at peak was
22 50 megawatts or less, it would be possible that
23 demand response could meet that need?

24 A. I'm sorry. I'm not following what
25 you mean by --

1 Q. If the company needed 50 megawatts
2 of resources to meet its peaking demand,
3 50 megawatts of demand response is a
4 dispatchable resource that could meet that
5 need?

6 A. Okay. So I think you're asking me
7 in a hypothetical --

8 Q. Yes.

9 A. -- if our needs were simply
10 50 megawatts of capacity, could the demand
11 response resources I identified meet that?

12 Q. (Nods head affirmatively.)

13 A. I think it depends because that's
14 why we have a supply role analysis. You know,
15 base load, load following, and peaking and
16 reserve supply roles are all very different.
17 Base load being in a very energy intensive
18 resource type or resource need which demand
19 response could not meet. Demand response
20 doesn't really provide any energy value. It
21 just shifts a portion of your peak. And so if
22 you're asking me specifically if demand
23 response could meet a peaking need, it
24 certainly could meet a peaking need generally,
25 but in this case, it's not enough to meet the

1 need we've identified in order to defer or
2 eliminate the need for NOPS.

3 Q. But you don't dispute if the need
4 were 50 megawatts or less and ICF's forecast
5 turned out to be true, you could meet that need
6 with demand response?

7 A. So in your hypothetical, if our
8 needs were only 50 megawatts and that need
9 existed in the time frame that that demand
10 response could be available, then I suppose
11 that that would meet the need. But there's
12 other benefits from having generation that
13 demand response can't provide. And so that's a
14 very important part of our story for this
15 resource is that we've identified a number of
16 circumstances that make it very compelling that
17 we need a local source of generation in the
18 absence of what we've had for the last four
19 plus decades at Michoud.

20 Q. Do you recall that in the 2015 IRP,
21 there was a chart that showed that demand
22 response resources have a total benefit to cost
23 ratio of 34.5 to one?

24 A. I don't remember the specific
25 reference, but I do recall the fact that we

1 evaluated each individual DSM measure's
2 cost-benefit ratio in the IRP.

3 Q. But you did not revisit that in this
4 application?

5 A. So without the specific reference, I
6 can't be sure if you're talking about ICF
7 study, which was in isolation, or subsequent
8 steps in the IRP where we combined those
9 alternatives together to come up with, you
10 know, the optimal combination.

11 Q. I'm referring to the fact that in
12 the course of this docket right here, not the
13 IRP -- we just talked about the IRP -- you did
14 not evaluate whether you could meet
15 50 megawatts of the capacity need using
16 incremental demand response?

17 A. So I addressed it, but we didn't
18 specifically evaluate it in an economic sense.
19 We identified a need that was far more
20 significant than that, and so the need exists
21 now, not 10 or 20 years from now. So it's just
22 not reasonable to have evaluated demand
23 response in that text.

24 Q. Do you agree that ICF found that
25 this 50 megawatts would be available by 2019?

1 A. The 50 megawatts that I identified
2 in testimony in isolation of supply-side
3 alternatives, yes, but that's not how we
4 conduct long-term planning.

5 JUDGE GULIN:

6 Mr. Brown, some time within the next
7 few minutes -- five or ten minutes -- I'd
8 like to take a break, so just let me know
9 when you feel you've reached an actual
10 break in your cross and then we will do
11 that. Okay?

12 MR. BROWN:

13 I think two more questions and I'll
14 be right there.

15 JUDGE GULIN:

16 Sure.

17 EXAMINATION BY MR. BROWN:

18 Q. So Entergy New Orleans owns
19 agreements for -- presently owns agreements for
20 about 20 megawatts of interruptible load; is
21 that correct?

22 A. So we have a large industrial
23 customer who is on an interruptible rate and
24 that is approximately 20 to 23 megawatts of
25 capacity that can be interrupted. I don't know

1 if that's what you're referring to, but that --

2 Q. Yes, sir. Yeah.

3 So just to be clear, if ICF's
4 forecast turned out to be true and Entergy New
5 Orleans pursued those 50 megawatts, the company
6 could have available as much as 73 megawatts of
7 demand response resources by 2019?

8 A. So it's important to understand that
9 we've already accounted for the 23 megawatts
10 that you referred to, and the need that I'm
11 talking about is in addition to that. It's
12 incremental to. So I wouldn't agree with the
13 math. I mean, yes, if you just added the two
14 resources together, it would be 73 megawatts.

15 Q. Yes. I'm just talking about the
16 amount of demand response that would be in your
17 stable of resources.

18 A. Sure. But I think it's important to
19 understand that the need that we've identified
20 it incremental to. It already accounts for the
21 23 megawatts of interruptible demand associated
22 with that customer.

23 MR. BROWN:

24 Okay. Your Honor, we can take a
25 break.

1 JUDGE GULIN:

2 Okay. Let's take a ten-minute break
3 and resume at five after two.

4 (Whereupon a recess was taken.)

5 JUDGE GULIN:

6 Back on the record.

7 Mr. Brown.

8 MR. BROWN:

9 Thank you, Your Honor.

10 EXAMINATION BY MR. BROWN:

11 Q. Mr. Cureington, Charles Long -- Were
12 you here yesterday or Friday when Charles Long
13 testified?

14 A. Yes.

15 Q. And he testified that generally in
16 the summertime, the peak in New Orleans occurs
17 between around five to 7 p.m. Do you recall
18 that?

19 A. As I recall, he clarified that it
20 could occur earlier, but that, generally
21 speaking, late afternoon to early evening was
22 the time of our peak.

23 Q. Late afternoon, early evening.

24 And you don't have any reason to
25 dispute that, do you?

1 A. Certainly not.

2 Q. At that time of day in summertime,
3 it's normally daytime; is that correct?

4 A. Well, it can be if the peak occurs
5 in the late afternoon, but if it occurs in the
6 evening, no, it wouldn't be.

7 Q. Frequently in the summertime,
8 7 o'clock, it would still be daylight?

9 A. Somewhat.

10 Q. Now, MISO applies a 50 percent
11 capacity credit to solar resources at least
12 initially; is that correct?

13 A. Yes, initially, until there's data
14 to back it up.

15 Q. And the reason for that capacity
16 credit is to estimate the peak period
17 contribution from the solar resource; is that
18 correct?

19 A. So I think what MISO is trying to do
20 is balance the fact that solar, because it's
21 intermittent and relies on the sun, its
22 production falls off typically when the
23 utility's loads start to peak. However, I
24 don't think we can assume that just because
25 they have given it 50 percent capacity credit

1 that that means that they're confident that it
2 will always be there every time it needs to be
3 at 50 percent capacity factor. I think they're
4 doing that for purposes of planning for
5 resource adequacy. And so we have to make sure
6 that we don't construe that to mean that you
7 can guarantee that it would be there.

8 Q. And, in fact, MISO allows after a
9 solar unit has built up a history for that
10 credit to be either raised or lowered based on
11 the actual output?

12 A. That's correct. Consistent with the
13 fact that, you know, the sun's radiance is
14 different in different parts of the United
15 States.

16 Q. And, Mr. Cureington, you worked on
17 Entergy New Orleans' one megawatt solar pilot
18 project; is that correct?

19 A. Yes. I was responsible for leading
20 the development of that project.

21 Q. I take it that that unit, if you
22 will, is not being bid into MISO; is that
23 correct?

24 A. That's correct. It's behind the
25 meter.

1 Q. Has Entergy New Orleans developed an
2 assumption as to the output at peak from those
3 solar panels?

4 A. So the purpose of that project was
5 to actually do research on both solar located
6 within our service area as well as the ability
7 of a battery which we have at the project also
8 to back that up because we recognize that these
9 resource alternatives, you know, might one day
10 be cost effective. And so we wanted to
11 endeavor in a pilot project to better
12 understand what the potential actually is
13 within our service area. But, no, the research
14 is not yet complete.

15 So just to clarify, we didn't
16 develop assumptions. We endeavored to conduct
17 a pilot to do research to establish what was
18 reasonable.

19 Q. You also supplied testimony before
20 the City Council and Entergy New Orleans'
21 application to build five megawatts of
22 commercial rooftop solar in the city; is that
23 correct?

24 A. Yes. I sponsored a piece of
25 testimony in that proceeding.

1 Q. In the course of your work in that
2 proceeding, have you developed any assumptions
3 about the output of solar panels at peak in New
4 Orleans?

5 A. So I didn't sponsor testimony
6 specific to that in the case but at the same
7 time, that wasn't, you know, the intent; right?
8 The idea was -- is that we wanted to request
9 approval of a new project recognizing the
10 potential that this resource could have.

11 Q. Right. And I read your testimony
12 and I know that wasn't the intent. But I'm
13 asking if you ever did do that analysis?

14 A. I'm sorry. What analysis
15 specifically?

16 Q. Whether you developed an -- either
17 an assumption going forward or actual data as
18 to the capacity output of the solar panels
19 involved in the project at peak?

20 A. So we made an assumption, like we do
21 today for any project that's not yet complete,
22 as does MISO, on what the capacity credit is
23 likely to be for those rooftop projects that we
24 ask for approval of and that was included in
25 the modeling, but those rooftop projects

1 certainly wouldn't be capable of 50 percent
2 capacity factor.

3 Q. You haven't received the data from
4 that project or obviously the project hasn't
5 been approved yet?

6 A. No. I just know from experience
7 that rooftop typically has a lower capacity
8 factor by virtue of the fact that it's on a
9 building and typically you have to face it in
10 one direction, unlike utility scale ground
11 mounted where you can install tracking
12 technology to track the sun.

13 Q. Yeah. And in this case for the
14 hundred megawatts of solar that is being
15 assumed in each of your portfolios, would that
16 be ground mounted tracking solar?

17 A. So we've evaluated both in the IRP.
18 But, I'm sorry, are you asking about something
19 else?

20 Q. Yeah. The hundred megawatts of
21 solar that's been assumed in each of your
22 portfolios in this case, can you describe what
23 type of solar resource that would be?

24 A. Yeah. Generally speaking, it was
25 assumed to be ground mounted solar, that's

1 correct, at Michoud, which is an impracticable
2 assumption, but it was made to give, you know,
3 those resources the benefit of the doubt.

4 Q. Would they be tracking?

5 A. To my recollection, yes, they would
6 be.

7 Q. And I believe in the one megawatt
8 solar battery pilot project, the solar units
9 are built specifically to be resilient against
10 storms in that they can lie down; is that
11 correct?

12 A. Yes. That was one of the design
13 features that we incorporated into the project.

14 Q. In the hundred megawatts of new
15 solar that Entergy is projecting that it could
16 add, we're assuming that it would be ground
17 mounted solar. Would it also have that feature
18 of being able to lie down?

19 A. With the understanding that we
20 haven't done any detailed design engineering, I
21 think, generally speaking, you know, the
22 industry recognizes that that is an important
23 feature for projects on the Gulf Coast.

24 Q. Now, Mr. Cureington, I'd like to
25 actually show you some of your testimony from

1 the five megawatt, the docket -- the testimony
2 you submitted in that docket to the City
3 Council. We'll pass it out as Sierra Club-6, I
4 believe we're at.

5 I know people are still getting it,
6 but, Mr. Cureington, if you could turn to
7 page 5, that's what I'm looking at.

8 A. (Witness complies.)

9 JUDGE GULIN:

10 So this is marked as [SC-6.

11 EXAMINATION BY MR. BROWN:

12 Q. And, Mr. Cureington, this testimony
13 was submitted to the City Council in October
14 2017; is that correct?

15 A. That's correct.

16 Q. And at the bottom of page 5 of your
17 testimony under Roman numeral No. 10, you
18 reference the fact that Entergy New Orleans --
19 earlier in the testimony you reference that
20 Entergy New Orleans conducted an RFP in
21 conjunction with this project. Have you --

22 A. I'm sorry. I just wanted to
23 clarify. I don't know that that's my
24 testimony. This looks more like the
25 application.

1 MR. REED:

2 Yes.

3 (Whereupon a pause occurred in the
4 proceedings.)

5 EXAMINATION BY MR. BROWN:

6 Q. I'm sorry. I was looking at the
7 wrong part. This would be page 8 of your
8 testimony. It says the same thing as I was
9 going to point out in the application.

10 A. Okay. So that's on the back of the
11 very last page?

12 Q. Yeah. I'm sorry. Back page here.
13 And this is Question 13. Was there
14 robust participation in the 2016 renewables
15 RFP. (As read.)

16 And your answer on page 8 is,
17 ANSWER: Yes, to the extent that ENO received
18 17 proposals representing approximately
19 325 megawatts of total capacity. (As read.)

20 Is that your testimony? Did I read
21 it accurately?

22 A. That sounds correct, yes.

23 Q. Now, Mr. Cureington, in your
24 modeling in this case -- and moving back to
25 this docket that we're in now.

1 JUDGE GULIN:

2 Are you finished with this?

3 MR. BROWN:

4 Yes, Your Honor.

5 JUDGE GULIN:

6 It's being offered for cross
7 purposes?

8 MR. BROWN:

9 Actually, given that it's the
10 witness's testimony and he's here, I'll
11 offer it as substantive evidence.

12 JUDGE GULIN:

13 Is there any objection to that?
14 And, if so, would you want to adopt a
15 more robust --

16 MR. OLSON:

17 Right. We would request optional
18 completeness on this. It's just one page
19 of testimony.

20 JUDGE GULIN:

21 Okay. So it will admitted under the
22 condition you can provide the complete
23 testimony.

24 MR. BROWN:

25 Sure.

1 JUDGE GULIN:

2 So it's conditional at this point.

3 EXAMINATION BY MR. BROWN:

4 Q. Now, Mr. Cureington, turning back to
5 this docket, in your testimony, your assumption
6 is that the total energy produced by rooftop
7 solar systems in New Orleans will remain
8 constant after 2021; is that correct?

9 A. So my testimony assumes in the
10 economic analysis that the existing systems
11 will continue to provide energy to offset load
12 at their new and clean condition over the
13 20-year planning horizon, which assumes that
14 customers will make the necessary investments
15 to maintain those systems, including trimming
16 the vegetation back to prevent shading.

17 MR. BROWN:

18 And, Your Honor, I'm sorry about
19 this, but I'd like to close the room just
20 for a moment to go through an HSPM
21 exhibit.

22 JUDGE GULIN:

23 HSPM? Okay.

24 I'll ask those who have not signed
25 the confidentiality agreement to please

1 leave the room at this time. We're not
2 expecting a long delay.

3 MR. BROWN:

4 Yeah. It should only be a few
5 questions.

6 JUDGE GULIN:

7 I assume you want this as SC-7?

8 MR. BROWN:

9 Yes, Your Honor.

10 Mr. Cureington, take your time to
11 review it. I mostly want to focus on the
12 chart on the second page of this -- on
13 the last page of this.

14 MR. CUREINGTON:

15 Okay.

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MR. BROWN:

Your Honor, let me just make sure
there are no more questions before we
bring everyone in.

Okay. I think we're good.

1 JUDGE GULIN:

2 We can invite everyone back into the
3 room, please.

4 Thank you.

5 And we're back in regular session.

6 MR. BROWN:

7 Thank you, Your Honor.

8 EXAMINATION BY MR. BROWN:

9 Q. Mr. Cureington, you would agree that
10 Louisiana is not the only state in the nation
11 that has in recent years removed its tax
12 incentives for solar?

13 A. I'm sorry. Do you have a specific
14 example you want me to confirm?

15 Q. Sure. California. Have you studied
16 California?

17 A. Not specifically.

18 Q. Would you agree that other states in
19 the nation have also begun to reduce the tax
20 incentives they offer customers for solar
21 power?

22 A. I have seen reference to that, yes.

23 Q. I'd like to turn to SEC-18, which is
24 an exhibit to your rebuttal testimony, and I'm
25 looking at page 41.

1 A. Okay.

2 Q. And focused on -- Before I get to
3 the Figure 3.15, I just want to confirm that
4 you've read this report; is that correct?

5 A. Yes. This was attached as an
6 exhibit to my testimony.

7 Q. Okay. And the Figure 3.15 here
8 shows the cumulative installations of
9 non-utility scale solar generation in the
10 United States historically from 2010 to
11 2015 and also provides a forecast of what NERC
12 believes is likely to occur up to 2021; is that
13 correct?

14 A. At the time that the report was
15 produced and as the footnote indicates, you
16 know, this was based on a second quarter 2016
17 research report from Greentech Media, which has
18 since been updated numerous times and is
19 actually reflecting a decline in nonresidential
20 PV for the first time.

21 Q. By "decline," you mean simply the
22 rate of new installations has declined?

23 A. So there's two declines in the most
24 recent report. There's the first ever actual
25 retraction in 2017 in the growth by 17 percent.

1 In other words, the number of new systems
2 actually declined 17 percent, and then they
3 adjusted their forward looking forecast down
4 significantly as well.

5 Q. No one is, to your knowledge,
6 projecting that zero solar units will be
7 installed on residential rooftops going
8 forward?

9 A. So I think what's important to keep
10 in mind is, is this is a very macro level view
11 of what might happen nationally and what we're
12 talking about what is likely to happen in New
13 Orleans. So because this doesn't apply
14 specifically to New Orleans, I don't think we
15 can assume that just because any of these
16 reports reflect a trend at the national level
17 that that is true in New Orleans.

18 Q. Sure. But would you agree that
19 looking at this chart contained in an exhibit
20 to your testimony shows that residential solar
21 installations increasing year over year through
22 2021?

23 A. Yes. As I indicated, this is an
24 outdated reference point, though, that's been
25 since changed.

1 Q. Is this report outdated in your
2 estimation?

3 A. No. It wasn't at the time that I
4 attached it to my testimony.

5 Q. But you're questioning whether the
6 assumptions in 2016 still apply in 2017?

7 A. Well, not questioning. I'm just
8 saying that NERC's own reference point here has
9 been updated by Greentech Media reflecting that
10 the residential solar installation companies
11 nationally are facing significant challenges to
12 acquire new customers and that's driven, in
13 part, because they're facing increased costs
14 associated with that market. And as a result,
15 they're focusing more on higher profit margin
16 areas of the country and not trying to grow
17 their footprint nationally. And we see that
18 bear out in the data and, in fact, we seen that
19 in New Orleans. We've seen a decline in the
20 number of installation companies that have a
21 presence.

22 Q. But your testimony is starting in
23 2021, there would be zero incremental
24 behind-the-meter capacity installed in New
25 Orleans?

1 A. Yes. Because, effectively, the
2 decline that is occurring today in New Orleans
3 is an exponential decline and so it's
4 reasonable to expect that at some point, that
5 would level off to a de minimus amount, whether
6 it's zero or five new systems a month. When
7 you talk about the typical size of a
8 residential rooftop system of five kW, you'd
9 need 400 of those systems to equal one megawatt
10 of capacity.

11 Q. Mr. Cureington, did you run any
12 sensitivity -- other sensitivity to that
13 analysis? Did you assign a probability to a
14 scenario in which you were not correct about
15 this?

16 A. I didn't run that specific
17 sensitivity. What I assumed is that by giving
18 these existing systems the benefit of the
19 doubt, that they would always contribute the
20 level of energy that they are today at new and
21 clean conditions for the next 20 years, that
22 that, in effect, would take care of any minor
23 growth that might occur in the number of new
24 systems.

25 Q. But to be clear, in the load

1 forecast, for instance, that you use in this
2 case, there are sensitivities of a higher end
3 projection for load that's assigned a certain
4 probability, there's a sensitivity for a low
5 projection of load that's assigned a certain
6 sensitivity, and you determine a reference
7 case. You did not do that in the context of
8 New Orleans behind-the-meter solar
9 installations?

10 MR. OLSON:

11 Objection. That's a compound
12 question.

13 JUDGE GULIN:

14 Well, I understood the question.
15 You can answer.

16 MR. CUREINGTON:

17 So you reference the upper and lower
18 bound.

19 MR. BROWN:

20 Yes.

21 MR. CUREINGTON:

22 And that's exactly what I was going
23 to -- to clarify that I don't need to do
24 the sensitivity that you referred to
25 because what we're talking about is

1 decrements to load from new rooftop
2 systems that offset the decline in the
3 efficiency of new systems as they degrade
4 over time. And so the process we use to
5 forecast load would account for the minor
6 types of changes that you're talking
7 about.

8 EXAMINATION BY MR. BROWN:

9 Q. But you did not run another
10 sensitivity in this case?

11 A. No. What I'm saying is the upper
12 and lower bound would have captured the changes
13 that you're contemplating with the sensitivity,
14 rendering it moot.

15 Q. That's not how I interpreted what
16 you were saying. Did you run multiple
17 scenarios? Did you evaluate multiple scenarios
18 as to the amount of rooftop solar that would be
19 installed in New Orleans? Yes or no?

20 A. What I'm saying is that wasn't
21 necessary based on the data we have.

22 Q. So you did not?

23 A. It wasn't necessary, so I did not.

24 Q. Thank you.

25 Mr. Cureington, you oversaw the 2015

1 IRP for Entergy New Orleans; is that correct?

2 A. Generally speaking, that's correct.

3 Q. And I believe in the 2015 IRP,
4 Entergy New Orleans identified a need of
5 approximately 300 megawatts of capacity; is
6 that correct?

7 A. So we identified several different
8 needs in the IRP. I'm sorry. Which one are
9 you referring to specifically?

10 Q. The peaking and reserve capacity
11 need.

12 A. Yes, it was well over 300 megawatts
13 over the planning horizon.

14 Q. Well over 300. Okay.

15 You've also testified at another
16 point that you felt you were ordered by the
17 City Council to evaluate a local peaking
18 resource of at least a hundred twenty
19 megawatts; is that correct?

20 A. I'm sorry. You said did I testify
21 to that?

22 Q. Yes. We can turn to your testimony
23 if you like. Your supplemental and amending
24 direct, July 2017, I believe page 19. If you
25 look at lines -- starting at line 16.

1 A. Okay.

2 Q. As previously discussed in ENO's
3 original application, the Council has already
4 ordered ENO in Resolution 15-524 to use
5 reasonable diligent efforts to pursue the
6 development of at least 120 megawatts of new
7 build peaking generation capacity for the City
8 of New Orleans. (As read.)

9 A. I'm sorry. That's on page 20;
10 right?

11 Q. I have it as page 19.

12 A. It's page 20 for me.

13 Q. I'm looking at the HSPM version.
14 It's page 19.

15 A. I'm looking at the public version.

16 Q. Oh, okay. I think on mine, there's
17 also a reference on the next page to that
18 resolution.

19 A. Let me just get the HSPM version to
20 be sure.

21 Q. Sure. Make sure we're looking at
22 the same thing.

23 A. Okay.

24 Q. So in my version, it's page 19
25 starting at line 16.

1 A. I see the reference.

2 Q. And do you agree with that? Did I
3 read your testimony accurately?

4 A. Would you reread it, please?

5 Q. Yes, sir. As previously discussed
6 in ENO's original application, the Council has
7 already ordered ENO in Resolution R-15-524, to
8 use reasonable -- and this is quoting from the
9 resolution -- use reasonable diligent efforts
10 to pursue the development of at least
11 120 megawatts of new build peaking generation
12 capacity within the City of New Orleans. (As
13 read.)

14 A. I'm sorry. What was the question?

15 Q. Just did I accurately read your
16 testimony there?

17 A. Correct. Yes, you did.

18 Q. Do you believe that that need that
19 was expressed there of at least a hundred and
20 twenty megawatts of new build peaking capacity,
21 was that consistent with the need that you were
22 looking at in the IRP?

23 A. They're two different things. What
24 I believe this is, is a reflection of the
25 Council's well meaning concern for the fact

1 that in this proceeding, we were terminating a
2 contract among the Entergy companies that had
3 existed for 40 plus years and at that same
4 time, we were contemplating the early
5 deactivation of Michoud, which we had relied on
6 to support reliability in the city for that
7 same period of time and so they understood that
8 having local generation was an important part
9 of the planning process. I think the number
10 isn't as important as the concept. The IRP
11 identified a need based on the load forecast.

12 Q. And you'd agree based on the need
13 that the company -- at least just focusing on
14 what the company projects in 2026, the company
15 is projecting now a need of 99 total megawatts
16 of total capacity?

17 A. In the first half of the planning
18 horizon, it averages, yes, 99 megawatts.

19 Q. In light of this resolution, did you
20 ever look at a resource that was less than a
21 hundred megawatts?

22 A. I'm sorry. In light of the
23 resolution? What do you mean?

24 Q. In light of this resolution asking
25 you to look at resources that are at least a

1 hundred and twenty megawatts, did you ever look
2 at a peaking resource putting it at Michoud
3 that is less than a hundred megawatts?

4 A. So we have looked at a very wide
5 range of peaking resource technologies, all the
6 way from 19 megawatts up to 226, but you can't
7 construe what the Council ordered us to do in
8 this resolution as supplanting -- the process
9 that we go through to identify needs and the
10 best alternatives to meet those needs. This is
11 just guidance to ensure that we had considered
12 at least some amount of local generation
13 because we had over 780 megawatts historically
14 at Michoud and that was going away all at once.
15 And so you have to pick a number and so I think
16 this is just an amount that the Council felt
17 would set sort of a floor, if you will.

18 Q. Was there any reason you set the
19 floor at a hundred -- and this is not -- What
20 I'm referring to is when you went to Jonathan
21 Long last spring and I think you both testified
22 that you looked at resources within the range
23 of a hundred to a hundred thirty and the
24 bigger, the better in that range. Was there a
25 reason you set the floor at 100?

1 A. Yes, there were several reasons. We
2 have always planned to have generation at
3 Michoud. The question of how much is a
4 function of our needs. But the number of
5 different peaking technologies that are out
6 there are numerous and so we have for a while
7 now evaluated a combination of smaller units
8 against the larger CT to ensure the Council has
9 the information about which one is the more
10 cost effective way to meet our long-term needs.

11 So in the direct case, I presented
12 testimony that supported a 100 megawatt unit
13 installed in 2020 followed by another
14 100 megawatt unit at every year after that in
15 order to inform how that total cost compared
16 against the larger CT.

17 Q. But you never looked at a unit below
18 a hundred megawatts on its own?

19 A. So that unit that I described was a
20 hundred megawatts.

21 Q. But you said two 100 megawatt units?

22 A. Because the need dictates what you
23 evaluate. So why would I evaluate something
24 that wouldn't meet the need?

25 Q. Now, in Mr. Jonathan Long's

1 testimony, he stated that he presented you with
2 the option of six reciprocating engine units.
3 Do you recall that?

4 A. I do not recall him presenting me
5 with that option.

6 Q. Would you -- Can you explain why you
7 never -- Strike that. I'll move on.

8 Mr. Cureington, did you ever look at
9 a power purchase agreement as an alternative to
10 building a local resource?

11 A. I have not looked at an alternative
12 to building this resource in the form of a
13 power purchase agreement because there are none
14 that would meet the need. There are no
15 existing resources within the service area or
16 the load pocket, more generally, that could
17 meet this need that we don't already either
18 have a contract for or that have been
19 deactivated. And because we're a hundred
20 percent dependent on transmission today, the
21 idea that I would go out and solicit proposals
22 for a resource outside of the load pocket, load
23 zone, capacity zone, and further exacerbate the
24 problem we're trying to address with NOPS by
25 purchasing an existing resource through a PPA

1 and using transmission to deliver to New
2 Orleans is just not reasonable.

3 Q. And, Mr. Cureington, has Entergy New
4 Orleans evaluated any plan for how it would use
5 the property at Michoud if these units were not
6 approved?

7 A. I'm sorry. When you say "not
8 approved," meaning?

9 Q. Let's assume the Council rejects
10 both options, both the combustion turbine and
11 the reciprocating engine. Has the company
12 studied how it would use the property at
13 Michoud in that event?

14 A. I'm sorry. By "use," what do you
15 mean specifically?

16 Q. What it would do with the property?
17 I mean, it could range from sitting vacant to
18 installing solar capacity to -- You have to
19 answer the question for me. I can't.

20 A. So we haven't studied specifically
21 what we might do if the Council rejects both
22 options for NOPS.

23 MR. BROWN:

24 Give me one moment, Your Honor. I
25 think I'll tender the witness.

1 Your Honor, I just had a quick
2 question about the exhibit that was
3 the -- Mr. Cureington's testimony in the
4 RFP. That was admitted for substantive
5 purposes subject to provision of the
6 full?

7 JUDGE GULIN:

8 Yes.

9 MR. BROWN:

10 Okay.

11 Ms. Stevens Miller, are you next?

12 MS. OSUALA:

13 No. Chinyere Osuala.

14 JUDGE GULIN:

15 Could you pronounce that for me?

16 MS. OSUALA:

17 "Osuala."

18 JUDGE GULIN:

19 "Osuala." Okay. Thank you.

20 MR. GUILLOT:

21 Your Honor, just for clarification
22 purposes going forward, are we going to
23 continue to allow in cross-examinations
24 the presentation of one page from a
25 rather large document where the witness

1 can't get the context of the specific
2 language being asked about going forward?
3 I just want to know for my own purposes.

4 JUDGE GULIN:

5 Are you referring to SC-6 where it
6 was the witness's own prior testimony?

7 MR. GUILLOT:

8 Yeah. I'm just starting to see a
9 pattern, Your Honor, even with the cross
10 of Mr. Long where they take one or two
11 pages from a larger document and start
12 asking questions about it and just -- You
13 know, it's your preference, but from my
14 experience, the witness is generally
15 allowed to review the larger document to
16 get the full context of what they're
17 asking about.

18 JUDGE GULIN:

19 I think we'll have to look at that
20 on a case-by-case basis, but if you have
21 a concern with a particular document that
22 the witness is being asked to review,
23 certainly bring that to my attention and
24 we'll deal with it.

25 MR. GUILLOT:

1 Sure.

2 MR. REED:

3 Your Honor, in that same light, most
4 of the pages of that exhibit were the
5 application as opposed to the testimony,
6 and I know Mr. Brown spoke in terms of
7 the testimony and I think Mr. Olson had
8 talked about exercising the rule of
9 optional completeness. I was wondering
10 what is getting completed? Is the
11 testimony getting completed or the
12 application? Because there were not
13 complete versions of either to my
14 knowledge.

15 MR. SMITH:

16 May I jump in? Joshua Smith on
17 behalf of Sierra Club.

18 And that's a clarification that I
19 think we were trying to get at as well.
20 I mean, typically the optional
21 completeness is on the adverse party. If
22 they want to complete the document and
23 whatever part they think is incomplete,
24 they are free to present that to provide
25 the context. We chose to provide an

1 excerpt so as to not clutter the record
2 with what we think is irrelevant
3 information. The relevant portions were
4 in the excerpt.

5 MR. GUILLOT:

6 Unfortunately, Your Honor, what
7 tends to happen is there's something
8 adverse to the point they're trying to
9 make on the page before it and so they
10 just give the witness one page and so he
11 can't reference the point on the previous
12 page.

13 JUDGE GULIN:

14 Well, in any event, I conditioned
15 the admission of the document as
16 substantive evidence upon it being
17 provided in toto. So if it's provided
18 in toto, it will be admitted.

19 Now, the question was just generated
20 by Mr. Reed as to whether you really
21 intended to include the application.
22 Does that matter to you whether the
23 application part of the document is
24 included, because I think all we really
25 need is the testimony?

1 MR. SMITH:

2 Okay. If that's what Entergy thinks
3 would complete the offer, then that's --
4 that's my point. We're not quite sure
5 what they think needs to be complete.

6 JUDGE GULIN:

7 It doesn't really matter what they
8 think. What I'm saying to you is that
9 it's admitted as long as you complete the
10 document as I instructed. So all I'm
11 asking now is whether, in fact, you want
12 the application to be part of that or
13 not? I don't remember any questions
14 about the application of it, so I would
15 say just the testimony.

16 MR. SMITH:

17 Okay.

18 JUDGE GULIN:

19 Okay.

20 MR. SMITH:

21 Okay. If that will resolve the
22 objection and if that's what the ALJ's
23 order is, then that's what we'll do.

24 MR. OLSON:

25 I just want to make sure because

1 your question started based on pages in
2 the application. I think --

3 THE COURT REPORTER:

4 Scott, please talk into the mic
5 because I'm not hearing every word.

6 MR. OLSON:

7 I just he had asked some questions
8 based on the application. I was just
9 confirming if that was in there and he
10 actually meant to use the whole
11 testimony.

12 JUDGE GULIN:

13 Yeah. So I think we're in agreement
14 that you're going to provide just the
15 testimony.

16 MR. SMITH:

17 Thank you.

18 JUDGE GULIN:

19 Okay. All right.

20 Yes, ma'am. Whenever you are ready.

21 EXAMINATION BY MS. OSUALA:

22 Q. Good afternoon, Mr. Cureington. My
23 is Chinyere Osuala, and I am representing the
24 Alliance for Affordable Energy and 350.org.

25 I think we've met before; is that

1 correct?

2 A. Correct.

3 Q. I'd like to turn back to
4 Exhibit SEC-8 in your supplemental direct
5 testimony that was filed in November of 2016.

6 A. Okay.

7 Q. And then compare that again with
8 Exhibit Sierra Club 5, which would be the
9 objection and responses to the advisors for --
10 from the advisors for the Alliance for
11 Affordable Energy's first set of requests of
12 information, the data request.

13 A. I'm sorry. What --

14 Q. Do you remember the data request
15 with the chart attached?

16 A. Is this it (indicating)?

17 Q. I believe that's it. It should be
18 part of the data request from the advisors.

19 A. It doesn't have a cover page that
20 indicates it's part of the data request. I'm
21 sorry. That's right. I guess it was just --
22 There were objections on it, so --

23 Q. Okay.

24 A. What number is it again?

25 Q. Just the last page, back to the

1 chart.

2 A. Okay.

3 Q. And do you remember the line of
4 questions from Mr. Brown that -- or I think it
5 was one question that referred to that note at
6 the bottom of your chart, SEC-8, that says
7 Revision 1?

8 A. I do recall that question.

9 Q. I just wanted to clarify, have you
10 seen other versions of this chart or no?

11 A. No, I have not.

12 Q. Now, do you mind turning to page 31
13 of your supplemental direct testimony that was
14 filed in July of this year, July 2017?

15 A. Supplemental and amending?

16 Q. Yes, supplemental and amending.

17 A. Is the public version okay?

18 Q. Yes, that is fine. Because I
19 believe on that page, it should have a
20 Section B, requested portfolios. Does it have
21 it on your copy?

22 A. I'm sorry. What page?

23 Q. Thirty-one.

24 A. Yes. I see the section.

25 Q. I just wanted to ask you a few

1 questions about those requested portfolios.
2 Generally you remember or you're aware of a
3 March 23rd letter from the advisors asking ENO
4 to perform certain -- to submit certain
5 portfolios in regards to NOPS; is that correct?

6 A. I'm sorry. Are you referring to
7 what they filed in the docket?

8 Q. Yes.

9 A. Yes. That's what I'm referencing
10 here, yes.

11 Q. Yes. And do you remember -- And
12 those -- Strike that.

13 Do you remember specifically what
14 you were supposed to model?

15 A. I'm sorry. I don't understand the
16 question.

17 Q. So it says here on your testimony --
18 Well, I don't have the public version, but
19 line 20, page 31 of your HSPM version, which
20 requested that the company model certain
21 assumptions in those portfolios. Do you see
22 the line?

23 A. Yeah, I see the line, but I just
24 don't have committed to memory all of the
25 things that we were requested to evaluate.

1 Q. Okay. No problem.

2 MS. OSUALA:

3 Your Honor, may I approach the
4 witness?

5 JUDGE GULIN:

6 Please.

7 EXAMINATION BY MS. OSUALA:

8 Q. Mr. Cureington, what I have handed
9 you is a copy of advisor witness Joseph Rogers,
10 an exhibit to his testimony Exhibit JWR-4.

11 MS. OSUALA:

12 Sorry, Your Honor.

13 EXAMINATION BY MS. OSUALA:

14 Q. And looking at that, do you
15 recognize this as the letter or the filing from
16 the advisors as the recommendations with
17 respect to ENO's New Orleans Power Station
18 supplemental filing?

19 A. It looks familiar.

20 Q. Okay. And you can use that document
21 to refresh your memory or I can read from it,
22 but do you remember the advisors recommending
23 that ENO do two portfolios that would use the
24 Aurora automated resource optimization logic
25 software or do an optimization analysis?

1 A. I'm sorry. You're asking me if I
2 recall?

3 Q. Do you recall doing it, yes. Them
4 asking you to do that?

5 A. Yes. I recall the request including
6 that specific requirement.

7 Q. And those two portfolios, one of
8 them was supposed to be a least cost portfolio;
9 correct?

10 A. Yes. The advisors requested that we
11 run the optimization in two different ways.

12 Q. And one of them was the least cost
13 portfolio and the second one would be a second
14 best least cost portfolio?

15 A. Right.

16 Q. I'm adding words there. I
17 apologize.

18 But if you turn to Exhibit SEC-12 of
19 your supplemental and amending direct
20 testimony, page 2 of that.

21 A. Yeah.

22 Q. I believe that's the New Orleans
23 peaker project inputs and assumptions.

24 A. Okay.

25 Q. Here it has four portfolios in terms

1 of requested portfolios, and I'm assuming or --
2 The requested portfolios here is what you
3 referred to as the ones that were recommended
4 by the advisors; correct?

5 A. So the requested portfolios are our
6 attempt to try to respond to and accommodate
7 the advisors' request.

8 Q. And what you did was for requested
9 portfolio -- I just want to, like, understand
10 what exactly you did here. So for requested
11 portfolio Case 3 that has the RICE engines,
12 that's the only major resource within that
13 portfolio; is that correct?

14 A. No, that's not correct.

15 Q. What would be another reason?

16 A. So in all of the portfolios,
17 including the referenced portfolios, we've
18 included a 100 megawatt solar resource as well.

19 Q. Right, because that's already in
20 your loading capability study; correct? That's
21 already planned?

22 A. Well, no. These are all proposed
23 resources. None of these are complete. So
24 your question was whether we included the
25 only -- Your question was whether or not Case 3

1 only included the RICE engines as a significant
2 addition. I just wanted to clarify that, no, a
3 hundred megawatts of solar is a very
4 significant additional resource as well.

5 Q. Okay. And I didn't mean to say that
6 it wasn't a significant resource, but that is
7 part of what you base this -- Why don't you go
8 through the base assumptions for each request,
9 for each requested portfolio?

10 A. So what we've done on page 2 of this
11 exhibit is summarize at a high level the
12 different resource additions to each portfolio,
13 and as you can see on the line labeled "ENO
14 peaker" on the far left, the answer to that
15 question indicates whether or not there is a
16 version of NOPS in each of the portfolios, that
17 being either the reciprocating engines or the
18 combustion turbine.

19 And then from there moving down, you
20 have assumptions about future demand-side
21 management programs, transmission upgrades, and
22 solar resources. And so the matrix indicates,
23 you know, the assumptions that were made in
24 each portfolio.

25 Q. And then, after you did all of these

1 things -- and we'll say the RICE engine would
2 be Case 3. The CT would be Case 3G. You have
3 solar tracking, Case 4A, which is an additional
4 hundred megawatts of solar in addition to what
5 you have planned in your load and capability
6 forecast; correct?

7 A. Yes. Case 4A includes an
8 incremental 100 megawatts to the 100 that was
9 already in all of the cases.

10 Q. And Case 4B would be onshore wind?

11 A. Yes, Case 4B includes onshore wind
12 and a hundred megawatts of solar.

13 Q. And then, did what you do is just
14 take those four portfolios and just figured out
15 the cost and then compared those costs and then
16 figured out what was the lowest cost out of the
17 four of them?

18 A. So, generally speaking, that's the
19 idea. We run the optimization production cost
20 model on each of the portfolios to identify the
21 total variable supply cost and then we combine
22 that with the fixed revenue requirement
23 associated with each portfolio to produce what
24 we call a total relevant supply cost and then
25 we discount the value of that over the planning

1 horizon so that you can compare all of the
2 portfolios to today's dollars on an equal
3 footing.

4 Q. Is that the same as -- What the
5 advisors asked you to do, is that the same as
6 the optimization analysis using Aurora that the
7 advisors asked in its recommended letter that I
8 gave you today?

9 A. I'm sorry. Could you point me
10 specifically to what part of the request you're
11 referring to?

12 Q. Sure. On page 2 and it has the
13 graph numbered two.

14 A. I'm sorry. The what numbered two?

15 Q. Graph numbered two on page 2.

16 A. Graph number?

17 Q. Paragraph No. 2?

18 A. Oh, paragraph number. I'm sorry.

19 Okay.

20 Q. I'm sorry. I was a journalism
21 major.

22 So it says at the last line, aurora
23 XMP automated resource optimization logic, and
24 they shorten it to, Optimization analysis. (As
25 read.) Is that the same as what you did here?

1 A. So I don't know specifically if we
2 interpreted the advisors' request exactly
3 correct, but we did use Aurora to run
4 production cost modeling. But as one of the
5 advisors' witnesses, I believe Joe Rogers
6 possibly, my memory could not be correct,
7 discussed the issues we encountered with the
8 optimization engine associated with the
9 capacity expansion component of Aurora, but I
10 explained in testimony why the model simply
11 wouldn't solve under the requested portfolios
12 and so we had to run these portfolios
13 effectively using the same assumptions we would
14 have provided to the expansion algorithm to get
15 to the same answer.

16 Q. Did you discuss with the advisors
17 prior to doing that that you were going to not
18 do two portfolios, you were going to try and
19 simulate what you were doing?

20 A. So first let me say that it's not
21 two portfolios.

22 Q. Sorry. In the recommendations, it
23 does say -- sorry -- on Paragraph 4 on page 2,
24 it says, The optimization analysis should
25 identify two resource portfolios. (As read.)

1 A. I'm sorry, yes, but we were talking
2 about the problem we encountered with a
3 component of the Aurora model.

4 Q. Right. Right. And that's why you
5 did these four portfolios; correct? These four
6 different portfolios on SEC-12?

7 A. No. What I'm saying is that these
8 four portfolios would have been run regardless
9 of the issue that we encountered with the
10 expansion algorithm.

11 Q. And did you explain that to the
12 advisors before you ran this portfolio?

13 A. I personally did not explain that to
14 the advisors.

15 Q. Okay. Mr. Cureington, were you here
16 earlier today during the testimony of
17 Mr. Jonathan Long?

18 A. Yes.

19 Q. I just have one question I'd like --
20 Well, I'd like to stay on your Exhibit SEC-12
21 and go to page 3. And on that page, it's the
22 general assumptions and technology
23 alternatives. That refers to the four
24 requested portfolios; is that correct?

25 A. No, that's not correct. These are

1 general assumptions that we employed regardless
2 of the case that we evaluated.

3 MR. OLSON:

4 Your Honor, if we could just break
5 for a minute. This exhibit itself is
6 highly sensitive and some of the numbers
7 in here are.

8 MS. OSUALA:

9 I wanted to ask about just the
10 installed cost of the CT and the
11 installed cost of the RICE.

12 MR. OLSON:

13 Okay. That's fine.

14 JUDGE GULIN:

15 Okay. Thank you.

16 EXAMINATION BY MS. OSUALA:

17 Q. So earlier today, Ms. Miller asked
18 Mr. Long a series of questions about the EPC
19 contract and its renegotiation figure. I'm not
20 going to say any HSPM. Do you remember that
21 line of questioning?

22 A. Generally I recall that line of
23 questioning.

24 Q. I wanted to ask if for the installed
25 cost for the CT -- which would be 232 million;

1 correct?

2 A. That's what's listed here, yes.

3 Correct.

4 Q. And the RICE, which would be
5 210 million. Do you see that there?

6 A. I see the reference.

7 Q. Do those numbers account for any
8 price changes due to renegotiation of these
9 contracts? Well, I think the EPC contract
10 refers to one, one specific. I think it's just
11 the CT. But do those numbers account for any
12 price changes due to renegotiation of those
13 contracts?

14 A. I can't say exactly what the price
15 listed here accounts for in the contract. That
16 would be a question for Mr. Long, but I do know
17 that this is the current estimate of the
18 installed cost for these units.

19 MS. OSUALA:

20 No further questions, Your Honor.

21 JUDGE GULIN:

22 Thank you, Ms. Osuala.

23 And Ms. Harden next.

24 MS. HARDEN:

25 Okay.

1 EXAMINATION BY MS. HARDEN:

2 Q. Good afternoon. My name is Monique
3 Harden. We've met before. I'm an attorney
4 with for Deep South Center for Environmental
5 Justice. And, Mr. Cureington, my questions for
6 you today start with the site assessment.

7 According to your deposition at page
8 130, lines 18 through 22 --

9 MR. OLSON:

10 Your Honor, his deposition hasn't
11 even been admitted into evidence yet and
12 it sounds like -- it's happened a couple
13 of times that they've started asking
14 questions out of the deposition, but they
15 haven't been using them to contradict any
16 other testimony. So they've not laid any
17 kind of foundation. They just start
18 diving into these depositions. So I
19 would ask that she lay a proper
20 foundation before directing him to pages
21 that he hasn't been asked about.

22 JUDGE GULIN:

23 Are you using the deposition for a
24 prior inconsistent statement? What is
25 the purpose of --

1 MS. HARDEN:

2 Just to refresh his memory because
3 he had a very long deposition and I just
4 wanted to just jump right to the point.
5 I thought it would ease the efficiency of
6 this.

7 JUDGE GULIN:

8 You can certainly review -- What did
9 you want him to review, what section?

10 MS. HARDEN:

11 It's your deposition,
12 Mr. Cureington, at page 130 starting with
13 lines 18 going through 22.

14 MR. CUREINGTON:

15 Okay. Give me just a -- please give
16 me just a minute.

17 MS. HARDEN:

18 Sure.

19 MR. CUREINGTON:

20 Okay.

21 EXAMINATION BY MS. HARDEN:

22 Q. Now, in this part of your
23 deposition, you say that you reviewed but did
24 not conduct the site assessment that supports
25 the selection of the Michoud location for the

1 proposed Entergy gas plant; is that correct?

2 A. That's correct. I rely on the
3 planning organization to conduct that analysis.

4 Q. Did you in your review look at more
5 than one site assessment involving Michoud as a
6 potential location for the gas plant proposal?

7 A. I'm sorry. When you say "more than
8 one site assessment," what specifically --

9 Q. When you said you reviewed site
10 assessment, was it one or multiple -- or more
11 than one?

12 A. So I think we were discussing
13 Exhibit 5 in the deposition, which is the site
14 assessment that I rely on to support the
15 conclusions that were reached.

16 Q. Would you say that there was one
17 site assessment, or was there more than one
18 site assessment?

19 A. So there's just one site assessment
20 that I'm relying on in support of my testimony.

21 MS. HARDEN:

22 Okay. Can I refer to his materials
23 that's HSPM? I hate to do it moving the
24 room out, but --

25 JUDGE GULIN:

1 Why don't you tell me?

2 MS. HARDEN:

3 Well, no. I mean, I'm going to have
4 to do it, but --

5 JUDGE GULIN:

6 Okay. All right. Then I'm going to
7 ask that the room be empty of those who
8 have not signed the confidentiality
9 agreement. Thank you for your patience.

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So we're out of HSPM, dealing with
the site assessment.

JUDGE GULIN:

Yes, thank you so much for
bringing --

MS. HARDEN:

That's all right.

JUDGE GULIN:

-- that to my attention.

MS. HARDEN:

Thank you, Mr. Brown.

JUDGE GULIN:

Please, sir. Thank you.

Let us know when you are finished
reviewing the resolution.

MR. CUREINGTON:

Okay.

EXAMINATION BY MS. HARDEN:

1 Q. Okay. So the title of this --

2 JUDGE GULIN:

3 Let him finish.

4 MS. HARDEN:

5 I thought he was ready.

6 MR. CUREINGTON:

7 I'm sorry, ma'am. I was just
8 responding to -- Okay. I'm ready.

9 EXAMINATION BY MS. HARDEN:

10 Q. Okay. Just to get all of our
11 bearings straight here, I've just passed to
12 you, Mr. Cureington, City Council Resolution
13 numbered R-15-524. And this resolution was
14 referenced in earlier cross-examination of your
15 colleague, Mr. Jonathan Long, who said that you
16 would probably know the steps leading up to
17 this resolution. So I have a few questions
18 about that.

19 A. Okay.

20 Q. Okay.

21 MR. OLSON:

22 Your Honor, we don't have a copy of
23 whatever it is they're looking at.

24 (Whereupon Mr. Olson is tendered a
25 copy of the document.)

1 EXAMINATION BY MS. HARDEN:

2 Q. All right. So the title of this
3 resolution is the Proposed settlement
4 terminating the Entergy System Agreement in
5 FERC Docket No. ER14-75; is that correct,
6 Mr. Cureington? (As read.) Is that what your
7 copy reads?

8 A. Yes, I have that copy.

9 Q. I want to bring your attention to
10 page 12, the first full paragraph that begins
11 with "Whereas."

12 A. Okay.

13 Q. And the paragraph that follows.
14 Okay?

15 A. Give me just a second.

16 Q. Sure.

17 MR. REED:

18 Counsel, could you give that page
19 reference again?

20 MS. HARDEN:

21 Page 12.

22 MR. REED:

23 Thank you.

24 MR. CUREINGTON:

25 Okay.

1 EXAMINATION BY MS. HARDEN:

2 Q. So at this section of the Council
3 resolution, it reads as follows, Whereas, ENO
4 will use reasonable, diligent efforts to pursue
5 the development of at least 120 megawatts of
6 new build peaking generation capacity within
7 the City of New Orleans. As part of this
8 commitment, ENO will fully evaluate Michoud or
9 Patterson along with any other appropriate
10 sites in the City of New Orleans as a potential
11 site for a combustion turbine, CT, or other
12 peaking unit to be owned by ENO or by a third
13 party with an agreed to PPA -- which stands for
14 purchase power agreement -- to ENO. This
15 evaluation will take into consideration, among
16 other material considerations, the results of
17 the Michoud site analysis that was completed in
18 connection with the summer 2014 request for
19 proposal.

20 And, whereas, ENO commits to use
21 diligent efforts to have at least one future
22 generation facility located in the City of New
23 Orleans. And it goes on. (As read.)

24 The question to you, Mr. Cureington,
25 with regards to those two provisions in the

1 City Council resolution is what led to this?

2 A. So my understanding, as discussed in
3 the resolution, is this is a summary of the
4 proposed settlement agreement that was entered
5 into between the Entergy operating companies
6 and, in this case, at the FERC, and then here
7 locally at the retail level between the City
8 Council's advisors and Entergy New Orleans in
9 furtherance of the early termination of the
10 System Agreement.

11 Q. To your knowledge, was Entergy New
12 Orleans a party to this settlement agreement?

13 A. To the one summarized here, yes, I
14 believe so.

15 Q. So before this resolution, at least
16 Entergy was leaning towards agreeing to these
17 terms?

18 MR. OLSON:

19 Assuming facts not in evidence.

20 JUDGE GULIN:

21 Could you rephrase that question,
22 please?

23 MS. HARDEN:

24 It's really more of a chronology I'm
25 trying to establish here.

1 EXAMINATION BY MS. HARDEN:

2 Q. Prior to the resolution, was there a
3 proposal for a settlement agreement with these
4 terms that Entergy New Orleans was a party to?

5 A. So I don't have the exact timing
6 committed to memory, but there certainly was a
7 settlement agreement before this resolution
8 came out because it's summarized here.

9 Q. Thank you.

10 And Entergy New Orleans was a party
11 to that settlement agreement?

12 A. To my knowledge, yes, that's
13 correct.

14 Q. Did you have any role in setting the
15 120 megawatts as a minimum for gas plant
16 generation capacity?

17 A. I'm sorry. What 120 megawatt
18 minimum?

19 Q. The 120 megawatts that's set as a
20 floor where it says, at least 120 megawatts new
21 build peaking generation capacity. (As read.)

22 A. So I was aware of the number that's
23 referenced here, but I didn't specifically
24 provide that number.

25 Q. Do you know the Entergy personnel

1 who did work on this?

2 A. No. This was a proceeding that was
3 litigated at the FERC.

4 Q. So with regards to the proceeding
5 that was litigated at the FERC, were any
6 Entergy engineers involved with capacity or
7 generation, involved in setting this term for a
8 hundred and twenty megawatts? Where did it
9 come from?

10 A. So to answer your first question, I
11 don't know specifically who was involved in
12 those settlement negotiations because they're
13 confidential and limited to the parties that
14 are involved in that case at the FERC, but what
15 I can say is that, as I indicated to Mr. Brown
16 earlier, this simply reflects the fact that
17 there were a variety of circumstances in play
18 at the time that we were contemplating early
19 termination of the System Agreement and one of
20 those was the early -- the potential early
21 deactivation of Michoud.

22 I believe the resolution is dated
23 November 2015. We deactivated Michoud in June
24 of 2016. We had already submitted Attachment Y
25 requests to MISO to study transmission upgrades

1 necessary to deactivate that unit, and so I
2 think this simply reflects that the Council
3 understood that by relying on Michoud for the
4 last 40 plus years, they understood the
5 importance of having local generation. And so
6 I think this amount is just a reference point
7 for some minimum that they wanted us to at
8 least contemplate going forward. It's not a
9 requirement, but it's a minimum for us to
10 consider going forward.

11 Q. And this resolution, did it come
12 before the completion of the integrated
13 resource plan?

14 A. As it's dated, it would have been
15 between the draft and the final.

16 Q. So it was before it was completed?

17 A. Yes, it was before the final IRP was
18 filed, but we had already identified the
19 preferred portfolio in the draft IRP earlier
20 that year.

21 Q. With regards to identifying a
22 location with Michoud and Patterson or other
23 locations in New Orleans, were other locations
24 in New Orleans considered?

25 A. So I'm not aware of any other

1 locations that are possible alternatives to
2 Michoud and Patterson.

3 Q. Okay.

4 A. We considered Michoud and Patterson
5 obviously because we own them and they have
6 electric and gas interconnections that reduced,
7 you know, the cost to construct a new resource.

8 Q. Were you responsible for overseeing
9 the development of the 2015 IRP, integrated
10 resource plan?

11 A. Yes.

12 Q. And would you agree that the process
13 for developing the integrated resource plan is
14 a legal requirement in the City of New Orleans
15 for planning energy to meet future needs?

16 A. I'm sorry. I don't know what you
17 mean by "legal requirement."

18 Q. Well, where does it come from?

19 A. Where does what come from?

20 Q. Your integrated resource plan, is it
21 pursuant to a law in the City of New Orleans.

22 MR. OLSON:

23 Objection to the extent she's asking
24 him to interpret her -- have him explain
25 the legal requirements of the city.

1 MS. HARDEN:

2 I'm only asking for that and to the
3 extent that it pertains to his work and
4 overseeing the integrated resource
5 planning process. Either he knows or he
6 doesn't know if there's a law regarding
7 establishing integrated resource plans.

8 JUDGE GULIN:

9 You can answer that.

10 MR. CUREINGTON:

11 Sure. So my understanding is the
12 Council's IRP requirements have been put
13 in place for some time now. I don't know
14 whether or not that rises to a level of a
15 legal obligation, but we certainly
16 attempt to comply with their IRP
17 requirements when we conduct our IRP.

18 EXAMINATION BY MS. HARDEN:

19 Q. And in the 2015 integrated resource
20 plan, Entergy selected the 226 megawatt CT gas
21 plant as part of the preferred portfolio; is
22 that correct?

23 A. I'm sorry. Which IRP?

24 Q. The 2015.

25 A. The final?

1 Q. Yes, sir.

2 A. Yes, we included a preferred CT
3 technology in both the draft and the final IRP.

4 MS. HARDEN:

5 I'd like to introduce one page from
6 the integrated resource plan and it's
7 page 79.

8 JUDGE GULIN:

9 You'd like to introduce that as
10 substantive evidence at this point?

11 MS. HARDEN:

12 Yes, sir.

13 JUDGE GULIN:

14 Is there any objection to that?

15 MR. OLSON:

16 Obviously subject to optional
17 completeness.

18 JUDGE GULIN:

19 That will be marked as DSCEJ No. 1.

20 Let me just understand, is this a
21 public document?

22 MR. OLSON:

23 Your Honor, we --

24 MS. HARDEN:

25 Yes, it is.

1 MR. OLSON:

2 -- ask that we attach the final IRP
3 also --

4 JUDGE GULIN:

5 Let me ask Ms. Harden. This is a
6 public document?

7 MS. HARDEN:

8 That is correct, sir. This page is
9 from the integrated resource plan that
10 Entergy filed with our City Council of
11 New Orleans on, I believe it was
12 February 1st, 2016.

13 MR. OLSON:

14 We just wanted to confirm this is
15 the final. You know, there were multiple
16 drafts filed.

17 JUDGE GULIN:

18 Okay. I don't think I can even
19 admit it. I can take judicial notice of
20 it, but certainly subject to check, it
21 will be admitted as DSCEJ 1 as
22 substantive evidence.

23 MS. HARDEN:

24 Thank you, Your Honor.

25 EXAMINATION BY MS. HARDEN:

1 Q. So can you identify the document I
2 just handed to you, Mr. Cureington?

3 A. I mean, I recognize the table as a
4 format of a table we included in the IRP.

5 Q. And what is this table showing?

6 A. It is showing our projections of the
7 company's peak load and total resource
8 requirements and comparing that against our
9 projections of our existing resource portfolio
10 of supply and demand-side resources to get to a
11 comparison of what the net is of those two, in
12 other words, the long-term needs that we have.

13 Q. And looking at the load and capacity
14 table for the years 2016 through 2035, can one
15 describe some of the data as the projections or
16 forecasts by Entergy New Orleans of future
17 customer demand for energy and electricity?

18 A. I'm sorry. Could you restate the
19 question?

20 Q. Yes. Looking at what's titled, Load
21 and capability for the years 2016 through 2035,
22 is it accurate to describe some of the data
23 contained therein as Entergy New Orleans'
24 forecasts of customer demand for electricity in
25 future years? (As read.)

1 A. Yeah. I just don't see the
2 reference to the load and capability that you
3 described. Is there a specific --

4 Q. Oh, it's in the --

5 A. Is there a specific row you want --

6 Q. Yeah. If you look at the -- It's in
7 the gray shaded -- It may not be very clear.

8 A. What's the label?

9 Q. The top line underneath the title.

10 A. Right. Right. The whole document,
11 correct. Okay.

12 Q. So would that be correct?

13 A. I'm sorry. The --

14 Q. Say it again?

15 A. Yeah, say it again.

16 Q. Sure. So with regards to the load
17 and capability for the years 2016 through 2035,
18 would it be correct to say that some of the
19 data contained herein are Entergy's projections
20 of forecasts of customer demand for electricity
21 in future years?

22 A. That's precisely what we were trying
23 to do here is use our projected load forecast
24 and compare that to our existing resource
25 portfolio.

1 Q. This was very tough for me to learn
2 so I just want to kind of show off a little
3 bit.

4 All right. Thank you,
5 Mr. Cureington, for agreeing on that. I got
6 that correct.

7 So I want you to look at the year
8 2030.

9 A. Okay.

10 Q. And what does it project as customer
11 demand for energy?

12 A. So this is a peak load forecast, not
13 an energy forecast, and it projects our peak
14 load in 2030 of 1,251 megawatts such that when
15 you add our 12 percent planning reserve margin,
16 we projected at this time to need
17 1,401 megawatts to meet our overall planning
18 reserve margin requirement.

19 Q. So the total projected amount,
20 including peak load and your reserve margin of
21 12 percent, totals 1,401 megawatts of
22 capability that would be needed for that year?

23 A. Yes, from an overall capacity
24 standpoint, that's correct.

25 Q. Thank you.

1 Now, I'd like you to take a look at
2 your direct testimony on page 18.

3 A. Are you looking at the HSPM version?

4 Q. No, I'm not.

5 A. There's different page numbers,
6 so --

7 Q. Yes, I'm looking at the public
8 version.

9 A. I've got the public. Page 18?

10 Q. Page 18.

11 A. Okay.

12 Q. And this is in your direct
13 testimony; is that correct?

14 A. Yes.

15 Q. And Table 2 shows what exactly? Can
16 you explain what Table 2 is on this document?

17 A. Sure. So Table 2 takes a snapshot
18 of the long-term resource needs that we've
19 projected at the time the forecast was done for
20 our direct testimony and breaks it down by
21 supply role.

22 Q. And for the year 2030 as shown in
23 Table 2, the total megawatt resource need is
24 1,131; is that correct?

25 A. I'm sorry. The total resources? Is

1 that what your question was?

2 Q. Yes.

3 A. Yes. That's not the need. That's
4 just the existing resources.

5 Q. I'm so sorry. The need is
6 1,336 megawatts?

7 A. That's correct.

8 Q. Sorry about that. Thank you.

9 So this is different, is it not,
10 from what was projected in the IRP for the year
11 2030?

12 A. That's correct. As we indicated,
13 the load forecast has declined since the IRP.

14 Q. Would you agree that the difference
15 is 65 megawatts between the two forecasts?

16 A. Yes, that looks correct.

17 Q. All right. There's one more
18 forecast I'd like you to take a look at.

19 MS. HARDEN:

20 Your Honor, may I approach?

21 JUDGE GULIN:

22 Please.

23 MS. HARDEN:

24 You might need a looking glass for
25 this. It's a little squinchy.

1 MR. CUREINGTON:

2 Okay.

3 EXAMINATION BY MS. HARDEN:

4 Q. Are you ready for a question,
5 Mr. Cureington?

6 A. I'm sorry. Yes.

7 Q. Okay. Great.

8 Can you identify the document I just
9 handed to you?

10 A. No, I can't.

11 MS. HARDEN:

12 Your Honor, for the record, this is
13 Exhibit 1 to a filing that Entergy New
14 Orleans made to this docketed proceeding
15 of the 2017 forecast of load and
16 capability.

17 EXAMINATION BY MS. HARDEN:

18 Q. And does this now look familiar to
19 you at all, Mr. Cureington?

20 A. Well, so it's not a complete version
21 of the exhibit that we filed. So I don't know
22 if -- I mean, if you're asking me to confirm
23 that this is a portion of that, I would need
24 time to do that.

25 MR. GUILLOT:

1 Ms. Harden, is this the public
2 version of the --

3 MS. HARDEN:

4 This is the -- Exactly. I'm sorry.
5 Thank you, Mr. Guillot.

6 The information that you're probably
7 used to seeing on the document have been
8 excerpted, redacted by Entergy New
9 Orleans, and this is the public version.

10 MR. CUREINGTON:

11 Okay.

12 EXAMINATION BY MS. HARDEN:

13 Q. So, again, we're looking at load and
14 capability of the years 2017 through 2035; is
15 that correct?

16 A. That's correct.

17 Q. And, again, looking in at the year
18 2030 --

19 JUDGE GULIN:

20 Would you like to have this
21 identified?

22 MS. HARDEN:

23 Oh, I'm sorry. Could we have this
24 identified is DSCEJ Exhibit No. 2?

25 JUDGE GULIN:

1 Yes.

2 MS. HARDEN:

3 Thank you, Your Honor.

4 EXAMINATION BY MS. HARDEN:

5 Q. Can you tell us what the forecasted
6 customer demand for the year 2030 is?

7 A. Yes. In 2030, we've projected the
8 peak here to be 1,145 megawatts, such that when
9 you add the 12 percent reserve requirement, you
10 get 1,282 megawatts of total need.

11 Q. Thank you.

12 Do you agree there's a 54 megawatt
13 decrease between the 2017 forecast and the
14 Table 2 and the 2026 application?

15 A. I'm sorry. In what year?

16 Q. Well, what I'm doing is I'm
17 comparing the forecasts for 2017 with your
18 Table 2 as part of your testimony in the 2016
19 application.

20 A. Okay. I was just trying to clarify
21 what year you wanted me to compare.

22 Q. This is all for the year 2030.

23 A. 2030. Okay.

24 Q. I'm sorry.

25 A. And what was the number again?

1 Q. Would you agree that it's a
2 54 megawatt difference?

3 A. Comparing 2030 for both?

4 Q. Yes.

5 A. No, I don't think so. It looks like
6 48. No. I'm sorry. You're correct. I was
7 looking at the wrong number. That's correct.
8 I was looking at the wrong date.

9 Q. So what is correct? Is that the --

10 A. Yeah, the 54 megawatts.

11 Q. Fifty-four megawatt decrease between
12 the two forecasts?

13 A. Correct.

14 Q. And would you also agree that
15 between the 2015 IRP that we first looked at
16 and the 2017 forecast, looking again at the
17 year 2030, that there's a 119 megawatt drop in
18 customer demand?

19 A. So this is a lot of mental math
20 you're asking me to do here. We're looking at
21 a lot of different documents, so --

22 Q. So what I'm doing here with this
23 question is subtracting 1,282, which is the
24 total demand forecasted for the year, peak
25 demand for 2030 in the 2017 forecast from the

1 2015 IRP forecast for that same year of 2030.

2 A. And what was your number?

3 Q. One hundred and nineteen megawatts.

4 A. I'm sorry. I was looking at the IRP
5 table. I'm not getting that number. You're
6 comparing the 2015 IRP to the most current
7 forecast; is that correct?

8 Q. Yes. So 1,401 minus 1,282.

9 A. I'm sorry. What was your number
10 again?

11 Q. A hundred nineteen megawatts.

12 A. Correct. Yes, that's correct.

13 Q. All right. I'm going to get a prize
14 after this cross.

15 So based on the February 2017
16 forecast of lower customer demand, is it
17 correct that Entergy asked for suspension of
18 the Council's proceeding on its initial
19 application?

20 A. I'm sorry. That was a long
21 question, so --

22 Q. Based on the forecast --

23 A. -- can you restate it?

24 Q. Based on the 2017 forecast of lower
25 customer demand, is it correct that Entergy

1 asked for a suspension of the proceeding on the
2 initial application?

3 A. Yes. We asked for a suspension to
4 evaluate the impact that the revised forecast
5 would have.

6 Q. Is it also true or correct that in
7 response to the lower forecast, Entergy
8 submitted a second application, this time
9 presenting two gas plant options, the
10 226 megawatt combustion turbine gas plant and
11 128 megawatt RICE unit?

12 A. So we conducted an updated
13 evaluation of what we already proposed in the
14 direct case, which was the CT, but we also
15 included an alternative, which was the
16 reciprocating engine option.

17 Q. Given the drop of 65 megawatts
18 between your projection in the June 2016
19 application and the 2015 IRP, so looking at
20 just those two data sets, can you explain why
21 Entergy did not make any adjustment or offer an
22 alternative to the 226 megawatt CT gas plant?

23 A. I'm sorry. When specifically?

24 Q. Well, let's unpack this.

25 In the IRP, you have this projection

1 for year 2030 that drops by the time you
2 prepare your June 2016 gas plant application;
3 correct?

4 A. Yes. The forecast we used in the
5 direct case was different from the IRP.

6 Q. And it was a much larger decrease,
7 right, of 65 megawatts versus the 54 that
8 happened between the gas plant application
9 forecast and the 2017 forecast?

10 MR. OLSON:

11 Object to the characterization.

12 MS. HARDEN:

13 What's wrong with saying 65 is
14 larger than 54?

15 MR. OLSON:

16 You called it major change.

17 EXAMINATION BY MS. HARDEN:

18 Q. Is 65 larger than 54?

19 A. Yes.

20 Q. Okay.

21 A. Focusing just on 2030?

22 Q. Yes, for the year 2030.

23 A. There were other years, though, that
24 were different.

25 Q. Can you explain why there was no

1 adjustment or offering a different alternative
2 than what was originally proposed in the IRP
3 that was also moved forward and through the
4 application as a proposal?

5 A. Yes. So although the load forecast
6 moderated, it didn't eliminate the needs that
7 we had previously identified. In fact, there
8 was still a substantial need in both cases for
9 both overall capacity and peaking and reserve
10 capacity.

11 Q. So in what you just said, did that
12 make you go back and rework or update your
13 planning analysis that was in the IRP?

14 A. No. The IRP is much too complex to
15 update on the time frame that we're talking
16 about here. We had already drawn the
17 conclusion through that process that a CT was
18 the best way to meet the identified needs and
19 simply because the load forecast moderated did
20 not eliminate that need and so there was no
21 need to revisit that analysis or that
22 assumption rather.

23 Q. Let me just be clear. My question
24 was not did you revise the IRP. My question is
25 in terms of your work of energy planning, was

1 there any going back to the drawing board and
2 reconsidering the analysis and the work plans
3 that were part of the -- and certainly part of
4 the integrated resource plan?

5 A. So the type of analysis that we
6 conducted in support of the direct case and all
7 of the subsequent analysis that we did was
8 consistent with what you would do in an IRP.
9 It was just much more focused on what specific
10 peaking technologies are the most cost
11 effective as opposed to any and all
12 technologies because we had identified a need
13 for that in the IRP and that need continues to
14 exist today. So just because the peak came
15 down doesn't mean you've eliminated the needs
16 that we identified. They've just moderated a
17 bit.

18 Q. Did you have to document that
19 analysis and the conclusion that it led to for
20 you?

21 A. I'm sorry. What analysis?

22 Q. What you just laid out was sort of a
23 summary of what you considered and the
24 conclusion you came up with, that
25 notwithstanding the lower forecast, it did not

1 change your position with regards to proposing
2 this gas plant. And what I'm wondering is was
3 there any documentation to the effect of
4 showing reconsideration based on that forecast
5 change and supporting the conclusion you
6 reached?

7 A. Yeah. I mean, I'm not trying to
8 sound too smart here, but that's what my direct
9 testimony attempted to accomplish. I laid out
10 a very complete summary of all of the analysis
11 that we've done in support of the CT using the
12 current load forecast that existed at that
13 time, which I acknowledge, you know, had
14 moderated from the IRP, but the needs were
15 still there.

16 Q. Would you say that the same thing
17 holds true for the second application? Like
18 that would be the documentation of your
19 analysis between the last forecast and the
20 forecast that was shown that was developed in
21 2017?

22 A. Yes, I would simply because, again,
23 the needs that we've identified have not
24 materially changed. The load has just
25 moderated since the IRP.

1 JUDGE GULIN:

2 Ms. Harden, a heads up. You've got
3 about five minutes, I believe.

4 MS. HARDEN:

5 Okay.

6 JUDGE GULIN:

7 And also with respect to Exhibit
8 No. 2, were you offering that for any
9 purpose?

10 MS. HARDEN:

11 I don't think it's in the record is
12 my only issue.

13 MR. GUILLOT:

14 I believe it is in the record. Is
15 this the exhibit that you took from our
16 response to your motion to make the load
17 forecast public?

18 MS. HARDEN:

19 Yes.

20 MR. GUILLOT:

21 Then it's in the record as an
22 exhibit to that response.

23 MS. HARDEN:

24 So is there any problem with making
25 it an exhibit in this line of

1 questioning, cross-examination then?

2 JUDGE GULIN:

3 You can certainly offer it for the
4 purposes of cross-examination.

5 MS. HARDEN:

6 Thank you.

7 JUDGE GULIN:

8 Okay.

9 MS. HARDEN:

10 Is there any reason why it cannot be
11 also submitted for substantive evidence?

12 JUDGE GULIN:

13 Is there any objection to that?

14 MR. GUILLOT:

15 Subject to authentication, Your
16 Honor, I think we would not object.

17 JUDGE GULIN:

18 Okay. Very well. Subject to
19 authentication, it is admitted as
20 substantive evidence.

21 MS. HARDEN:

22 Okay. One last question,
23 Mr. Cureington in the few minutes I've
24 got.

25 EXAMINATION BY MS. HARDEN:

1 Q. If the Council approved the seven
2 RICE units, would Entergy expect to add more
3 RICE units for projected increases in customer
4 demand?

5 MR. OLSON:

6 It calls for speculation.

7 MS. HARDEN:

8 He's an energy planner. That's what
9 he does all day long.

10 JUDGE GULIN:

11 Can you just restate the question,
12 please? Or just repeat it?

13 MS. HARDEN:

14 Sure.

15 EXAMINATION BY MS. HARDEN:

16 Q. If the Council approved seven RICE
17 units, would Entergy expect to add more RICE
18 units for projected increases in customer
19 demand?

20 JUDGE GULIN:

21 If you can answer it.

22 MR. CUREINGTON:

23 So understanding that I haven't
24 evaluated what we would do in the
25 alternative if the Council approves the

1 seven RICE units, but recognize that that
2 would only meet approximately half of the
3 needs that we've identified over the
4 planning horizon. So to the extent the
5 Council chooses that option and we needed
6 to come back in the next few years to
7 ensure that we had the capacity that we
8 needed not met by the RICE alternatives,
9 then that would be one of considerations.
10 I just don't know how that would compare
11 to the other alternatives just because
12 it -- again, there are a variety of
13 things there that are changing.

14 MS. HARDEN:

15 Thank you, Mr. Cureington.

16 No further questions, Your Honor.

17 JUDGE GULIN:

18 Thank you, Ms. Harden.

19 I think what I'd like to do is -- We
20 still have some time. Let's go ahead and
21 take a ten-minute break, and then we can
22 go to Air Products. We're not going to
23 be able to get through Mr. Cureington
24 today, but at least get a jump on
25 tomorrow, which is a very long day, if we

1 can take care of Air Products cross
2 today. So ten-minute break. Come back
3 at five after four.

4 (Whereupon a recess was taken.)

5 JUDGE GULIN:

6 We're going to begin with
7 Mr. Edwards. And you're indicating we're
8 beginning with HSPM?

9 MR. EDWARDS:

10 Yes, Your Honor.

11 JUDGE GULIN:

12 Okay. I have to ask those who have
13 not signed the agreement to please leave
14 the room at this time.

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JUDGE GULIN:

Okay. I would ask that someone please invite people in who were asked to leave before, and we can go back to general session.

1 Thank you.

2 (Whereupon a pause occurred in the
3 proceedings.)

4 EXAMINATION BY MR. EDWARDS:

5 Q. Mr. Cureington, do you have any
6 familiarity or responsibility with respect to
7 how costs are billed to customers on the rider,
8 the PPCACR, P-P-C-A-C-R?

9 A. No, I do not.

10 MR. EDWARDS:

11 I think I've asked all the questions
12 I need to ask today of you. I thank you
13 very much for your patience.

14 JUDGE GULIN:

15 Thank you, Mr. Edwards.

16 Ms. Hand, about how much would you
17 estimate you have?

18 MS. HAND:

19 If Mr. Cureington doesn't surprise
20 me, probably around a half an hour.

21 JUDGE GULIN:

22 And at this point, how much recross,
23 if any, do you anticipate before we hear
24 from Ms. Hand?

25 MR. GUILLOT:

1 Very little, Your Honor. Maybe one
2 question.

3 JUDGE GULIN:

4 Why don't we try to complete that
5 this afternoon so that Mr. Cureington can
6 be excused after tonight and that will
7 give us a good head start on tomorrow?

8 So let's go to Ms. Hand.

9 EXAMINATION BY MS. HAND:

10 Q. Good afternoon, Mr. Cureington. I'm
11 Emma Hand, representing the Council's utility
12 advisors. You and I have met before?

13 A. Correct.

14 Q. Do you have in front of you copies
15 of all your prefiled testimony, the transcript
16 of your December 7th deposition, and a copy of
17 the advisors' testimony?

18 A. Yes to my testimony and the
19 deposition, but no to the advisors' testimony.

20 MS. HAND:

21 Your Honor, permission to approach?

22 JUDGE GULIN:

23 (Nods head affirmatively.)

24 MS. HAND:

25 Counsel, would you like to look at

1 this before I hand it to him?

2 MR. GUILLOT:

3 No.

4 JUDGE GULIN:

5 You're very adept with the
6 microphone.

7 MS. HAND:

8 Thank you.

9 EXAMINATION BY MS. HAND:

10 Q. And in my references to your
11 testimony, I'm going to be referring to the
12 HSP -- SM number. I think I got those letters
13 out of order, HSPM version.

14 So in your rebuttal testimony --

15 A. Okay.

16 Q. -- on page 28, starting at about
17 Line 7.

18 A. Okay.

19 Q. Would you agree that in that
20 section, you are criticizing the economic
21 analysis of advisors' witness Rogers for
22 relying on the assumption that the Council's
23 2 percent DSM goal can be achieved?

24 A. So what I was trying to do here is
25 simply acknowledge the fact that my

1 interpretation of advisor witness Rogers'
2 contention was -- is that we overestimated our
3 needs by virtue of not including the Council's
4 2 percent goal.

5 Q. But you would not say that it's
6 unreasonable for Mr. Rogers to suggest that the
7 2 percent goal should be taken into account in
8 the analysis as the Council is looking at the
9 potential outcomes of the various recommended
10 portfolios?

11 A. I wouldn't describe it as
12 unreasonable to consider, but I would describe
13 it as unreasonable to rely on for long-term
14 planning.

15 Q. And you would also agree that it's
16 reasonable to consider the 2 percent goal in,
17 for example, an IRP proceeding?

18 A. Yes. In fact, I think that's the
19 more appropriate place to consider the
20 Council's 2 percent goal.

21 Q. Now, in your analysis, isn't it true
22 that you only included -- and I believe I'm
23 referring to your reference case analysis
24 here -- the level of DSM that was in existence
25 for program year nine?

1 A. No, that's not --

2 Q. Program year six. I'm sorry.

3 A. That would be correct, yes. We
4 assumed what we've been able to achieve to date
5 will be sustainable over the 20-year planning
6 horizon.

7 Q. And earlier this morning, you and
8 Mr. Brown discussed the fact, did you not, that
9 the Council just last week approved the Energy
10 Smart program budgets and kilowatt hour savings
11 goals for program years seven through nine?

12 A. Yes, I recall that discussion.

13 Q. Knowing that the Council is
14 committed to continue pursuing as much energy
15 efficiency as is cost effective and that the
16 Council just approved program years seven
17 through nine budgets and kilowatt hour savings
18 goals, which I believe you agreed this morning
19 represent an increase over program year six,
20 would you agree that it would be reasonable to
21 expect that the actual amount of kilowatt hour
22 savings achieved through energy efficiency over
23 the planning horizon is likely to be higher
24 than that which already existed in program year
25 six?

1 A. No, I would not agree that it's
2 likely. It's possible. But as I described to
3 Mr. Brown, it's not something that I can rely
4 on today because we haven't actually achieved
5 it.

6 Q. Moving on to the topic of the MISO
7 PRA, which is the planning resource auction,
8 there in the price forecasts, in your
9 testimony, in various places in your rebuttal
10 testimony -- and for one example you can refer
11 to page 7, lines 17 through 23 -- you
12 characterize advisor witness Rogers as having
13 developed a forecast of the MISO PRA clearing
14 prices; is that correct?

15 A. Give me just a second.

16 (Whereupon a pause occurred in the
17 proceedings.)

18 MR. CUREINGTON:

19 Yes, I see the reference.

20 EXAMINATION BY MS. HAND:

21 Q. Isn't it more accurate, though, to
22 characterize Mr. Rogers' analysis as a
23 sensitivity analysis than as a forecast?

24 A. I think that that is a fair
25 characterization. I think it's important to

1 understand that although I referred to it as a
2 clearing price forecast, I did not mean that in
3 the sense that he actually attempted to produce
4 a forecast of what might clear the auction for
5 the next 20 years. I guess I just found it
6 interesting that he used that one clearing
7 price projection, whatever you want to call it,
8 to conclude that the transmission only case was
9 the lowest cost solution since it doesn't meet
10 our identified needs.

11 Q. But because he did not perform a PRA
12 forecast, several of your statements -- and I'm
13 looking at your rebuttal testimony starting at
14 page 24, line 14, and then carrying over
15 through page 25 to line 19. In that portion of
16 your testimony, you're claiming that his
17 forecast was flawed because it rests on things
18 like a static view of demand, speculation that
19 the market will remain over supplied, or that
20 other utilities and regulators will build, but
21 none of that is true, wouldn't you say, if
22 Mr. Rogers never made a forecast, if what he
23 was running was a sensitivity analysis?

24 A. So I'm sorry. With the distraction,
25 I got a little off track there. Could you

1 restate the question?

2 Q. Sure. To the extent that you -- I'm
3 going to rephrase a little bit to try to make
4 it simpler. To the extent that in your
5 testimony, you are putting forth criticisms of
6 a forecast that Mr. Rogers did and arguing that
7 it is not a viable forecast because it rests on
8 things like a static view of demand,
9 speculation that the market will remain over
10 supplied, or that other utilities and
11 regulators will build, none of those criticisms
12 are true if Mr. Rogers never made a forecast,
13 if what he was running was simply a sensitivity
14 analysis?

15 A. No, I wouldn't agree with that. So
16 whatever we call his projections, the fact is
17 that he relied on those projections as a
18 sensitivity, as you described it, but yet
19 concluded with that one sensitivity that the
20 transmission only scenario was the lowest cost
21 solution, when, in fact, it's not a solution at
22 all.

23 Q. And you understand that, don't you,
24 that Mr. Rogers is not recommending that the
25 Council base its decision exclusively on the

1 economic analysis, but that he does recommend
2 that there is a need that has been identified
3 that requires that capacity be built?

4 A. Yes, generally speaking, I
5 understand that.

6 Q. So on your rebuttal testimony at
7 page 24, and here I'm looking specifically at
8 lines 14 through 18.

9 A. Okay.

10 Q. You state there that, Advisors'
11 witness Rogers claims that the theory of supply
12 and demand may not apply in MISO because most
13 of the load-serving entities are vertically
14 integrated utilities with an obligation to
15 serve and, therefore, will build capacity
16 without an economic incentive. (As read.)

17 Have I correctly stated your
18 testimony there?

19 A. Yes.

20 Q. But isn't it true that Mr. Rogers
21 recognizes in his testimony -- I'm sorry.
22 That's the question I just asked you.

23 Isn't it true, though, that
24 Mr. Rogers' statement regarding the
25 applicability of the theory of supply and

1 demand was specific to the MISO PRA and not to
2 the entirety of MISO and its market structure?

3 A. I'm sorry. I don't understand the
4 distinction. I thought we were referring to
5 specifically the projections of clearing prices
6 in the auction.

7 Q. Right. But his statement is very
8 specific to the PRA and not to, for example,
9 other markets in MISO and whether they are
10 driven by the theory of supply and demand?

11 A. Yes, that's my understanding. He
12 was just referring to the capacity markets.

13 Q. Now, would you agree that utilities
14 have incentives other than the MISO PRA prices
15 that may influence whether or not they build
16 capacity?

17 A. I'm sorry. When you refer to
18 "incentives," what do you mean specifically?

19 Q. For example, they could be required
20 by a regulator to build capacity or know that
21 they are -- particularly with a vertically
22 integrated utility, it would be able to earn a
23 rate of return on its investment in the
24 capacity from its ratepayers regardless of what
25 the MISO PRA price is?

1 A. So from my perspective as the
2 resource planner, I'm focused exclusively on
3 the needs and the best way to meet those needs,
4 but I understand that we have shareholders who
5 invest in the company in order to earn a return
6 on the investments they make in our company,
7 but that's independent of the decisions that I
8 have to make around how best to meet our
9 customers' needs.

10 Q. Right. So does that mean that you
11 agree that you would have incentives, or
12 perhaps we'll say reasons, other than the MISO
13 PRA prices that influence the decision of
14 whether or not you're going to build capacity?

15 A. From my perspective, I'm focused
16 exclusively on what our resource needs are and
17 how best to meet those and that does not
18 include what, for example, we might earn on a
19 resource as a result of the investments we're
20 making.

21 Q. So the answer is yes?

22 A. I think so. I wanted to qualify
23 that.

24 Q. All right. And don't you admit in
25 your own testimony -- and I'm looking at your

1 rebuttal at page 23, lines 4 through 6 -- that
2 there is evidence that PRA clearing prices are
3 not representative of the true value of
4 capacity?

5 A. I see the reference.

6 Q. And don't you further state in your
7 rebuttal testimony on page 23, at lines 12 to
8 15, that, As the utility tasked with long-term
9 resource planning and an obligation to reliably
10 serve its customers, ENO cannot base its
11 long-term planning decisions on prevailing ACPs
12 in MISO's PRA in any given year? (As read.)

13 A. I see the reference.

14 Q. That's a direct quote from your
15 testimony, is it not?

16 A. That's correct.

17 Q. But isn't that exactly what ENO
18 recommends that the Council do by approving the
19 proposal for the CT unit?

20 A. No. What I'm referring to here is
21 historical prices.

22 Q. But the economic analysis that you
23 have presented to the Council demonstrating
24 that the CT unit is the most cost effective
25 unit is dependent upon that unit --

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MS. HAND:

And this may be HSPM. May I show it
to counsel?

JUDGE GULIN:

Absolutely. Let's go off the
record.

(Whereupon a pause occurred in the
proceedings.)

MS. HAND:

Okay. My next couple of questions
are going to pertain to HSPM.

JUDGE GULIN:

Okay. I'll ask if those who have
not signed the agreement to please step
out for a few moments, till notified.

(Whereupon a pause occurred in the
proceedings.)

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JUDGE GULIN:

Okay. If you would please invite in the people who left. Thank you.

EXAMINATION BY MS. HAND:

Q. So in spite of the noted volatility in MISO's auction clearing prices, you are asking the Council to rely on your MISO PRA clearing price projections in support of your economic analysis of the total relevant supply cost of the CT; aren't you?

A. We're asking the Council to rely on the analysis that we produced in support of my

1 testimony, that's correct. But, importantly,
2 there are other factors that the Council should
3 consider.

4 Q. Thank you.

5 Looking at your supplemental and
6 amended testimony page 31, starting at line 16.

7 A. I see the reference.

8 Q. Now, you refer there to four
9 additional portfolios that the companies
10 analyzed as the requested portfolio; is that
11 correct?

12 A. That's correct.

13 Q. And you state that those were
14 requested by the advisors; correct?

15 A. That's correct.

16 Q. However, isn't it also true that in
17 your testimony, you admit that you were not
18 able to perform the analysis that was actually
19 requested by the advisors, and, instead, you
20 attempted to simulate the results of the
21 analysis by creating the four so-called
22 requested portfolios instead? Is that correct?

23 A. So just so I'm clear, are you
24 referring to the footnote on page 32?

25 Q. I'm referring to page 32, lines 3

1 through 6.

2 A. Three through 6. Yes, this is where
3 I describe how the expansion algorithm
4 component of Aurora would not solve by virtue
5 of the unreasonable assumption that we could
6 achieve 3 percent goal. The model did not have
7 a need significant enough to solve four, so it
8 couldn't iterate to conclusion. So we had to
9 develop a set of cases that included the same
10 inputs we would have provided to the expansion
11 algorithm so that we could end up effectively
12 in the same place with the same information.

13 Q. Thank you.

14 Earlier today Mr. Brown asked you if
15 you had heard about the Tesla battery bank that
16 was just built in Australia. Do you recall
17 that conversation?

18 A. I recall.

19 Q. And do you know what the capacity of
20 that battery bank is?

21 A. I think he referenced it, but I do
22 not know specifically.

23 Q. Would it surprise you, based on what
24 you know about battery storage, to find out
25 that a battery that is the size of a football

1 field that is approximately a hundred megawatts
2 of capacity and a hundred and twenty-nine
3 megawatt hours can store enough energy to power
4 about 30,000 homes for one hour?

5 A. Would it surprise me? Not
6 necessarily.

7 Q. Would you expect that to be the type
8 of resource that would be of use to you in
9 meeting the identified resource needs here in
10 New Orleans?

11 A. Only if it were cost effective.
12 Technically speaking, batteries have value, but
13 they're just not cost effective at this time.

14 Q. But if you had a contingency on the
15 system that had a power outage of several days
16 affecting 50,000 customers in New Orleans,
17 would the battery resource, potentially in
18 combination with solar of that size and with
19 that capability, be able to keep or mitigate
20 the outage and keep homes lit until the fault
21 was corrected?

22 MR. BROWN:

23 Objection, Your Honor. This witness
24 has already stated he's not an expert in
25 transmission reliability and that's

1 clearly what this question is designed to
2 elicit.

3 MS. HAND:

4 No. I was asking whether this
5 generation resource, the solar battery,
6 would be able to keep the city lit while
7 the transmission problem was being fixed.
8 I was not asking about the transmission
9 problem itself.

10 JUDGE GULIN:

11 Okay. And put it in a -- I think
12 you were trying to put it in the form of
13 a hypothetical.

14 MS. HAND:

15 Right.

16 JUDGE GULIN:

17 Could you restate the premises?

18 MS. HAND:

19 Sure.

20 EXAMINATION BY MS. HAND:

21 Q. If you have a hypothetical situation
22 where the city had a transmission fault that
23 created a cascading outage that impacted 49 or
24 50,000 customers in the city, would a battery
25 unit that has a hundred megawatts of capacity

1 and a hundred and twenty-nine megawatts that
2 would be able to power 30,000 homes for one
3 hour be of much use in addressing that
4 situation?

5 A. So it would depend obviously on the
6 circumstances of the hypothetical, but,
7 generally speaking, no, I would not expect that
8 to be particularly useful simply because one
9 hour is much shorter, I think, than most
10 transmission outages last.

11 MS. HAND:

12 Thank you, Mr. Cureington. That's
13 all I have.

14 MR. BROWN:

15 And, Your Honor, I'd just like to
16 reurge my objection for the record.

17 JUDGE GULIN:

18 Very well.

19 All right. Mr. Olson, was there a
20 redirect?

21 MR. OLSON:

22 Give us two minutes, Your Honor.

23 JUDGE GULIN:

24 Okay.

25 (Whereupon a pause occurred in the

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proceedings.)

MR. OLSON:

We do not have any questions, Your Honor.

JUDGE GULIN:

Okay. That being the case, we will call it a day. And, Mr. Cureington, thank you very much for your testimony. You are excused.

Tomorrow we will begin with, I guess, Mr. Fagan at 8:30 tomorrow. So have a good evening.

(Whereupon the proceedings were recessed for the day at 5:09 P.M.)

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REPORTER'S CERTIFICATE

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