

STATE OF NEW HAMPSHIRE  
PUBLIC UTILITIES COMMISSION

April 26, 2023 - 9:02 a.m.  
21 South Fruit Street  
Suite 10  
Concord, NH

*[Hearing also conducted via Webex]*

RE: DE 21-004  
LIBERTY UTILITIES (GRANITE STATE  
ELECTRIC) CORP. d/b/a LIBERTY UTILITIES:  
Least Cost Integrated Resource Plan.

**PRESENT:** Chairman Daniel C. Goldner, Presiding  
Commissioner Pradip K. Chattopadhyay  
Commissioner Carleton B. Simpson

Alexander Speidel, Esq./PUC Legal Advisor

Doreen Borden, Clerk & PUC Hybrid  
Hearing Host

**APPEARANCES:** Reptg. Liberty Utilities (Granite  
State Electric) Corp. d/b/a  
Liberty Utilities:  
Michael J. Sheehan, Esq.

**Reptg. Residential Ratepayers:**  
Michael Crouse, Esq.  
Office of Consumer Advocate

**Reptg. New Hampshire Dept. of Energy:**  
Paul B. Dexter, Esq.  
Jay Dudley, Electric Group  
(Regulatory Support Division)

Court Reporter: Steven E. Patnaude, LCR No. 52

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1	Least Cost Integrated Resource Plan	<i>premarked</i>
	<b>{CONFIDENTIAL &amp; PROPRIETARY}</b>	
2	Least Cost Integrated Resource Plan [REDACTED - For PUBLIC Use]	<i>premarked</i>
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8	Technical Statement of Jay E. Dudley, Ronald D. Willoughby and Joseph J. DeVirgilio	<i>premarked</i>

**P R O C E E D I N G**

CHAIRMAN GOLDNER: Okay. Good morning. I'm Commissioner Goldner, Presiding Officer for today's hearing. I'm joined by Commissioners Chattopadhyay and Simpson.

This is the first scheduled day of a hearing for DE 21-004, the Liberty/Granite State Electric 2021 Least Cost Integrated Resource Plan review proceeding. The hearing was rescheduled from mid-March at the request of the Company due to severe weather at that time.

Our review of this proceeding is governed by the LCIRP statute, RSA 378:38 through :40, and other related statutes. The Order of Notice for this docket issued on March 4th, 2021, and the Commission's requirements set forth in Orders 26,207, 26,209, 26,408.

There are two days of hearings scheduled for this proceeding, with the second day scheduled for tomorrow, Thursday, if needed.

I'll note that the Department of Energy has stated in its filings dated February 17th, 2023, that it supports Commission approval of the

1       Company's 2021 LCIRP, as supplemented. We do not  
2       have any position statements on the record at  
3       this time from the Consumer Advocate regarding  
4       the LCIRP.

5               In any instance, we'll proceed with the  
6       full case in chief presentation with the  
7       Company's witnesses, followed by a panel of the  
8       DOE witnesses. We presume that the March 7th  
9       Joint Witness List and Exhibit List are still  
10      operative for our consideration. We welcome  
11      cross-examination from the OCA of all witnesses,  
12      and Commissioner questioning as well.

13              We also expect the filing of  
14      post-hearing briefs, with leave for replies,  
15      depending on the hearing today. And note that  
16      there are no intervenors in this proceeding.

17              Okay. Let's begin by taking  
18      appearances, starting with the Company.

19              MR. SHEEHAN: Good morning,  
20      Commissioners. Mike Sheehan, for Liberty  
21      Utilities (Granite State Electric) Corp.

22              CHAIRMAN GOLDNER: Thank you. And the  
23      New Hampshire Department of Energy?

24              MR. DEXTER: Good morning, Mr. Chairman

1           and Commissioners. My name is Paul Dexter,  
2           appearing on behalf of the Department of Energy.  
3           I'm joined today by Jay Dudley of the Electric  
4           Division from the Department, and our consultant,  
5           Ron Willoughby.

6                     I have one preliminary matter I'd like  
7           to address, if this is the appropriate time, or I  
8           can wait until --

9                     CHAIRMAN GOLDNER: We can do it now,  
10          Mr. Dexter.

11                    MR. DEXTER: Okay. You had mentioned  
12          the Exhibit List that was filed. And, due to the  
13          scheduling of this hearing and a conflict with  
14          one of our witnesses who is listed on that list,  
15          Joseph DeVirgilio, is not able to testify today.  
16          Mr. Willoughby and Mr. DeVirgilio work for the  
17          same company. And my intent was to have  
18          Mr. Willoughby adopt the testimony of  
19          Mr. DeVirgilio.

20                    I have consulted with counsel from  
21          Liberty and the OCA, and neither has an objection  
22          to that adoption.

23                    CHAIRMAN GOLDNER: Very good, sir.  
24          That sounds -- that will work from the

1 Commission's point of view.

2 Anything else you would like to  
3 mention?

4 MR. DEXTER: No thank you.

5 CHAIRMAN GOLDNER: Thank you. Okay.  
6 And the Office of the Consumer Advocate?

7 MR. CROUSE: Good morning,  
8 Commissioners. My name is Michael Crouse. I'm  
9 flying solo today, on behalf of the OCA. Thank  
10 you.

11 CHAIRMAN GOLDNER: Okay. Very good.  
12 Safety first. Excellent. So, that takes care of  
13 appearances.

14 For confidentiality, it's the  
15 Commission's expectation that a ruling on  
16 confidentiality will be embedded in the  
17 Commission's final order in this proceeding. In  
18 the meantime, we expect the parties to abide by  
19 the requirements of Puc 203.08, and alert the  
20 Commission to any potential discussion regarding  
21 confidential material, and to alert the Court  
22 Reporter as well.

23 At this time, I'll ask if there are any  
24 objections to the Company's Motion for

1 Confidential Treatment?

2 MR. DEXTER: None by the Department.

3 MR. CROUSE: None from the OCA.

4 CHAIRMAN GOLDNER: Okay. Thank you.

5 Okay. So, we see that there are three  
6 Company witnesses, and now two DOE witnesses,  
7 based on Mr. Dexter's update, proposed for  
8 today's hearing, and eight proposed exhibits.

9 Are there any objections to the  
10 exhibits offered today?

11 MR. DEXTER: None by the Department.

12 CHAIRMAN GOLDNER: Mr. Crouse, any  
13 objection to today's exhibits?

14 MR. CROUSE: No. None from the OCA.

15 CHAIRMAN GOLDNER: Thank you.

16 Okay. So, at this point, I'll invite  
17 counsel for the parties to make brief opening  
18 statements, beginning with the Company.

19 MR. SHEEHAN: Thank you.

20 As the Commission is well aware, this  
21 IRP was filed in early 2001 [2021?]. And,  
22 through various -- for various reasons, the  
23 hearing is scheduled today.

24 We did file some updated reports



1 through the course of this docket to address  
2 issues that arose. And, so, we have, today, a  
3 filing from a 2021 docket, and we are aware of  
4 all the orders that came out last summer in the  
5 context of the gas IRPs. And we have pivoted  
6 somewhat to address those, but our position is  
7 that we may not have checked all those boxes, and  
8 that was, we believe, appropriate given the  
9 timeframe.

10 So, today, the witnesses here are the  
11 ones most involved in preparing the Plan. And  
12 they're mostly here to answer questions. And we  
13 are at a -- not a loss, but we are at a  
14 disadvantage not knowing what the Commission  
15 wants to hear about. So, we could certainly  
16 spend hours walking through it all with them, or  
17 I could give a brief overview, and sit back and  
18 let the questions flow, which is, frankly, what  
19 we intended to do.

20 So, at the end of this, we believe that  
21 we have met the requirements of the statute, and  
22 we will be asking the Commission to approve the  
23 Plan.

24 Thank you.

1 CHAIRMAN GOLDNER: Thank you. Moving  
2 to the Department of Energy.

3 MR. DEXTER: Thank you.

4 The Department of Energy, at this time,  
5 has on the record, and plans to reaffirm today,  
6 its support for the IRP, as it has been filed by  
7 the Company. That was not our original position.  
8 If you go back to Exhibit 6, which is our  
9 testimony from September 2022, the Department had  
10 noted what it believed were fatal flaws in the  
11 filed IRP, some key issues that were missing, and  
12 some key things that didn't align, namely, the  
13 load forecast and the capacity additions that we  
14 talked about. Through a variety of data requests  
15 and technical sessions and supplements, and,  
16 importantly, the filing of Exhibit 8, which is  
17 the Company's response to the Department's  
18 Request 1-10, the Department came to the  
19 conclusion that, with all that information in the  
20 record, that the filings now do meet the  
21 statutory requirements for the LCIRP. And,  
22 therefore, we recommend that the Commission  
23 approve it.

24 We will ask some questions of the

1 Company's witnesses today to highlight some of  
2 these areas that I talked about that were  
3 updated. And we will make our witnesses  
4 available for questioning as well.

5 Thank you.

6 CHAIRMAN GOLDNER: Thank you, Attorney  
7 Dexter. And the Office of the Consumer Advocate.

8 MR. CROUSE: The Office of the Consumer  
9 Advocate is humbly recommending that the  
10 Commission does not accept Liberty's LCIRP. And  
11 I hope to kind of tease out why they don't meet  
12 the statutory requirements during  
13 cross-examination.

14 Thank you.

15 CHAIRMAN GOLDNER: Okay. Thank you,  
16 Mr. Crouse.

17 And is there anything else that we need  
18 to discuss, before the witnesses are sworn in?

19 *[No verbal response.]*

20 CHAIRMAN GOLDNER: Okay. Seeing none.  
21 Mr. Patnaude, would you please swear in the  
22 Company witnesses.

23 *(Whereupon* **HEATHER M. TEBBETTS,**

24 **MICHAEL COOPER,** *and* **ANTHONY STRABONE**

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1                   *were duly sworn by the Court Reporter.)*

2                   CHAIRMAN GOLDNER: All right. We'll  
3 begin with direct, and Attorney Sheehan.

4                   MR. SHEEHAN: Thank you.

5                   We'll begin with introduction of the  
6 three folks in the box.

7                   **HEATHER M. TEBBETTS, SWORN**

8                   **MICHAEL COOPER, SWORN**

9                   **ANTHONY STRABONE, SWORN**

10                  **DIRECT EXAMINATION**

11 BY MR. SHEEHAN:

12 Q       Ms. Tebbetts, please introduce yourself and your  
13 position with Liberty?

14 A       (Tebbetts) My name is Heather Tebbetts. And I am  
15 the Director of Business Development in New  
16 Hampshire for Liberty Utilities.

17 Q       Unlike the two gentlemen to your left, you do not  
18 have a technical background, is that correct?

19 A       (Tebbetts) I am not an engineer, no.

20 Q       Is it fair to say that your role in this document  
21 was wearing your former hat as part of the  
22 Regulatory Department at Liberty?

23 A       (Tebbetts) Yes.

24 Q       And there's not testimony in this docket that

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 needs to be adopted. But is there anything in  
2 the filings, as you reviewed them in preparation  
3 for today's hearing, that would require a  
4 correction, so to speak, aside from the fact that  
5 we have evolved in our filings over the course of  
6 the docket?

7 A (Tebbetts) No.

8 Q Thank you. Mr. Cooper, your name and position  
9 with Liberty?

10 A (Cooper) I'm Michael Cooper. I'm an engineer for  
11 Liberty. And I work in System Planning.

12 Q And how long have you been with Liberty?

13 A (Cooper) Since 2014.

14 Q And your training is as an engineer, is that  
15 correct?

16 A (Cooper) Yes. I moved over from being a system  
17 operator in, I think, 2019/2020.

18 Q Okay. But your formal training is engineering?

19 A (Cooper) That is not my education. But I do have  
20 the training through the Company.

21 Q Okay.

22 A (Cooper) Yes.

23 Q And your day-to-day job is doing what?

24 A (Cooper) System planning. So, I deal with, you

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 know, reliability issues, any need for system  
2 improvements, modifications, to improve the  
3 reliability. There's a few other things that I  
4 kind of handle, but, yes.

5 Q And is it fair to say you played a large role in  
6 preparing the documents that have been filed in  
7 this case?

8 A (Cooper) I provided a lot of the data and the  
9 background for the Plan, yes.

10 Q Okay. Thank you. Mr. Strabone, please introduce  
11 yourself?

12 A (Strabone) Good morning. Anthony Strabone. I'm  
13 the Senior Director of Electric Operations for  
14 Liberty. I'm responsible for the safe, reliable  
15 operation, design, and maintenance of the  
16 electric service.

17 Q And you are also an engineer, is that -- or, you  
18 are an engineer, is that correct?

19 A (Strabone) Yes. That is correct.

20 Q And that is your formal training?

21 A (Strabone) Yes, it is.

22 Q And it's electrical engineering?

23 A (Strabone) That is correct.

24 Q Prior to your current position, did you have

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 roles within the Company's Engineering  
2 Department?

3 A (Strabone) Correct. I was the Senior Manager of  
4 Electric Engineering.

5 Q And, before coming to Liberty, you had  
6 engineering roles at PSNH, I believe, is that  
7 correct?

8 A (Strabone) That is correct, through distribution  
9 engineering, system planning and strategy, and  
10 substation design.

11 Q Thank you. And you also played a large role in  
12 preparing the documents and the underlying  
13 information that's before the Commission today?

14 A (Strabone) That is correct.

15 Q Thank you. As I indicated to the Commission,  
16 Ms. Tebbetts, we are not sure what the points of  
17 concern or the questions are from the Commission.  
18 So, it is our intent to essentially make  
19 ourselves available to answer questions, is that  
20 fair?

21 A (Tebbetts) Yes.

22 Q But you have prepared a brief sort of overview of  
23 what brings us here. Could you please present  
24 that?

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 A (Tebbetts) Yes. I just have a summary of how we  
2 got from January 2021 to April 2023.

3 So, we made our initial filing in  
4 January of 2021. And, in that filing, we  
5 included the Plan, for which we include multiple  
6 appendices. Those appendices provide backup  
7 information to what's in the Plan for the next  
8 five years for the Company. And, at the time, we  
9 had planned -- the Plan covered 2022 through  
10 2026.

11 Included in those appendices, we had  
12 the requirements of the statute, detailed demand  
13 forecasts, annual planning process, our planning  
14 criteria, a grid modernization report, load  
15 studies for our Lebanon and Bellows Falls area,  
16 and a reliability review.

17 In the middle of 2021, the docket was  
18 suspended. And, as the PUC Staff at the time  
19 required, they needed to have -- find an  
20 engineering consultant to work on the docket.  
21 And, so, they requested that the docket be  
22 suspended until later in the fall.

23 Once they were able to find a  
24 consultant, the Company actually asked for more



[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 time to file their non-wires solution to  
2 February 2022. And, during the Fall of 2021  
3 through January of 2022, --

4 MR. SHEEHAN: If I may interrupt? The  
5 phone call is coming in.

6 WITNESS TEBBETTS: Yes.

7 MR. SHEEHAN: If I can take it?

8 CHAIRMAN GOLDNER: Of course.

9 MR. SHEEHAN: I'll take it, and I'll be  
10 right back in.

11 CHAIRMAN GOLDNER: Okay. Pause here.

12 *[Off the record, and then a brief*  
13 *off-the-record discussion ensued*  
14 *between Atty. Sheehan and Chairman*  
15 *Goldner as well.]*

16 CHAIRMAN GOLDNER: Okay. Thank you.

17 And we'll go back on the record.

18 BY MR. SHEEHAN:

19 Q Ms. Tebbetts, I believe I interrupted your  
20 overview.

21 A (Tebbetts) That's okay. I believe I was  
22 mentioning that, in the Fall of 2022 [2021?], we  
23 requested an extension to file our non-wires  
24 solution. Where originally in the Plan filed in

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 January 2021, we said six months after the Plan  
2 is filed we will file the business case and cost  
3 analysis for the non-wire solution we presented  
4 within the Plan for a Microgrid at Bellows Falls.  
5 And, given the suspension of the docket due to  
6 other reasons, and then, finally, the DOE getting  
7 their engineers onboard, we then asked for a  
8 longer period of time, February 2022, to file  
9 that supplemental report.

10 Between the Fall of 2022 -- I'm  
11 sorry -- between the Fall of 2021 and February of  
12 2022, the Company did a lot of digging into the  
13 reliability in that area of Bellows Falls, and  
14 found that a Microgrid probably wasn't the  
15 correct solution at this time to address  
16 reliability issues. And, as such, in February,  
17 we asked for another extension, to file a  
18 reliability report for that area in May.

19 And, in May of 2022, the Company filed  
20 a preliminary reliability report associated with  
21 the Bellows Falls area, noting "these are the  
22 issues we have found to be pretty significant,  
23 and that we are not sure that a non-wires  
24 solution is the right solution for right now."

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1           In June of 2022, we filed a full  
2       report, noting that "these other reliability  
3       issues we have, there could be some non-wire  
4       solutions, but the least cost solution was to  
5       build some tie lines and move towards a wired  
6       solution."

7           In September of 2022, the DOE filed  
8       their testimony. And they had concerns, as Mr.  
9       Dexter noted in his opening statement, of what we  
10      had filed originally in our Plan and in the  
11      reliability reports.

12          So, through technical sessions, and a  
13      supplemental report from the Company, the Company  
14      addressed those issues. And the result of that  
15      was the DOE and its consultants filing their  
16      technical statements in January 2023 recommending  
17      approval of our Plan, noting that we had met the  
18      burden of the statute at that time, due to the  
19      fact that we provided that supplemental  
20      information.

21          And here we are today, at the hearing,  
22      to further discuss and answer questions.

23      Q     And, last, Ms. Tebbetts, let's just briefly walk  
24      through the exhibits to identify them.

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1                   Exhibits 1 and 2 are the 2021 Plan, a  
2                   confidential version and redacted version, is  
3                   that correct?

4    A           (Tebbetts) Yes.

5                   MR. SHEEHAN: And, just to state it,  
6                   the confidential material in the Plan is simply a  
7                   couple maps, with drawings, that the Company has  
8                   asked to keep confidential. All the words and  
9                   all the numbers are not confidential.

10   BY MR. SHEEHAN:

11   Q           Exhibit 3 is that first Bellows Falls report you  
12               just mentioned, is that right?

13   A           (Tebbetts) Yes.

14   Q           And April 4 -- sorry -- Exhibit 4 is the full  
15               report on the non-wires issue in Bellows Falls?

16   A           (Tebbetts) Yes.

17   Q           Five (5) consist of data requests that DOE asked  
18               to introduce as evidence, is that correct? "Data  
19               responses", I should say?

20   A           (Tebbetts) I actually believe they were record  
21               requests we may have received from the  
22               Commission.

23   Q           Okay. I can double-check that. You're correct.  
24               Those are record request responses from the

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 Commission?

2 A (Tebbetts) Yes.

3 Q Okay. Six (6) is DOE's testimony?

4 A (Tebbetts) Yes.

5 Q Seven (7) is the Company's supplemental report,  
6 and 8 is DOE's technical statement that you just  
7 described?

8 A (Tebbetts) Yes.

9 MR. SHEEHAN: Great. Thank you.

10 That's all I have. And turn the witnesses over  
11 to questioning from the parties, and, obviously,  
12 from the Commission.

13 Thank you.

14 CHAIRMAN GOLDNER: Okay. Thank you.

15 We'll move to friendly cross from the New  
16 Hampshire Department of Energy.

17 MR. DEXTER: Thank you.

18 I'd like to ask a couple of questions  
19 about the Company's load forecast in its original  
20 filing.

21 **CROSS-EXAMINATION**

22 BY MR. DEXTER:

23 Q And, in order to do that, I'd like to go to  
24 Exhibit 1, Bates Page 129. Do you have that in

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 front of you?

2 A (Tebbetts) Yes.

3 Q So, what I'm looking at is a table called  
4 "Table 2 Forecasted Peaks Normal Weather". And  
5 this is for the entire Company, both it's eastern  
6 and western areas, is that right?

7 A (Tebbetts) Yes.

8 Q Okay. And, if I go to the column, it's about  
9 five or six columns over, there's a column marked  
10 "Growth", and there's a bunch of percentages. Do  
11 you see that?

12 A (Tebbetts) Yes.

13 Q And the same thing, there's -- at the far  
14 right-hand column, it's the same thing. I guess  
15 the far -- the left-hand part of the page is  
16 summer and the right-hand part of the page is  
17 winter, is that right?

18 A (Tebbetts) Yes.

19 Q Okay. And, if I look down at the percentage  
20 growths, and if I look at the last line, which is  
21 an average growth over the period, I see roughly  
22 0.3 to 0.4 percent annual growth each year.

23 Would you agree?

24 A (Tebbetts) Yes.

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 Q And would you agree that that annual growth is a  
2 result of the econometric model that's described  
3 in this part of the Plan, which I believe is  
4 Appendix B to Exhibit 1?

5 A (Tebbetts) Yes.

6 Q Okay. And the Department -- would you agree that  
7 the Department raised some concerns that, on the  
8 one hand, we were seeing 0.3, 0.4, 0.2 percent  
9 growth each year, and, on the other hand, we were  
10 hearing about "significant load additions in the  
11 Salem area". Do you recall that?

12 A (Tebbetts) Yes.

13 Q Okay. And is it correct that, after some  
14 discussions and data requests and tech sessions,  
15 that the Company updated its load forecast to  
16 adjust for these out-of-model adjustments for  
17 these specific loads?

18 A (Tebbetts) To be clear, we did not adjust the  
19 load forecast -- the way I want to make sure it's  
20 explained is, we took the original load forecast,  
21 which you see here, and we adjusted it for spot  
22 load information that we had at this time. We  
23 did not adjust -- we do not redo the forecast,  
24 the full forecast. We just adjusted for spot

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 load in Salem.

2 Q And this technique of "adjusting for spot load  
3 with out-of-model adjustments" was, in fact,  
4 contemplated in the Company's original Plan, is  
5 that correct?

6 A (Tebbetts) Yes.

7 Q And, if I go to Exhibit 1, Bates Page 015, on  
8 Line 17, that's where the Company indicates that  
9 they make "out-of-model adjustments to account  
10 for known future loads", is that right?

11 A (Tebbetts) Yes.

12 Q Okay. And, to get to the "updated" forecast, if  
13 that's the right word, that reflects these spot  
14 load adjustments, we need to go to Exhibit 8,  
15 Bates Pages 476 through 479. I'm going to take a  
16 minute to get there.

17 Do you have that page in front of you,  
18 I'm looking at Bates Page 476 of Exhibit 8?

19 A (Tebbetts) It is just taking me a moment. Just  
20 one moment, I guess. I thought I had the file  
21 here, but -- all right. And you said it was  
22 "476"?

23 Q Correct.

24 A (Tebbetts) Of Exhibit 8, I'm looking at it, but I



[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 don't see a Bates page on here.

2 MR. SHEEHAN: Maybe it's the same as  
3 the *pdf* page number.

4 BY MR. DEXTER:

5 Q It's also labeled "Attachment DOE 10-1.b".

6 A (Tebbetts) Okay, 10-1.b. Yes, I am there.

7 Q Okay.

8 A (Tebbetts) I have it as -- it's "Page 472" at the  
9 top? Is that correct? "Attachment TS-JED/*et*  
10 *cetera* Data Requests Set 10 Page 472 of 472"?

11 Q Well, I'm actually looking at "Page 469 of 472".

12 A (Tebbetts) Okay. I'm at 469.

13 Q Okay. That's the first one of these three  
14 charts. And I chose Page 476, or 469, because  
15 it's Total Company Normal Weather Forecast, which  
16 is the equivalent of what we were looking at  
17 before. Is that right?

18 A (Tebbetts) Yes.

19 Q Okay. So, on the left-hand side of this page, it  
20 looks very much like the forecast sheets we were  
21 looking at before. Again, for the summer growth,  
22 and the winter growth on the left-hand side of  
23 the page, I see annual growth rates of around  
24 0.3 percent. Is that right?

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 A (Tebbetts) That is correct.

2 Q Okay. And then, on the right-hand side of the  
3 page, I see the same annual growth rates for all  
4 the years -- well, let me withdraw that question  
5 and state it this way: On the right-hand side of  
6 the page, I see a new column that's been added,  
7 and it's called "Spot Load Adjustment", do you  
8 see that? And there's a footprint "2" attached  
9 to it?

10 A (Tebbetts) Yes.

11 Q Could you explain what the "spot load adjustment"  
12 is and what the footnote is?

13 A (Tebbetts) So, the "spot load adjustment" has to  
14 do with the load that we have either seen come  
15 into the Salem area, or that is anticipated to  
16 come in in the next couple years. We captured it  
17 from 2021 through 25.

18 Q And, in fact, on those years where there is a  
19 spot load adjustment, for example, year 2024, the  
20 percentage load increase is much higher than the  
21 "0.3 percent" we've been seeing, in that year  
22 it's "13 percent", correct?

23 A (Tebbetts) Yes.

24 Q Okay. So, I wanted to take a few minutes to talk

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1       about the two spot loads that are referenced in  
2       Footnote Number 2. The first one says "Tuscan  
3       Village", the second one says a "single  
4       manufacturer". And, if possible, I'd like you to  
5       answer without revealing any confidential  
6       information. And, to talk about the Tuscan load  
7       development, I'd like to go up a couple of pages,  
8       to Exhibit 8, Bates Page 475. Do you have that?

9       A     (Tebbetts) 475.

10      Q     So, that's a *pdf* version of an Excel sheet that  
11       we've talked about many times over the course of  
12       this docket, that lays out the expected load  
13       customer by customer at the Tuscan Village  
14       project.

15      A     (Tebbetts) I have it -- yes. I have it at "Page  
16       468" at the top.

17      Q     Okay.

18      A     (Tebbetts) Your filing, when you download it from  
19       the website, it doesn't -- they are separated.

20      Q     Okay.

21      A     (Tebbetts) I have Page 468 in the *pdf*.

22      Q     Yes, "468 of 472" in the upper right-hand corner.

23      A     (Tebbetts) Yes.

24      Q     I have it as Exhibit 8, Bates Page 475. But I

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 think we're looking at the same thing.

2 A (Tebbetts) Yes.

3 Q Unfortunately, this didn't translate very well as  
4 a *pdf*. So, I just want to ask you a couple of  
5 questions about the numbers on the bottom of the  
6 page. After the long chart, there's some totals  
7 at the bottom. And I see "Total North", "Total  
8 South", "Total Tuscan Village", and some numbers  
9 that total "22,598". Are those -- those are  
10 kilowatts, is that right?

11 A (Tebbetts) Yes.

12 Q And, so, that's demand. Could you explain what  
13 those numbers are?

14 A (Tebbetts) That is the total anticipated demand  
15 and total actual demand for anything that's  
16 either complete under current status, or you can  
17 see what's anticipated.

18 Q So, the "North" and "South", that just refers to  
19 two different parts of the development?

20 A (Tebbetts) Yes.

21 Q So, the total expected demand from Tuscan  
22 Village, at the time this chart was prepared, was  
23 22,598 kilowatts, or what we've been calling "22  
24 and a half", "22.6 megawatts"? Does that --

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 A (Tebbetts) Yes.

2 Q -- sound right? Okay. The three numbers below,  
3 unfortunately, the captions did not come up in  
4 the *pdf*. They total the same, 22.6 megawatts.  
5 The first number is 7.3 megawatts. Could you  
6 explain what the 7.3 is?

7 A (Tebbetts) Yes. I have the original filing in  
8 front of me.

9 So, what those are is -- I want to say,  
10 the first one is -- the 7.2 is completed, load  
11 that's complete. So, the tenants are in, they  
12 have -- you know, we have load being served  
13 there.

14 The 4.1 is -- let me see here for a  
15 minute. Some of that is going to be -- some of  
16 it's completed, some of it's not, some of it's in  
17 flux, depending on what items were above that  
18 were connected to that number.

19 And then, the 11 was, again, some of it  
20 is complete and some of it isn't. And I'm trying  
21 to see why these numbers were here in the first  
22 place.

23 But, nonetheless, they all sum to the  
24 22.5 megawatts, between both villages.

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 Q Okay. And when were these numbers compiled, do  
2 you recall?

3 A (Tebbetts) In mid-January, I provided the  
4 updates, which was -- which is in red that you  
5 see on the *pdf*. And everything else was either  
6 updated in prior responses or has not changed,  
7 with regards to the anticipated load.

8 Q Okay. So, these total numbers are current as of  
9 January 2023, I think is what you're saying?

10 A (Tebbetts) Yes.

11 Q Yes.

12 A (Tebbetts) Yes.

13 Q Have you continued to update this spreadsheet  
14 since January of 2023?

15 A (Tebbetts) No.

16 Q Okay. Do you know, if you were to update it,  
17 would those three numbers at the bottom -- or,  
18 any of the numbers in the totals have changed  
19 significantly since January of 2023?

20 A (Tebbetts) I do not know the answer to that.

21 Q Okay. Have you heard anything that would lead  
22 you to believe that the 22.6 total megawatt  
23 number is either too large or too small at this  
24 time?

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 A (Tebbetts) I haven't. I don't know if  
2 Mr. Strabone or Mr. Cooper have.

3 A (Strabone) I can respond to that. Ultimately, we  
4 would not see a significant change in the numbers  
5 at this time, just due to construction within the  
6 Tuscan Village, based on the developer's  
7 timeframe and what they're currently under  
8 construction. And, at this point, we have no  
9 belief to -- or, no indication that these numbers  
10 would change at this time.

11 Q Okay. Thank you. The second customer that was  
12 noted in the footnote to the load study on Bates  
13 Page 476 of Exhibit 8, Page 469 of 72 [sic], was  
14 just noted as a "single manufacturer". Could you  
15 tell me what the expected load addition from this  
16 single manufacturer is?

17 MR. SHEEHAN: And, Mr. Strabone, just  
18 to advise, the only thing I think you need to  
19 keep confidential is the identity. I think  
20 everything else is fair game.

21 WITNESS STRABONE: Correct. Okay.  
22 Thank you.

23 **BY THE WITNESS:**

24 A (Strabone) That single manufacturer, they were

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 outside of the Tuscan development, but within the  
2 Town of Salem. They were a manufacturer of  
3 semiconductors. They were looking to enter into  
4 a contract within an existing building within the  
5 Town of Salem. Working with them, ultimately,  
6 they were looking to expand their operations  
7 within the State of New Hampshire. They already  
8 had a similar facility in a local town. And, as  
9 we worked through with the developer and the  
10 landowner, we based -- the information that we  
11 were getting were based off their similar plant  
12 and expectations.

13 Ultimately, just recently, within the  
14 last several months, that developer has pulled  
15 out of proceeding with that, with the expansion  
16 in the state.

17 BY MR. DEXTER:

18 Q So, this spot load that's listed here, although  
19 accurate at the time that this forecast was  
20 filed, if you were to update it now, you would  
21 take out that spot load, is that what you're  
22 saying?

23 A (Strabone) That is correct.

24 Q Okay. And which -- again, I'm on Bates Page 476,



[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 Attachment DOE 10-1.b, the horizontal sheet with  
2 the yearly loads listed. Which of the spot load  
3 adjustments was related to that single  
4 manufacturer? Was that the spot load of 26.5  
5 megawatts on 2024?

6 A (Tebbetts) So, actually, it was -- it's in that  
7 line, but the spot load was "20 megawatts". And,  
8 so, the 6.5 megawatts is still anticipated to  
9 come in.

10 Q Okay. Okay. One of the concerns that the  
11 Staff -- that the Department of Energy had raised  
12 in its testimony was that we were seeing capacity  
13 adjustments predicted for the Salem area, but  
14 that we weren't seeing commensurate load  
15 forecasting to match those capacity additions.  
16 And I wanted to talk for a minute about the  
17 capacity additions.

18 And, in order to do that, I'd like to  
19 direct your attention to Attachment DOE 10-1.a,  
20 which is Bates Page 467 of 472 in Exhibit 8,  
21 which is Bates Page 474. And it's a page with a  
22 lot of horizontal charts. The left-hand side is  
23 black and white. And the right-hand side is  
24 highlighted in yellow or blocked in yellow, and

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1       it's entitled -- it's titled "Alternate Plan  
2       Capacity". And, with that long introduction, do  
3       you have that sheet in front of you?

4   A     (Tebbetts) Yes.

5   Q     Okay. There is, on the right-hand side, there's  
6       a box that has some green highlighting as well,  
7       and it's called "Revised Calculation". Can you  
8       tell me what the revised calculations are? What  
9       this box is showing and what the revised  
10      calculations are?

11  A     (Tebbetts) Yes. So, when the DOE asked us to  
12      look at the spot load, and whether or not it was  
13      included in our original calculations, we went  
14      back and took a look at those numbers, and  
15      revised the information to accommodate that spot  
16      load.

17  Q     So, could you summarize -- or, tell me if this  
18      chart summarizes the added capacity, the capacity  
19      that was added in the Salem area, in connection  
20      with the updates -- the upgrades that were done,  
21      along the lines of the Rockingham Substation and  
22      the 115 kV line or lines that were being added?

23  A     (Tebbetts) Yes. So, when we look at this, we --  
24      if we want to go back, we have to actually --

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1       there's more information within, I believe, in  
2       the attachment that we note at the top, "DOE  
3       10-1.e.2".

4               Okay. So, when we look at this, what  
5       we were asked to do was take a look at the  
6       original capacity. And I'm just been looking at  
7       it as I read it to you. So, we had Golden Rock  
8       and Rockingham, we've added Rockingham. And you  
9       can see -- "Total Summer Normal Capacity (MVA)",  
10      this is the information provided with regards to  
11      summer normal capacity. And, if you look at the  
12      original, there was no change under the "Total  
13      Summer Normal Capacity". What changed was the  
14      firm capacity, under the "Total Added".

15             And I'd have to go back into the  
16      spreadsheet and look at exactly the numbers,  
17      because I just have it as a *pdf*.

18   Q       Okay. Let me ask the question in a different  
19      way.

20             If you could, very briefly, because  
21      we've talked about a lot of this in technical  
22      sessions, and I'm not sure exactly where it is on  
23      the record, but could you briefly describe the  
24      engineering, capacity additions and changes that

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1           were undertaken in the Salem Division over the  
2           last two or three years?

3   A       (Strabone) So, you're looking at just the overall  
4           project?

5   Q       Just an overview, yes.

6   A       (Strabone) Sure. Ultimately, as identified in  
7           our Salem Area Study, we have had significant  
8           capital investments in the Salem area to address  
9           asset conditions, reliability, safety issues,  
10          obsolete equipment, and, ultimately, preparing  
11          our system for future load growth.

12                       Over the past several years, all of  
13          those investments have addressed various issues  
14          from, as I mentioned, plus additional planning  
15          criteria violations. So, over the past several  
16          years, we're at a very high level, in conjunction  
17          with working with National Grid, we worked with  
18          them to install a 115 to 13 kV transformer at  
19          Golden Rock, which has allowed us to install  
20          three 13 kV distribution sub -- distribution  
21          circuits within the Town of Salem. That's helped  
22          to identify asset conditions within the area,  
23          planning criteria violations over at our existing  
24          substation at Spicket River, and ultimately

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 positioning ourselves for the additional load  
2 growth in the area.

3 In addition to what we've done at  
4 Golden Rock, we've also designed and installed  
5 and energized one 115 kV supply line to a  
6 brand-new Rockingham Substation. Upon  
7 energization, we energized five distribution  
8 circuits at the 13 kV level, which ultimately  
9 allowed us to once again address, you know,  
10 various issues within the Town of Salem, but also  
11 allowed us to retire two aged and obsolete  
12 substations, Barron --

13 *[Court reporter interruption.]*

14 **CONTINUED BY THE WITNESS:**

15 A (Strabone) -- Barron Ave. Substation and Salem  
16 Depot Substation. We're currently in  
17 construction for our second 115 kV supply line,  
18 which is expected to be complete mid-year this  
19 year.

20 In addition to the five distribution  
21 circuits that we've installed, we have room for  
22 future growth for an additional five distribution  
23 kV circuits out of Rockingham, and those will  
24 come along as necessary, with either load growth

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1       or other planning criteria violation, as we  
2       conduct additional studies within the area in  
3       future years.

4   BY MR. DEXTER:

5   Q     And thank you.  So, with that background, which I  
6       probably should have asked you first before I  
7       went to the chart, going back now to the chart  
8       that I was referring to, the yellow box that's  
9       entitled "Alternate Plan Capacity", about midway  
10      down the page there's, as I said, a "revised  
11      calculation" of capacity that's highlighted in  
12      green, the bottom line of that chart says "Total  
13      Added Capacity", "Summer 177.7 MVA", and "Winter  
14      51.1 MVA".  That line is added -- is labeled  
15      "Total Added Capacity".  So, is this the capacity  
16      that was added as a result of the infrastructure  
17      improvements that you just described?

18   A     (Strabone) I believe that "51.1" is for "Total  
19      Firm".

20   Q     What did I say, "Winter"?

21   A     (Strabone) Yes, you did.

22   Q     I'm sorry.

23   A     (Strabone) I just want to make sure that it's --

24   Q     Yes, "Total Firm".  Okay.

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 A (Strabone) That's correct. And, yes, this is  
2 reflective of the Rockingham Substation and the  
3 investments that we've made.

4 Q Okay. And, --

5 A (Tebbetts) I'd like to add, the reason we revised  
6 this, and I couldn't remember until you guys  
7 started talking, in the yellow box, under "Total  
8 Summer Emergency Capacity (MVA)", you'll see  
9 "182.8", and, in the "Total Firm Capacity",  
10 "182.8" as well. And, when the DOE asked us  
11 questions about the information on the capacity,  
12 we found that the 91.6 MVA was double-counted  
13 originally in the table. And, so, the revision  
14 is to fix that. And that's why you see in the  
15 revision, in the green, of "91.6" in both boxes.

16 Q Thank you. And, so, with this Revised  
17 Calculation of capacity, and with the revised  
18 load forecast that we just talked about for the  
19 spot load additions, do you believe now that the  
20 Plan, when you take all these parts together,  
21 appropriately reflects what's going on in the  
22 Salem area, in terms of load and capacity?

23 A (Strabone) Yes.

24 Q Okay. Thank you. In the Plan, you've provided a

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 Salem Area Study and a Lebanon Study. The  
2 Lebanon Study, which I wanted to talk about  
3 first, appears in Exhibit 1, Bates Page 431. I  
4 just want to go there for a minute.

5 A (Tebbetts) We did not provide a Salem Area Study  
6 here. We provided a Bellows Falls Study, along  
7 with Lebanon. The Salem Area Study was conducted  
8 prior to us filing this Plan.

9 Q Okay. I'll get to the Salem Area Study in a  
10 minute. I just wanted to ask first about the  
11 Lebanon Study.

12 Could you explain what the Lebanon  
13 Study does, again, in very general terms, and why  
14 it was undertaken? What would cause the Company  
15 to undertake the Lebanon Study?

16 A (Strabone) I'm sorry, what page are you on again  
17 please?

18 Q Well, I thought I was on Exhibit 1, Bates  
19 Page 431, but let me check that.

20 Yes. So, it is Exhibit 1. It actually  
21 starts at -- the cover page is "Bates Page 429".

22 A (Strabone) Thank you. My computer was a bit  
23 lagging to get there. So, --

24 Q No, I was in the wrong -- I was in Exhibit 8,



[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1           that's what confused me.

2                       But the question was, if you could just  
3           generally explain why the Company undertook this  
4           study in 2020, what it was intended to do, and  
5           what the results were?

6   A       (Strabone) Hold on one second please.

7                       *[Short pause.]*

8   **BY THE WITNESS:**

9   A       (Strabone) All right. I appreciate your  
10          patience. Thank you, everyone.

11                      So, ultimately, very similar to what  
12          we've done in the Salem area, the study up in  
13          Lebanon was to look at the overall area with all  
14          of our substations, and do the same exact -- do a  
15          study to look at asset conditions, load growth,  
16          reliability, maintainability, functionality of  
17          the system, and then identify any issues that we  
18          would need to address in the coming years.

19                      That was done in the Lebanon area,  
20          looking at all of our substations that fall  
21          within that service territory. So, you know,  
22          Mount Support, Lebanon Substation, Enfield, and  
23          the like, ultimately identifying, as I mentioned,  
24          areas that need to be addressed, and then

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 potential projects in the coming years.

2 BY MR. DEXTER:

3 Q Thank you. And you said that that's the similar  
4 purpose that was undertaken for the Salem Study?

5 A (Strabone) That's correct. We perform -- we  
6 usually try to look at our areas. We have our  
7 Salem area, Lebanon area, and, again, our  
8 Charlestown/Walpole, which is known as "Bellows  
9 Falls". We looked at -- we tend to look at those  
10 areas as our planning service areas and perform  
11 studies within those areas to identify issues,  
12 and propose a holistic type of approach for  
13 identifying system deficiencies.

14 Q Okay. And the Salem Study did find its way into  
15 the docket. Ms. Tebbetts is correct, it was not  
16 filed with the original Plan.

17 But, if we were to go to Exhibit 8,  
18 which is the Department's exhibit, and go to  
19 Page 11, --

20 CHAIRMAN GOLDNER: And, Mr. Dexter,  
21 I'll just jump in. We've got a couple minutes  
22 left before we need to take the break. So, maybe  
23 just after this question?

24 MR. SHEEHAN: I was actually waiting

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1           for another call, it will be 10:00, give or take.  
2           So, we can just keep chugging along.

3                       CHAIRMAN GOLDNER:   Okay.   All right.  
4           Very good.   Please proceed.

5                       MR. DEXTER:   Thank you.

6   BY MR. DEXTER:

7   Q       So, I'm at Exhibit 8, Bates Page 011.   And I've  
8           got a document entitled "Liberty Utilities Salem  
9           Area Study Salem, New Hampshire".   Do you see  
10          that?

11   A       (Tebbetts) Yes.

12   A       (Strabone) Yes.

13   Q       And that's the so-called "Salem Study" that was  
14          -- well, I want to get to a minute to a second  
15          Salem Study.   Could you tell me when this Salem  
16          Study was prepared?

17   A       (Strabone) So, I am on -- well, forgive me.   All  
18          right.   So, within this, there's a -- the  
19          document was prepared with original draft  
20          submission in 2016, again, revised a few months  
21          later, ultimately, in 2017, there was a proposal.  
22          And then, there was another revision date that I  
23          do not currently have in front of me.

24   Q       But, basically, the 2016-2017 timeframe, correct?

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 A (Strabone) Yes.

2 Q And then, following this study, in Exhibit 8, on  
3 Bates Page 229, there's another study called  
4 "Salem Area Study 2020". Could you explain the  
5 difference between the first study we just looked  
6 at, which was the 2016-2017 timeframe, and the  
7 2020 Study?

8 A (Strabone) Thank you for that. That was just the  
9 revision to the -- that was the final date I was  
10 looking for.

11 Q Okay.

12 A (Strabone) So, it's the same study, just revised  
13 in 2020.

14 Q Okay. So, the most current Salem Area Study, for  
15 purposes of figuring out what's going on, would  
16 be this one that starts at Bates Page 229, on  
17 Exhibit 8, which is the "Salem Area Study 2020",  
18 is that right?

19 A (Strabone) That is correct.

20 Q Okay.

21 MR. SHEEHAN: Mr. Chairman, ten o'clock  
22 it is.

23 CHAIRMAN GOLDNER: Okay. Very good.

24 Let's take a break here. And how long do you

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1           need, Mr. Sheehan?

2                   MR. SHEEHAN:   Fifteen minutes.

3                   CHAIRMAN GOLDNER:   Let's make it 20, so  
4           you -- so, let's return at 10:20, everyone.  
5           Thank you.

6                   *(Recess taken at 9:59 a.m., and the*  
7                   *hearing resumed at 10:28 a.m.)*

8                   CHAIRMAN GOLDNER:   Okay.   Let's go back  
9           on the record with Mr. Dexter.

10                   MR. DEXTER:   Thank you, Mr. Chairman.

11                   I had just finished pointing out where  
12           the two Salem Studies were located in the record,  
13           and the witnesses described what's in the Salem  
14           Study.   So, I want to move on to a different  
15           topic.

16   BY MR. DEXTER:

17   Q    I want to ask the panel to go to Exhibit 1, Bates  
18           Page 057.   That's Table 4.7.   And I want to ask a  
19           couple of questions about the capital budget.

20                   The page I'm looking at has a  
21           multicolored chart in the middle, that's labeled  
22           "Figure 4.7.   Summary of 5-Year Capital  
23           Investment Plan and Budget Category Definitions".  
24           Do have that in front of you?

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 A (Strabone) Yes.

2 Q And, at the bottom there, "5-Year Total", is  
3 "\$124.2 million", that's the capital budget for  
4 the period 2022 to 2026, is that right?

5 A (Strabone) Yes.

6 Q Okay. Later on in the case, the Department of  
7 Energy had asked for a breakdown of that 5-Year  
8 Plan into more detail, and that was provided as  
9 part of Exhibit 8, Bates Page 480. So, I'd like  
10 to go to that for a minute.

11 And, on that page, I find a blue and  
12 white two-page chart, with about 40 or 50 lines  
13 of capital projects broken out by year. Do you  
14 have that in front of you?

15 A (Strabone) Yes, I do.

16 Q And, if we jump down to the bottom of that, on  
17 Bates Page 481, and go to the far right-hand  
18 corner, we see "124,121,592" [sic]. That's the  
19 same total that we saw in Exhibit 1 in the  
20 summary chart, is that correct?

21 A (Strabone) Correct. On mine, I have  
22 "124,191,592"?

23 Q Yes. Thanks.

24 A (Strabone) Thank you.

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 Q So, this constitutes then a more detailed budget,  
2 in terms of both the projects that are listed and  
3 the year-by-year expected spending, is that  
4 right?

5 A (Strabone) That is correct.

6 Q And did the Salem investments that we discussed  
7 earlier, are they included in this capital  
8 budget?

9 A (Strabone) Hold on one second please. At quick  
10 glance, yes, I do see some projects that are  
11 associated with that.

12 Q Okay. And I'm jumping around a little bit. I  
13 started the day asking about load forecasts, and  
14 I want to ask my final question about the load  
15 forecast. I probably should have covered this  
16 earlier on.

17 But could you, in a general sense,  
18 explain if and how the load forecast accounts for  
19 energy efficiency forecasts, electric vehicle  
20 forecasts, and distributed generation forecasts?

21 A (Tebbetts) Sure. So, if we go to -- well, since  
22 you're on Exhibit 8, why don't we go to Page --  
23 Bates Page, I have it as "Page 469", and it is  
24 the table -- let me see here. No, actually, it

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1           might be easier just to -- my apologies. It's  
2           probably easier just to go to the load forecast.  
3           Let me just find the Bates Page.

4                     Okay. If we go to Bates Page 127 of  
5           Exhibit 1, that's where we start looking at the  
6           seasonal load forecasts. And, if we look at  
7           we'll say Bates Page 129, which provide the  
8           forecasted peaks for normal weather, you can see  
9           that we do include the load forecasts for EVs and  
10          PV installations here.

11                    With regards to energy efficiency, we  
12          have not included future reductions for energy  
13          efficiency in here, as I understand it. And I  
14          need to double-check, but I don't recall seeing  
15          that within the details of this.

16   Q       Well, let me ask a follow-up, if I could, if  
17          you're finished? If not, I'll let you finish.

18   A       (Tebbetts) Go ahead.

19   Q       Okay. So, you --

20   A       (Tebbetts) Oh, wait. I apologize. I'm sorry.

21                    On Bates Page 135, in the Introduction,  
22          we do include the historic monthly peaks net of  
23          all energy efficiency. We just don't separately  
24          account for it within the tables.



[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 Q Okay. So, my apologies for asking three  
2 questions at once. So, let me go back to Bates  
3 Page 129, where I think you started.

4 On Bates Page 129, you pointed to a  
5 column labeled "PV and EV Peak". Is "PV", in  
6 that instance, "photovoltaic", shorthand for  
7 "solar"?

8 A (Tebbetts) Yes.

9 Q Okay. And "EV" is short for "electric vehicles"?

10 A (Tebbetts) Yes.

11 Q So, is it correct then this Table 2, which is a  
12 forecast of normal weather peaks, has a specific  
13 adjustment for those two items?

14 A (Tebbetts) Yes.

15 Q Okay. And then, the third part of the question I  
16 asked you about was energy efficiency, and I  
17 believe that's where you pointed me to Bates  
18 Page 135. So, let's go there, and make sure I  
19 understand that.

20 Bates Page 135 says, towards the top,  
21 "historic monthly peaks were net of all energy  
22 efficiency and distributed generation load  
23 impacts." What does that mean, "net of all  
24 energy efficiency and distributed generation load

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 impacts"?

2 A (Tebbetts) So, we took into consideration the  
3 historic monthly peaks. So, when we look at --  
4 when the load forecast is created, we look back I  
5 believe it's 30 years. And, so, rather than just  
6 taking the load -- rather than -- let me say this  
7 again. We adjust in the model for known solar  
8 and energy efficiency impacts. How that is taken  
9 into consideration within the model, I can't  
10 explain. But it is taken into consideration in  
11 the historic information. So that, when we look  
12 forward and do the calculation, for future load,  
13 we know that we have not -- we have made those  
14 adjustments in the model.

15 Q So, to the extent that the econometric  
16 forward-looking forecast is based on history, is  
17 what you're saying that the Company has a long  
18 history of utility-sponsored energy efficiency,  
19 and that long history would have impacted the  
20 historical load that you're using as the basis?

21 A (Tebbetts) Yes.

22 MR. DEXTER: Okay. That's all the  
23 questions we have. Thank you.

24 CHAIRMAN GOLDNER: Thank you. We'll

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 move to cross-examination with Attorney Crouse,  
2 and the Office of the Consumer Advocate.

3 MR. CROUSE: Great. Thank you.

4 All right. Well, as a History major, I  
5 always like to bring up the past.

6 BY MR. CROUSE:

7 Q So, if we could turn to Exhibit 2, Bates  
8 Page 005, Lines 6 through 8. And just let me  
9 know when you guys are there.

10 MR. SHEEHAN: I'm sorry, the page  
11 again?

12 MR. CROUSE: Bates Page 005. It should  
13 also be *pdf* Page 5.

14 WITNESS TEBBETTS: What lines did you  
15 refer to?

16 MR. CROUSE: Six through eight.

17 WITNESS TEBBETTS: Okay. Sure.

18 BY MR. CROUSE:

19 Q Yes. It's just generally speaking about the  
20 current LCIRP being compared in compliance with  
21 Order Numbers 26,039 and 26,408. I was just  
22 curious, could any of you please explain what  
23 those directives were, and how Liberty was  
24 compliant briefly?

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 A (Tebbetts) Sure. So, Order 26,039 was the order  
2 in which the 2016 LCIRP was approved, and the  
3 Order 26,261 was the order approving the 2019  
4 Least Cost Plan. And, as part of those -- well,  
5 as part of the 2016, we had looked at, you know,  
6 multiple investments within there. And we -- I'm  
7 trying to remember off the top of my head. We  
8 looked at different investments for 2016, moving  
9 forward through 2021.

10 And then, as part of the 2016 LCIRP was  
11 a directive to look at our planning criteria, and  
12 that also occurred at the same time as our 19-064  
13 rate case. And, as part of Docket 19-120, which  
14 was the 2019 LCIRP, we were directed and we  
15 agreed to change our planning criteria. And  
16 those directives were included in this Plan.

17 Q Thank you. And, at the bottom of that same page,  
18 in Footnote 1, it talks about how the prior LCIRP  
19 was "a more limited document". Could you explain  
20 briefly why it was "a more limited document"?

21 A (Tebbetts) So, it was more limited because we  
22 were working through that planning criteria issue  
23 within the 19-064 rate case. And, so, we -- two  
24 things. One, the statute provides that we file

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 an LCIRP one of two ways. We either file it  
2 within two years after our last order, or five  
3 years from the last filing.

4 And, given the planning criteria issues  
5 that came up in the last LCIRP from 2016, and the  
6 planning criteria issues that came up in the  
7 19-064 rate case docket, we submitted a modified  
8 plan to address those issues, and then -- within  
9 that two-year -- two- to five-year timeframe, and  
10 then submitted a full plan five years from the  
11 date of the 2016 filing, to address those issues  
12 only.

13 Q Yes. Thank you very much. That was helpful.  
14 And would you agree with the characterization  
15 that, just generally speaking, the prior LCIRP  
16 was more limited due to some of the transitions  
17 taking place, and now the current 2021 filing  
18 wouldn't be under those same limitations?

19 A (Tebbetts) I don't know what transitions you're  
20 referring to.

21 Q Just from the orders that were mentioned in  
22 Lines 6 through 8, the Commission at the time  
23 just generally talks about how, I believe it's on  
24 Page 6, just generally, like there needs to be a

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 greater detailed analysis for like the NWS  
2 projects, or just providing more information due  
3 to the LCIRP statutes coming into effect.

4 A (Tebbetts) Yes. And also, because, at the time,  
5 we were working through a grid modernization  
6 docket, 15-296, and these other dockets were  
7 happening at the same time. And, so, at that  
8 moment, it made sense to make the filing in the  
9 manner that we did, and parties agreed at the  
10 time that making the filing in the manner that we  
11 did was -- made the most sense.

12 Q Yes. Thank you. That's very helpful. So, I'm  
13 going to have everybody turn to Bates Page 122  
14 and 123 of Exhibit 2. And just a moment while I  
15 get there as well.

16 So, the questions I'm about to ask,  
17 anyone on the witness panel is welcome to answer,  
18 if you feel one of you is better able to answer,  
19 I don't mind if you pass it off or chime in to  
20 provide assistance.

21 But, just generally speaking, I believe  
22 it's Line 17, where it just talks about how  
23 "Liberty's electricity supply as procured through  
24 its Energy Service RFP (described in [greater

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 detail] in Section 3)." Just generally speaking,  
2 have all the witnesses read RSA 378:38?

3 A (Tebbetts) Yes.

4 Q And then, would you agree that default energy  
5 service is a market procurement?

6 A (Tebbetts) Yes.

7 Q So, then, can you point me where in Liberty's  
8 LCIRP that there's an analyzation of  
9 opportunities for reducing the cost of default  
10 energy service?

11 A (Tebbetts) I would need to take a look at  
12 Section 3.

13 Q Okay.

14 A (Tebbetts) But, as -- could you ask your question  
15 again please?

16 Q Yes. I guess what I'm really just looking for  
17 is, is there a section in the LCIRP where Liberty  
18 actively analyzed its opportunities for reducing  
19 the current cost of default energy service based  
20 off of the supply options they have available?

21 I'm sorry, I've moved slightly away  
22 from the microphone.

23 A (Tebbetts) So, when this was filed, and prepared,  
24 this was filed in January 2021, and prepared in

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1       2020, at the time, there were discussions about  
2       opportunities for, you know, "how can we reduce  
3       costs?" I will also add at this time the market  
4       price for power was significantly lower than it  
5       is today.

6               So, at the time this was filed,  
7       certainly, there were always discussions and  
8       opportunities about opportunities to reduce  
9       costs. And those opportunities could be through  
10      owning our own generation that's renewable, and  
11      if we could do it cheaper.

12              I don't -- again, if you give me a  
13      minute, I can look at Section 3?

14   Q     Yes. If you don't mind?

15   A     (Tebbetts) Okay. One moment please.

16   Q     Yes. Please take your time.

17              *[Short pause.]*

18   **BY THE WITNESS:**

19   A     (Tebbetts) Okay. So, thank you. So, as a  
20      stakeholder of the New England market, Liberty is  
21      always looking at what is going on with the  
22      market. We do not have -- at this time, we don't  
23      have, I'd say, a direct influence on those market  
24      prices. We follow the Commission's orders, and



[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 we follow the restructuring statute, RSA 362, to  
2 procure power in the least cost manner, as  
3 required by the previous orders in all of our  
4 energy service dockets.

5 And, so, with regards to what Liberty  
6 can do to reduce prices, I don't know that  
7 Liberty can do much to reduce actual prices.  
8 Liberty has worked on promoting energy efficiency  
9 to reduce bills. I think prices, bills, and  
10 rates are different things. And there is always  
11 other opportunities for us to continue to do  
12 that, and promote energy efficiency, promote  
13 other kinds of projects that we have, like our  
14 Battery Storage Pilot, and potentially future  
15 demand response programs.

16 But, with regard to Liberty looking for  
17 opportunities to reduce pricing in the market, we  
18 are merely a participant in that market. And I'm  
19 not sure that there is much that Liberty can do  
20 on its own to reduce those actual prices.

21 BY MR. CROUSE:

22 Q Thank you. I understand that Liberty may not  
23 have a direct influence. But would you say that  
24 Liberty has a meaningful influence?

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 A (Tebbetts) I'd like to think we have a meaningful  
2 influence. But, unfortunately, I'm not sure we  
3 do either, because we are so small. We are  
4 45,000 customers. And we only procure power for  
5 about half of our load right now, and that is  
6 definitely going to change, now that we have a  
7 lot of community aggregation coming in.

8 And, so, I'd like to think it's  
9 meaningful, I don't know that it is.

10 Q RSA 378:38, Subsection III, calls for "An  
11 assessment of supply options including [but not  
12 limited to] market procurements." Does Liberty  
13 evaluate the generation resource options  
14 available under default service procurement?

15 A (Tebbetts) We do not evaluate resource options.  
16 We look to the market to provide what those  
17 resource -- however they are procuring power  
18 through resources, if it's natural gas, it could  
19 be renewables. But, at the end of the day, we  
20 rely on the market to provide the least cost  
21 power, and however they procure that power is up  
22 to those market participants.

23 Q Thank you. Does Liberty take into consideration  
24 any options, such as broader range of short,

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 medium, or long-term contracts to reduce risk,  
2 cost, or volatility as an alternative, even if it  
3 was just as a suggestion or a meaningful  
4 comparison?

5 A (Tebbetts) We've had internal discussions about  
6 looking at opportunities, I'll say, you know,  
7 just through the procurement process, and  
8 potentially, you know, do we want longer  
9 contracts or shorter contracts? There's good and  
10 bad to that.

11 If you asked me two years ago "should  
12 we lock in our price for two years?" I would  
13 have said "Nah, let's see what happens with the  
14 market." And, if you asked me six months ago,  
15 I'd have said "Boy, we should have done that."

16 So, I think that it's -- there are  
17 opportunities, and then there are results of, you  
18 know, the way that our market operates in New  
19 Hampshire, and I follow the market, because it's  
20 really, not the ISO-New England market, but how  
21 we procure power. And, without making changes to  
22 how we procure power, I think our hands are tied  
23 at this time.

24 Q Thank you for your explanation. I understand

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1       that an LCIRP is often considered "a snapshot in  
2       time". But, in order capture, and pardon the  
3       phrase, but "your best side", are any of those  
4       discussions, in the spirit of an assessment,  
5       included in the LCIRP, so the stakeholders can  
6       better understand that discussion process?

7    A   (Tebbetts) They are not, because all of the --  
8       everything that happens in our procurement  
9       process is actually vetted -- fully vetted  
10      throughout, within our two procurement dockets.  
11      Well, it's one single docket for our procurement  
12      periods here at the Public Utilities Commission.  
13      Everything is, while the contracts are  
14      confidential, all of the information is readily  
15      available to parties to review our process, and  
16      how we have accepted and been -- and awarded  
17      those bids.

18   Q   Thank you. A slight change of pace, but staying  
19      on the same page of Bates Page 122, at the top,  
20      Lines 1 through 4, there's a general comment  
21      about how Liberty's LCIRP needs "an assessment of  
22      plan integration and impact on compliance with  
23      the Clean Air Act". I take the point that you  
24      have been divested of your generation resources.

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 But my question for you all is, does divestiture  
2 of generation relieve the obligation to consider  
3 the costs and environmental impacts?

4 MR. SHEEHAN: Objection by counsel. I  
5 do believe there's prior orders essentially  
6 excusing distribution utilities who don't own  
7 generation from that requirement. We don't  
8 directly emit, that was the case when we --  
9 although we never owned generation, but when  
10 public utilities owned power plants, it was a  
11 relevant --

12 *[Court reporter interruption.]*

13 MR. SHEEHAN: -- it was a relevant  
14 consideration.

15 MR. CROUSE: My only point was the  
16 witness has acknowledged that default energy  
17 service procurement is a market procurement. And  
18 RSA 378:37 addresses the environmental impact of  
19 RSA 378:38, Subsection III, "assessment of market  
20 procurements". Thank you.

21 CHAIRMAN GOLDNER: And I'd like to hear  
22 from Mr. Dexter as well, if you have any comments  
23 on this topic?

24 MR. DEXTER: No, I don't have any

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1           comments at this time.

2                   CHAIRMAN GOLDNER: All right. So, the  
3           objection is noted. I'll allow the witness to  
4           comment, and we'll give it the weight it  
5           deserves.

6                   WITNESS TEBBETTS: Would you mind  
7           asking the question again please?

8                   MR. CROUSE: Yes. Of course.

9   BY MR. CROUSE:

10   Q       So, the question is simply, does divestiture of  
11           generation relieve the obligation to consider the  
12           costs and environmental impacts of default energy  
13           service procurement?

14   A       (Tebbetts) Well, I think there's a couple of  
15           things to look at here. One, we, through what  
16           Mr. Sheehan just described, we, I'd say, have  
17           been relieved of it through needing to provide  
18           information in this filing.

19                   As a company that looks to, let's say  
20           green its fleet, which we've done in other areas,  
21           we think it's really important to procure  
22           power -- and I won't say "procure power", I will  
23           say to see that customers in New Hampshire, and  
24           other areas that we serve, have the opportunity

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1       for clean air. And there are lots of ways to get  
2       there. We have looked at owning solar in New  
3       Hampshire. There may be opportunities in the  
4       future for us to do that. That is an opportunity  
5       for us to maybe procure less power that could be  
6       generated through natural gas and other fuel  
7       sources.

8               So, I won't say that it -- I won't say  
9       that we are not required -- well, here's what  
10      I'll say. We're not required to look at those  
11      things. But, if there are opportunities for  
12      investment to provide those clean air  
13      opportunities for our customers, we certainly  
14      have had those discussions. You very well may  
15      see some filings in the future from this Company,  
16      looking to own some solar. And we look forward  
17      to having a further discussion about that through  
18      those dockets, if in the event we end up filing  
19      something.

20   Q    Thank you. And I want to be mindful of the  
21       objection, so I won't push the issue. Other than  
22       to just to simply ask is there an example of any  
23       such discussions in the LCIRP?

24   A    (Tebbetts) There is. We have a non-wires

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 solution that we originally proposed, and that  
2 was to own solar and storage at the Bellows Falls  
3 area, which we had talked about earlier, where we  
4 took off the table, due to that reliability  
5 solution not being the best solution for now in  
6 that area.

7 Q Thank you. I'm going to have us turn to Bates  
8 Page 107, still within Exhibit 2, Line 3. And  
9 just a moment while I switch pages.

10 A (Tebbetts) I'm there.

11 Q Sorry, a big *pdf* and it's moving slowly. Thank  
12 you for your patience. In Line 3, it states that  
13 "Liberty plans to invest over \$23 million in  
14 energy efficiency programs and services." Would  
15 you agree that it is actually ratepayer funds  
16 that's being used or would you instead state  
17 Liberty is spending any of its own money in that  
18 figure?

19 A (Tebbetts) That money is collected through the  
20 Systems Benefit Charge from all customers, and  
21 Liberty utilizes that money to offer products and  
22 services to our customers.

23 Q Would you say it's a fair characterization to say  
24 that it's a "ratepayer-sponsored energy



[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 efficiency fund"?

2 A (Tebbetts) It's a customer-sponsored energy  
3 efficiency fund, yes.

4 Q Thank you. And does the Company plan on spending  
5 any of its own money?

6 A (Tebbetts) No.

7 Q Does the Company look into any other energy  
8 efficiency options beyond the NHSaves Program?

9 A (Tebbetts) Could you give an example of what  
10 you're talking about? I'm not understanding your  
11 question.

12 Q Certainly. The NHSaves Program talks about just  
13 general energy efficiency options that are made  
14 available to customers. Beyond the ones that are  
15 listed on their website, could you think of an  
16 example that Liberty is pursuing that may not be  
17 included?

18 A (Tebbetts) Off the top of my head, I cannot. But  
19 I can't say that there aren't any. I'm just not  
20 sure at this moment.

21 Q Okay. Thank you. And then, just moving more  
22 generally speaking, when this LCIRP was being  
23 drafted back in 2021, could you state who was  
24 responsible for approving the LCIRP before it got

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 filed?

2 A (Tebbetts) There were multiple folks within the  
3 Company. I will tell you, as one of the writers,  
4 and I guess approvers at the time as the Manager  
5 of Regulatory, it went from engineering, we  
6 included -- so, all, everyone from the bottom to  
7 the top in engineering; and regulatory was  
8 included; energy efficiency folks; we had energy  
9 procurement included in this; load forecasting,  
10 which is a different group; and, finally, our  
11 State President at the time, Susan Fleck,  
12 approved this Plan.

13 Q Thank you. That is helpful. When your president  
14 receives this, or someone in your executive  
15 suite, I'm assuming they're not just given a  
16 510-page document. Do they get some sort of meta  
17 comparison or some sort of analysis or an  
18 executive cheat sheet to help them understand  
19 what's in this exhibit?

20 A (Tebbetts) We had -- I got to go back to 2020.  
21 We had a meeting -- we had multiple meetings,  
22 with her and others, to go over the Plan, to go  
23 over the Plan, to answer questions, and make sure  
24 that we addressed all of the pieces that the

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 Company was looking at for the period of 2022 to  
2 2026.

3 Q This is more of a comment than a question. But  
4 it could be helpful to stakeholders to be able to  
5 see, if there is any sort of executive cheat  
6 sheet, shorthand, meta comparison that might help  
7 us understand how your president reaches their  
8 decision to approve the filing.

9 But, just generally speaking, let's say  
10 that I worked at Liberty, and I wanted to  
11 introduce a time-of-use rate. Could you just  
12 briefly walk me through that process and how that  
13 would look?

14 A (Tebbetts) Sure. So, as someone who has  
15 introduced time-of-use rates to this Commission,  
16 and others, and gotten them approved, the process  
17 simply is, anyone who has an idea at the Company  
18 actually could come and talk to -- a lot of times  
19 it starts with the Regulatory group, since they,  
20 you know, make most of the filings.

21 So, if someone wanted to come up and  
22 say "We want to create a time-of-use rate", the  
23 first thing that we would do, or the Regulatory  
24 group would do, is look at "when is our next rate

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 case?" Creating time-of-use rates outside of a  
2 rate case can have benefits. It does become  
3 problematic when you look at cost of service,  
4 though. And, so, we would look at the time  
5 period for our next rate case.

6 And "what is this time-of-use rate  
7 doing?" Is it merely a time-of-use rate? Or, is  
8 it something that's been paired, such as our  
9 Battery Storage Pilot, which was paired with an  
10 asset?

11 So, if it's paired with an asset, we  
12 went through a separate docket, and that separate  
13 docket was done simply because RSA 374-G required  
14 the Company at the time to get approval through  
15 that statute for any renewable generation, which  
16 storage at the time was included as generation.  
17 And, so, we paired time-of-use rates to be  
18 approved with those assets.

19 If we're just looking at a time-of-use  
20 rate, the basic energy arbitrage, we would  
21 include that through a rate case. And, as I  
22 mentioned, you know, if anyone had an idea at the  
23 Company that wanted to have this introduced, they  
24 certainly could go talk to the Regulatory team,

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 provide that input. The Regulatory team would  
2 take a look at the opportunities to offer it,  
3 look at any cost of service studies that would  
4 have to be done with it, and then propose it in a  
5 rate case.

6 Q Thank you. That is helpful. And, if I just  
7 wanted to do a capital investment, is it the same  
8 process, or is there a different team halfway  
9 that follows through?

10 A (Tebbetts) So, Mr. Strabone is in charge of the  
11 capital budgeting for Granite State Electric.  
12 So, I can have him answer that.

13 Q Thank you.

14 A (Strabone) So, just -- excuse me -- for clarity,  
15 you're looking just at a general capital  
16 investment into the system for --

17 Q Yes. I'm just comparing the two pathways, so,  
18 the capital investment versus the non-capital,  
19 the suggestion of like a time-of-use rate.

20 A (Strabone) Sure. Generally speaking, for a  
21 capital investment, if it's -- we can take the  
22 scenario where it's identified during our  
23 planning process. So, usually that starts  
24 actually in a few months from now for next year,

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 we'd start identifying system deficiencies,  
2 looking at, you know, what the system would  
3 require. From there, we're also then develop --  
4 so, we're looking at the system, we're developing  
5 a budget, and needs for capital investment.

6 As we step through the projects, we  
7 also look at alternatives to that. Is it a  
8 direct replacement? You know, if it's a single  
9 switch that we need -- is replaced because it's  
10 obsolete. Is it one-for-one replacement or is  
11 there other -- could there be a different  
12 alternative to the project? So, we're going to  
13 evaluate solutions, either that's traditional or  
14 non-wire solutions, depending on what we're  
15 looking for for capital.

16 As we step through that, we will  
17 also -- that is within Engineering, but they're  
18 also looking at, from an operational perspective,  
19 too, of other assets or other assets they need to  
20 include with this capital investment.

21 Ultimately, our capital plan is  
22 developed, and is submitted for review and  
23 approval with Engineering, Operations, and  
24 ultimately through Finance, and up to -- a

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 capital plan is developed, you know, with our  
2 president review, and submitted for final  
3 approval and review through Liberty's Executive  
4 team as well.

5 MR. CROUSE: Thank you very much for  
6 your responses. That's all the questions that I  
7 have today. Thank you.

8 CHAIRMAN GOLDNER: Thank you, Attorney  
9 Crouse.

10 We'll move to Commissioner questions,  
11 beginning with Commissioner Simpson.

12 CMSR. SIMPSON: Thank you, Mr.  
13 Chairman.

14 Mr. Crouse addressed some of the  
15 initial questions I had about prior orders. So,  
16 good form there.

17 I want to, you know, first off, commend  
18 the Company. I think you've done a nice job with  
19 this filing, especially with the supplements.  
20 And I appreciate all the work that DOE did to  
21 uncover some of the questions and earlier  
22 perceived deficiencies, and then the Company  
23 addressing them in supplemental filings. So,  
24 thank you for that.

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 BY CMSR. SIMPSON:

2 Q So, first, let's jump to the non-wires analysis.  
3 If you could point us to the exhibit and Bates  
4 page, with respect to the Microgrid project at  
5 Bellows Falls, and the subsequent list of  
6 non-wire solutions, I think that's a good place  
7 to start.

8 And why I'm starting there, just for  
9 context, my initial questions are intended to  
10 address some of the requirements from prior  
11 Commission orders that are outside of the  
12 statutory requirements in RSA 378.

13 A (Tebbetts) One moment to direct you to it.  
14 Thanks.

15 Q Take your time.

16 MR. SHEEHAN: Perhaps 408? Did you  
17 find it?

18 WITNESS TEBBETTS: I did. My computer  
19 is slow.

20 **BY THE WITNESS:**

21 A (Tebbetts) So, if you go to Bates Page 407, we  
22 talk about the a "Non-Wire Solution Candidate" in  
23 Section 6.2. And, in there, we note that a  
24 traditional solution would have been "\$8



[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 million". And that traditional solution was to  
2 build a supply line. And, so, instead what we  
3 had looked at here was the opportunity for, if  
4 you go to Bates Page 408, a non-wires solution,  
5 which was -- there was two options for the  
6 non-wires solution. The first option here is "1  
7 megawatts of solar with 4 megawatt-hours of  
8 storage", and we would actually have it in front  
9 of the meter, but at our customer's location in  
10 Charlestown. And that would have provided us the  
11 opportunity to really island them during an issue  
12 on the system, so they could continue to make the  
13 widgets that they make.

14 The second opportunity for a non-wires  
15 solution was actually to put it near the  
16 substation, and same exact information, with  
17 regards to the project, it's just the location  
18 would have been different.

19 BY CMSR. SIMPSON:

20 Q And, when the Company thinks about a non-wires  
21 solution, you know, we hear that term, and I  
22 think there are a lot of reasonable  
23 interpretations as to what could be thought of as  
24 a "non-wires solution". Whether it's a

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 utility-owned and operated asset, whether it's  
2 owned and operated by a third party, who controls  
3 it, regardless of the ownership.

4 You know, what does the Company think  
5 of when you look to evaluate the topic of a  
6 "non-wire solution"

7 A (Strabone) Sure. I can chime in first. So,  
8 ultimately, we are looking at as you identified,  
9 but also "what is the need that we're  
10 addressing?" I think it really starts back at  
11 that, right? Are we addressing reliability? Are  
12 we looking to an asset condition, which usually a  
13 non-wire solution get very expensive for us. So,  
14 and plus that, if we identify that we have to  
15 address an asset, usually a non-wire solution  
16 does not apply, if there's asset conditions.

17 So, ultimately, we start looking at  
18 "What are we trying to address? Is it  
19 reliability? Is it loading? Is it capacity  
20 issues?" And then, from there, we're trying to  
21 identify what the right non-wire solution could  
22 be.

23 So, in this case, it's reliability,  
24 we're looking at solar, with battery storage. If

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1       it was a capacity issue, one could look to say  
2       "All right, what about demand-side energy  
3       management, and try to reduce loading during  
4       certain times?", very similar to like, you know,  
5       residential batteries.

6               So, ultimately, when we're looking at  
7       all of that, we're trying to figure out what the  
8       "need" statement is, how the solution could  
9       apply. And it's going to be different, depending  
10      on what we're looking at.

11             And then, ultimately, from there, as we  
12      step further, it's alternatives costs,  
13      operability, maintainability, and further on down  
14      the path. Not to exclude safety or environmental  
15      at that point either, no. I apologize, those are  
16      pretty inherent when we do it, but I do want to  
17      call out that. Those are items that we are, you  
18      know, significantly considering as we step  
19      through the process.

20    Q      Thank you. That's helpful. And then, with  
21      respect to evaluating ownership, you know, the  
22      topic of "third party ownership" in this  
23      space, --

24    A      (Strabone) Yes.

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 Q -- it has been debated, you know, whether  
2 utilities solicit proposals for solutions that  
3 could alleviate issues or future issues that you  
4 perceive. Does the Company have a position on  
5 the ownership structure for non-wires solutions  
6 at this point?

7 A (Strabone) I would say, at this point, the  
8 approach would be, it's open to all discussions.  
9 I mean, it would be great to own a plant. But,  
10 ultimately, it's all part of the considerations  
11 on what ultimately results in the best scenario  
12 for the situation.

13 Q And this topic, in particular, it appears it was  
14 of interest in 2016-17, and then also in '19,  
15 with the sort of two prior LCIRPs. You know,  
16 maybe you might enlighten us with a little bit of  
17 historical context, from your perspective, as to  
18 why and how this topic became relevant for this  
19 LCIRP?

20 A (Tebbetts) Sure. So, I'm going to go back in my  
21 brain to 2016, when we first made the filing.  
22 But, as I mentioned earlier, in 2015, the  
23 Commission opened up the grid modernization  
24 docket. And that was at the same time we were

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 preparing the 2016 filing. And, so, the 2016  
2 filing, we put a process in place to evaluate  
3 non-wires solutions. We did not offer any  
4 non-wires solutions within that filing. But we  
5 did put a process in place that we wanted to be  
6 approved as part of the filing, so that we had a  
7 planning -- we had a plan on how we would include  
8 non-wires solutions within our planning process.

9 The 2019 docket, as we mentioned  
10 earlier, was a partial filing, due to some issues  
11 in between, with a rate case at the time, and the  
12 last LCIRP. And, so, it didn't address non-wires  
13 solutions, because we were looking at planning  
14 criteria.

15 Fast-forward to the planning of this  
16 LCIRP, we were still working through other  
17 dockets. We had the value of DERs within the net  
18 metering docket, 16-276; we still had the grid  
19 modernization docket open; and we had just  
20 finished a rate case; we had approval of the  
21 Battery Storage Pilot in 2019. So, we had a lot  
22 of things happening at this time. And we thought  
23 this would be a great opportunity for us to  
24 propose a non-wires solution. We also said in

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1       our last LCIRP, 19-120, we would look to propose  
2       a non-wires solution. And we would meet with  
3       parties prior to to talk about what we had in  
4       mind.

5                   And, so, out of all of those things  
6       happening in that short period of time, this is  
7       what we felt was most appropriate to present as  
8       part of our Plan.

9   Q   And now that we're more than a couple of years  
10       from when you originally filed this, is there any  
11       updated status as to the relevancy of this  
12       particular non-wires solution?

13  A   (Strabone) We're still talking about the original  
14       one, correct?

15  Q   Uh-huh.

16  A   (Strabone) There's still validity to it.  
17       However, when we look at Bellows Falls as a  
18       whole, we identified two areas down in the  
19       Walpole area that had -- that area was  
20       experiencing pretty poor reliability in a few  
21       pockets. And we repurposed the non-wires  
22       solution to look down in that area, because,  
23       ultimately, the way our system is, it's a bit  
24       more rural.

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 Q Uh-huh.

2 A (Strabone) And the distribution feeders that are  
3 down in that area are radial, which means they  
4 emanate from the substation and go out to a point  
5 and stop. And, ultimately, what we were seeing  
6 for reliability in those areas was the fact that,  
7 depending on where we were having some issues on  
8 the system, every customer downstream was  
9 losing -- they were impacted, and the duration of  
10 outages were -- they were significant, and they  
11 were frequent.

12 So, ultimately, what we were looking to  
13 do there was see how we could improve  
14 reliability, either through the -- it was  
15 ultimately a combination of a traditional  
16 project, poles and wires, and then a non-wires  
17 solution that would help bring in an additional  
18 source into the area as well during those  
19 reliability -- to address the reliability out in  
20 that area. And we had that additional filing I  
21 believe in June of 2022, where we repurposed the  
22 non -- the wires and non-wires solution in the  
23 Bellows Falls area.

24 Q And that's Exhibit 4?

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 A (Strabone) Hold on one second, let me check my  
2 Exhibit List. Yes, it is.

3 Q So, in your own words, describe this update?

4 A (Strabone) Sure. So, this update looks at, as I  
5 mentioned, we have the two circuits down in the  
6 Bellows Falls area, which is down in the  
7 Walpole/Charlestown area, the 12L1 and 12L2. And  
8 those circuits, as I mentioned, are radial,  
9 they're fed out of a substation over in -- just  
10 over, across the Connecticut River, in Vermont.  
11 It's owned by National Grid, which then crosses  
12 the river and feeds our customers down in the  
13 Walpole/Charlestown area.

14 As I mentioned, those circuits are  
15 radial in nature, meaning they have some ties at  
16 the front end, we have a substation. But, as  
17 they go out into the other towns and communities,  
18 there's no other connections between them. We  
19 saw that those areas down in there, we have a  
20 couple of areas of poor reliability or pockets of  
21 poor performance that, really, the number of  
22 incidents and the duration of outages were  
23 significant, compared to the rest of our system.

24 So, ultimately, we looked in there to



[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1       determine what we could do to address the  
2       reliability. Ultimately, through this report, we  
3       evaluated a few alternatives, but ultimately came  
4       up to install a tie between the two feeders  
5       further away from the substation. And then,  
6       ultimately, from there, we evaluated "how can we  
7       get another source into the area?" Now, that  
8       could be line extensions again to tie into New  
9       Hampshire Electric Co-op's service territory.  
10      So, we could call on them for loss of our supply.  
11      It was also to look at ties to Eversource  
12      territory for the same thing. Or, ultimately,  
13      utilize that new line extension that we built to  
14      install a battery storage and solar Microgrid in  
15      there to call upon during these other times of  
16      reliability needs, be there as that other source,  
17      along with, as I mentioned, it's a combination of  
18      also traditional tree trimming and addressing  
19      those other pockets of poor performance with tree  
20      trimming, removal, and bare -- replacing the bare  
21      conductor with tree wire.

22    Q     So, you looked at -- you identified you have this  
23           issue, and you evaluated multiple options, wires,  
24           multiple wires options, versus this non-wires

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 solution. It sounds like you endeavored on some  
2 of the wires solutions, that's what were  
3 ultimately implemented, correct?

4 A (Strabone) Correct. Unfortunately, there was no  
5 way to not go with a traditional solution to  
6 address the reliability concerns. So, it has to  
7 be a combination of some form of traditional  
8 wires, with the non-wires solution.

9 Q So, this -- it sounds like this -- this was an  
10 educational process at a minimum for the Company,  
11 in terms of the process used to evaluate  
12 non-wires opportunities?

13 A (Strabone) Correct.

14 Q And, moving forward, you know, if we were to look  
15 to your Company's next LCIRP, you know, what  
16 might be some of the thresholds and the process  
17 through which the Company would leverage to  
18 determine reliability or operational performance  
19 concerns, and then that triggers an analysis of  
20 both wires and non-wires opportunities?

21 A (Strabone) Correct. So, there's a few avenues  
22 there. And I believe we have some in our  
23 planning criteria, which I'll get to in a second,  
24 I'll look it up.

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1                   But, ultimately, as we go forward  
2                   through our planning process now, we're looking  
3                   at, as I mentioned, we're looking at our capital  
4                   investments to say "All right, what is a  
5                   one-for-one replacement?" And that could be a  
6                   circuit breaker or a switch or a transformer,  
7                   where, ultimately, you need that equipment on the  
8                   system. So, those types of projects, you're  
9                   going to get a traditional solution there; so,  
10                  direct replacement.

11                  If we're looking for, as I mentioned,  
12                  reliability or capacity, now we're going to start  
13                  looking into, say, "Okay, is there a non-wires  
14                  solution?" Also, what comes into there is the  
15                  impact of what is the time horizon? And I know  
16                  that's in our report, I believe, if it's more  
17                  than two years out, we can consider a non-wires  
18                  solution for that project as well. I believe  
19                  there's also a threshold, around 2 -- I forget,  
20                  but there is a financial threshold, which I'll  
21                  look up in a moment. But there's also a  
22                  financial threshold, with a time requirement, and  
23                  a needs evaluation that goes along with that.  
24                  And, ultimately, as I mentioned, asset

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 replacement is pushed off to the side, that's a  
2 one-to-one replacement.

3 Any other project that's beyond two  
4 years, and above that threshold, that I think is  
5 around 250 to 500,000, would be considered, we'll  
6 start looking at non-wires solutions.

7 Q So, in these past LCIRPs of the Company, there is  
8 discussion about "updates to the Company's  
9 Operating Manual and design and planning  
10 criteria."

11 A (Strabone) Correct.

12 Q So, with all the discussion that we've had about  
13 non-wires solutions, I presume you're, if not the  
14 lead, one of the leads for the Company, in terms  
15 of maintaining the Operating Manual for planning.  
16 Is that -- am I understanding that right?

17 A (Strabone) I would be one to sign off on it. I  
18 would not be the lead to maintain it. We have  
19 other folks from our Operations team that would  
20 look at it, Safety, Engineering. Mr. Cooper here  
21 would also be part of that as well.

22 But, yes. Looking at our operating  
23 procedures, our standards, --

24 Q Uh-huh.

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 A (Strabone) -- and everything else, there would be  
2 a process.

3 Q So, with all the work that was done in the grid  
4 mod. investigation and these previous LCIRPs, I  
5 mean, clearly, technology is evolving. You've  
6 endeavored to implement behind-the-meter storage  
7 projects, you have time-of-use rates, you are  
8 evaluating distributed resources.

9 You know, are those lessons learned  
10 being reflected in subsequent updates to your  
11 Operating Manual and your planning procedures?

12 A (Strabone) So, lessons learned are always  
13 considered. Whether or not they're making it  
14 into an actual document of the planning criteria,  
15 or it's more lessons learned that are shared at  
16 the project level to consider for the next  
17 project. We would have to look to see how that  
18 really -- if it's significant enough that we're  
19 like "This needs to be part of the planning  
20 criteria document", --

21 Q Uh-huh.

22 A (Strabone) -- it would be captured that way. And  
23 then, ultimately, as, you know, we embark down  
24 this journey with new technology, as you said,

[WITNESS PANEL: Tebbetts | Cooper | Strabone]

1       and there are those lessons learned that are  
2       always taken back and implemented or applied to  
3       the next project or something very similar where  
4       we can truly apply it.

5 Q So, it seems that, with all these new  
6 technologies, the question is do we continue to  
7 just plan for a peak event? Do we look more  
8 dynamically at the system? And do we take  
9 time-based information and more data in as we  
10 determine how to improve system performance in  
11 the long run?

12 | A (Strabone) Yes.

13 | Q You would agree with that?

14 A (Strabone) Yes. And we would look at that. You  
15 know, things that come to mind when you talk  
16 about that is, you know, volt VAR  
17 optimization, --

18	0	Uh-huh.
----	---	---------

19 A (Strabone) -- and conservation voltage reduction,  
20 and that type of technology, where, you know,  
21 you're manipulating the system, so to speak, to  
22 prevent system overload, and ultimately delay  
23 maybe a traditional solution.

24 So, all of that is in -- is part of our

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 process, or it's what we want to consider. It's  
2 part of grid modernization and a path we'd like  
3 to go down and explore. Ultimately, we're not at  
4 the stage where we've completed all of our  
5 financial analysis and said "Okay, let's roll  
6 this out, and here are the benefits, here the  
7 costs." But that is opportunities in other  
8 projects that, you know, we would look to  
9 implement in the coming years.

10 CMSR. SIMPSON: Okay. I guess I would  
11 jump over, just as an inquiry to the Department,  
12 I mean former Staff, and now the Department.  
13 These topics appear to have been of significance  
14 to the Department in the past. Do you have any  
15 comment on whether -- or, do you have any comment  
16 on the appropriateness of integration of these  
17 types of technologies or process improvements  
18 into the Company's operating procedures?

19 You can reserve it for later. I just  
20 want to make sure that this topic, that has  
21 clearly been raised over the last six or seven  
22 years, is moving in a direction that is  
23 addressing the concerns or the interest.

24 MR. DEXTER: So, I'll ask our witnesses

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 to address that when they take the stand, after  
2 the Company.

3 CMSR. SIMPSON: Very good. Thank you.

4 Okay. So, then -- this was a helpful  
5 discussion. Thank you for your responses.

6 **BY THE WITNESS:**

7 A (Tebbetts) And, if you --

8 BY CMSR. SIMPSON:

9 Q Please.

10 A (Tebbetts) I'd like to add another piece to that,  
11 too, because I think the customer aspect is  
12 really important on there.

13 Q Please.

14 A (Tebbetts) The customer -- the Company can do as  
15 much as they can to educate and to make changes  
16 to our planning to accommodate peaks and things  
17 like that. But, as part of the Battery Pilot, we  
18 have found, and in our report we filed, that  
19 customers have learned about when they use power,  
20 and how it affects their bill, because of those  
21 time-of-use rates, and because they have the  
22 batteries.

23 And, as someone who talks to customers,  
24 I've actually talked to customers a whole bunch



[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1       in the past few months simply because of  
2       community aggregation coming forward, and because  
3       of the high rates with regards to energy service.

4   Q   Uh-huh.

5   A   (Tebbetts) And a lot of questions they have asked  
6       about are really "How do I continue to try to  
7       reduce my bill?" And also, "How is it" -- you  
8       know, "This program has really allowed me to  
9       actually look at when I'm using power, and how to  
10      keep doing that?" And that really is great  
11      information for us to take back, because, even  
12      though our Operations and Engineering groups will  
13      plan our system, we still have to get customers  
14      to buy in to using power at periods that are  
15      cheaper.

16  Q   Uh-huh.

17  A   (Tebbetts) And, so, I think the customer aspect  
18      is really important when we're looking at our  
19      planning. And I know that our planning process  
20      does include, especially with the data we have  
21      from the Battery Pilot, you know, it includes  
22      looking at all of that new information that we  
23      have.

24  Q   Thank you. That leads me to a question I had

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1       about a comment on Bates Page 050 of Exhibit 2.  
2       It's at the very bottom of the page. And it  
3       describes "consideration of a screening of demand  
4       response programs into alternative analysis for  
5       system upgrades going forward, potentially  
6       leveraging the increasing amounts of demand  
7       response resources participating in the Forward  
8       Capacity Market and energy markets." Do you see  
9       that statement?

10    A     (Tebbetts) Yes.

11    Q     Do you have any updates or comments to provide to  
12       us with respect to that statement?

13    A     (Tebbetts) Sure. So, we have looked at  
14       opportunities for front-of-the-meter storage,  
15       large batteries. And how can we utilize what's  
16       come out of FERC 2222 Order?

17               My understanding is, as of right now,  
18       FERC has left it up to the ISOs to determine how  
19       they want to interpret and how they want to move  
20       forward with storage being bid into the market.  
21       And maybe that's even kind of old, actually.  
22       But, if there's newer information, there very  
23       well could be. But we have looked at it. We, as  
24       part of future planning, and I don't want to say

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 "planning" -- when I say "planning", I'm not  
2 saying it's within our capital budgeting. I'm  
3 saying, we're looking at today technology --  
4 technology is available today, and then, you  
5 know, where do we think that technology is going  
6 to go?

7 Q Yes.

8 A (Tebbetts) What are those costs to it? And how  
9 can we, as a company, utilize the markets to  
10 serve customers for reliability, but also price  
11 arbitrage in the market to earn money for  
12 customers to reduce rates?

13 So, if we have the opportunity to bid,  
14 you know, five megawatts of storage into the  
15 market, at four o'clock on, you know, July 7th,  
16 when it's 92 degrees outside, what is that  
17 cost-benefit to our customers? We have looked at  
18 that. We don't have any plans in the works at  
19 this moment to go and build something. But we do  
20 know that there are better opportunities in 2023  
21 than there were in 2020-2021. And these are  
22 things that we are looking at as opportunities.

23 CMSR. SIMPSON: Thank you. I think  
24 I'll leave it there for the time being.

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1                   So, I don't have any further questions.  
2           Thank you.

3                   CHAIRMAN GOLDNER:   Okay.   Let's move to  
4           Commissioner Chattopadhyay.

5                   CMSR. CHATTOPADHYAY:   Good morning.

6   BY CMSR. CHATTOPADHYAY:

7   Q     To be sure I understood the discussion before,  
8           let's go to Exhibit 8, Bates Page 476.   And let  
9           me know when you're there.

10   A     (Tebbetts) Just to be clear, 476 is actually  
11           "Page 472 of 472"?

12   Q     No.   It's "469 of 472".

13   A     (Tebbetts) Okay.   Thank you.   I'm there.

14   Q     Yes.   So, recall the discussion that you were  
15           having about the single manufacturer?

16   A     (Tebbetts) Yes.

17   Q     And I'm just trying to confirm, what you said  
18           was, if you go to the row associated with "2024",  
19           I think I'm seeing it right.   Yes.   So, where you  
20           have "26.547" for the "Spot Load Adjustment", I  
21           heard you that 20 of that has not materialized?

22   A     (Strabone) That is correct.

23   Q     So, ultimately, the total would be 42 -- it would  
24           be 22.598, overall total, correct, at the end?

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 A (Strabone) Correct.

2 Q Okay. I just wanted to be sure about that.

3 Okay.

4                   Going back to the discussion about NWA  
5 or NWS, is any of the witnesses here aware of a  
6 non-wired solution or that kind of project that  
7 is large-scale, but not, you know, a utility  
8 project? So, it's somebody, some competitive  
9 provider, is interested in -- have either  
10 implemented it or is considering. Does the  
11 utility, meaning Liberty, are you aware of  
12 anything that's going on in New Hampshire right  
13 now in your jurisdiction?

14 A (Tebbetts) I am not aware of any projects that  
15 are utilized for a non-wires solution within our  
16 territory. I don't know if the other two are?

17 A (Strabone) I am not.

18 Q Okay. Why do we have the LCIRP? What is it  
19 meant to do? It's a planning document, right?

20 A (Tebbetts) Yes. I think that the LCIRP -- well,  
21 it's a legacy, let's be clear, it's a legacy, but  
22 I do think it's important. It provides the  
23 Company, and other parties, an opportunity to  
24 present, outside of the company, its thoughts,

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1       its plans, and how it anticipates moving forward  
2       with serving its customers with, you know, safe  
3       and reliable power.

4   Q   And, when you document the LCIRP, you're, like, I  
5       think you're describing how you're looking into  
6       the future what the situation might be, and you  
7       find -- figure out what's the best way to serve  
8       the customers. What you need to do for the  
9       distribution plans, facilities, *et cetera*, as  
10      well as perhaps even procurement of energy,  
11      correct? Would you agree with that?

12  A   (Strabone) Yes.

13  Q   In the LCIRP that you have submitted here, apart  
14      from the forecasting analysis that relies on  
15      econometrics, wherein you might -- you have  
16      talked about "90/10", "50/50", perhaps normal  
17      load and all of that. But, other than variations  
18      due to that, this is largely a deterministic  
19      look, right? You haven't done any stochastic  
20      analysis, as to what happens to the prices in --  
21      over the next five years were double the prices  
22      that were at that point, you know, when you wrote  
23      the report? You didn't conduct any of that  
24      analysis? There is nothing stochastic here?

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 A (Strabone) Correct.

2 Q Would you agree that, at the time you  
3 conducted -- you wrote this report, if the energy  
4 prices were three times higher than what they  
5 were at that time, the solutions might be  
6 different, if you were really thinking about  
7 ratepayers. So, what kind of procurements you  
8 can have going forward, perhaps you would have  
9 suggested maybe what we have right now is not  
10 optimal, maybe we should go with a different mix  
11 of long term, medium term, you know,  
12 procurements, rather than just staying with what  
13 the Commission had said, that you're going to go  
14 through the RFP process and you're going to  
15 procure 100 percent?

16 A (Strabone) Correct. It's a snapshot in time,  
17 based on what we knew and when. Very similar, if  
18 we were to do this today, you know, and let's  
19 take it reversed or, you know, we're making an  
20 LCIRP today, and three years from now it's  
21 completely different, we're back to, you know,  
22 what the energy industry and everything else  
23 looked like three years ago, we'd be in the same  
24 situation, right? So, ultimately, the plan is

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1           what we knew when, based on the best information  
2           we had, and what we believe would address our  
3           plans and initiatives going forward.

4   Q       Are you aware of Monte Carlo?

5   A       (Strabone) Yes. Just to state, I'm aware of it.  
6           Never dove into the world of Monte Carlo  
7           analysis. But I'm aware of what it does.

8   Q       I probably would love to be in Monte Carlo, but  
9           I'm talking about the technique.

10   A       (Strabone) Yes.

11   Q       So, I think, what I'm getting at is, the LCIRP  
12           needs to be more driven by "What if this happens,  
13           what would be the approach?" And I know right  
14           now you're also thinking in terms of "There is a  
15           problem, we need to solve it." That's the  
16           mindset that largely drives what you have in the  
17           LCIRP.

18                   But, if you're going to make it more  
19           worthwhile, and not simply have a legacy  
20           document, you also need to think about perhaps  
21           playing with variations in key variables, and  
22           seeing where the solutions might lie differently  
23           then. Would you agree that would be a more  
24           useful exercise?



[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 A (Strabone) I believe it would, as long as all the  
2 parameters, with all stakeholders, were agreed to  
3 prior to running the analysis.

4 Q So, did the Company at all broach this issue and  
5 see how the other stakeholders react to it?

6 A (Strabone) I believe, as we stepped through this,  
7 there was stakeholder engagement. However, Ms.  
8 Tebbetts can further explain.

9 A (Tebbetts) Yes. So, when it comes to a Monte  
10 Carlo, no, we didn't discuss that. We had  
11 stakeholder engagement looking at potential  
12 non-wires solutions.

13 But, when I mentioned earlier "this is  
14 a legacy", I guess I didn't mean the document  
15 itself, I meant the statute. The statute is a  
16 legacy. It still talks about "procurement of  
17 power". And, certainly, as we discussed today,  
18 we go out to bid for that.

19 I do think that there is  
20 opportunities -- there's always opportunities to  
21 make this better. There's always opportunities  
22 to look and see how we can modernize the statute.  
23 And I know that there's an effort right now in  
24 the Legislature to look at that, and see how it

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 can be changed.

2 Q I think, even as the statute stands where it is  
3 currently, there are ways to do the LCIRP better,  
4 to be focused on the Company being more  
5 nimble-footed in responding to, for example, the  
6 situation that happened over the last year or so.  
7 So, you could have probably looked into "You know  
8 what, the procurement method probably should be  
9 different, if we are into a period where the  
10 prices are very high."

11 That's the kind of insight you might  
12 end up getting from -- if you were doing a Monte  
13 Carlo approach. And I'm just suggesting that  
14 would be helpful.

15 A (Tebbetts) May I respond to that?

16 Q Yes. Please.

17 A (Tebbetts) Respectfully, we filed this in  
18 January of 2021. And I agree, there should be  
19 more opportunities to be nimble. But I would  
20 suggest the process of approval, and no one's to  
21 blame, it's the process, is not nimble. And,  
22 because it's not nimble, we are here two years  
23 later with many things that have happened. We  
24 have gone through a pandemic. We've had

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 ridiculous gas prices in the market, really high  
2 energy prices. And none of that can be reflected  
3 in what we filed in January 2021, unless we  
4 refile and completely redo our Plan again.

5 And, so, I think you're right. And I  
6 don't know how to fix that approval process. But  
7 I do think that, if that process were more  
8 nimble, we would be able to pivot more easily to  
9 look at opportunities there.

10 Q I agree with you that, you know, to be more  
11 nimble, you can be more nimble on different  
12 fronts.

13 But, really, with respect to the LCIRP  
14 myself, what I'm trying to get a response from  
15 you is, if we had applied a more stochastic  
16 approach, that is more helpful to be able to  
17 react to the market realities that you are  
18 facing. And I'm just -- and I understand your  
19 point about, that is also a question for the  
20 other stakeholders, but I'm just asking, would  
21 you agree that what I just said is true?

22 A (Tebbetts) And, again, I think there is truth to  
23 it. I don't know -- I don't know how well it  
24 would work. But I think the concept makes sense.

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 And it's an opportunity to explore and see if we  
2 can get there.

3 Q So, let's go to Exhibit -- just a moment. This  
4 is, I think, Exhibit 7. And it's Bates Page 007.

5 A (Tebbetts) Okay, I'm there. I'm there.

6 Q And it's the -- it's the supplemental filing, the  
7 page number for that was Page 5, just to make  
8 sure that we are okay.

9 A (Tebbetts) Yes.

10 Q And you start off, right after when you say  
11 "Future of Energy Pricing", said -- there's a  
12 sentence about DOE's testimony. And then  
13 "Liberty is a price taker in the market for  
14 electric supply; Liberty procures its electric  
15 supply through a competitive solicitation  
16 process. Thus, Liberty has no expertise on the  
17 global natural gas market or on the longer-term  
18 availability of capacity. Those topics are best  
19 addressed by ISO-New England."

20 Can you just give me a sense of what  
21 did you understand the term "longer-term  
22 availability of capacity" meant?

23 And, you know, I'm just trying to  
24 understand.

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 A (Tebbetts) Sure. So, when we look at the  
2 capacity in the market, we, as a utility -- as a  
3 distribution utility, we don't own the  
4 generation. So, when we talk about "longer-term  
5 availability", we rely on ISO-New England to  
6 ensure that the power plants that are operating  
7 today will be there in five, ten, fifteen, twenty  
8 years. And, if they aren't, or they don't  
9 anticipate they will be, that ISO-New England is  
10 doing something to spur someone to build them.  
11 And that's where we look to say "we don't have  
12 expertise in that". We can only read what  
13 ISO-New England puts out in front of us to  
14 understand what they're doing.

15 Q I'm just trying to confirm what your  
16 understanding was.

17 A (Tebbetts) Uh-huh.

18 Q So, it sounds like you assumed that meant  
19 something akin to the capacity that is procured  
20 through the Forward Capacity Market at the  
21 ISO-New England world?

22 A (Tebbetts) And it's not just the ISO -- it's not  
23 just the Forward Capacity Market itself. It's  
24 just -- it could simply be the fact that power

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 plants are maintaining and operating. And, so,  
2 there's assurance that power will be available in  
3 the future.

4 Q Okay.

5 A (Tebbetts) Just not sure those are happening.

6 Q Okay. Do you agree, however, that, because we  
7 are talking about electric rates for your  
8 ratepayers, that, at least given the experience  
9 that we've had over the last couple of years,  
10 given how the prices can be volatile, that there  
11 is perhaps a role that the utility can play, in  
12 terms of thinking about creatively how to change  
13 the procurement approach, or at least suggest  
14 ways to do it, and talk to stakeholders about it?  
15 Would you agree with that?

16 A (Tebbetts) Yes. I agree that there are always  
17 opportunities to make this better, and utilizing  
18 what's happened in the past is a good start to  
19 avoid it in the future.

20 Q Given this was playing out, and I'm assuming this  
21 report was filed in December 2022?

22 A (Tebbetts) Yes.

23 Q So, this was all playing out over the last few  
24 years. Did you actually have any conversation

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 with the other parties about, you know, the  
2 ability to at least intellectually discuss  
3 whether the improvements in procurement itself  
4 would help quite a bit to help lower the electric  
5 rates?

6 A (Tebbetts) So, I have not. I don't know if our  
7 Procurement group has. Our Energy Procurement  
8 group deals directly with the bids.

9 Q I'm asking within the LCIRP?

10 A (Tebbetts) Oh, my apologies. No, not within the  
11 LCIRP.

12 CMSR. CHATTOPADHYAY: Okay. I think  
13 that's all I have. Thank you.

14 CHAIRMAN GOLDNER: Okay. I have a few  
15 questions.

16 So, let me just begin, and I'll stop  
17 myself at noon. I probably won't be finished by  
18 noon. And would the parties, for the lunch  
19 break, like half an hour, 45 minutes, an hour?  
20 What would be best?

21 MR. SHEEHAN: I'm hearing "an hour"  
22 from our side would be best.

23 CHAIRMAN GOLDNER: Okay.

24 MR. SHEEHAN: I got some fingers up

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1           there.

2                   CHAIRMAN GOLDNER:   Perfect.   That's no  
3           problem.

4                   MR. SHEEHAN:   This finger *[indicating]*.

5                   CHAIRMAN GOLDNER:   Is that acceptable  
6           to everyone?

7                   MR. CROUSE:   Yes.   In a prior life, I  
8           worked at a theme park.   So, whatever you say  
9           works for me.

10                  CHAIRMAN GOLDNER:   Okay.

11                  MR. DEXTER:   Yes.   An hour lunch would  
12           be helpful, because we'll have a chance to talk  
13           to our witnesses over lunch.

14                  CHAIRMAN GOLDNER:   Okay.   Very good.  
15           Okay.   I'll try to stop at 12:00 sharp, and then  
16           we'll come back at 1:00.

17                  Okay.   So, just getting started, I  
18           have -- I see that the Company responded to some  
19           of the Commissioner prior questions relative to  
20           "capital".   So, I appreciate that being in the  
21           filing, and it being worked by the DOE as well.

22   BY CHAIRMAN GOLDNER:

23   Q   And, so, I'll go to, as I think Mr. Dexter  
24       pointed out earlier, Exhibit 8, Pages 480 and



[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1           481, is the capital -- I'll call it the "Capital  
2           List", "5-Year Capital List", \$124 million total.

3                       So, my first question is, the first  
4           column in the spreadsheet is "2022". And are  
5           those actuals? This was filed in 2023. So, I'm  
6           assuming it's actuals, but maybe not.

7   A       (Tebbetts) No. Actually, what we took was the  
8           request, when we had worked with DOE, was to take  
9           what's on Bates Page 057, which was compiled in  
10          2020, and provide the detail behind that.

11   Q       Okay.

12   A       (Tebbetts) So, this is not actuals. This is just  
13          that original breakdown.

14   Q       Okay. So, it's a couple years old and dated.  
15          So, can you tell me what the actual capital spend  
16          was for 2022?

17   A       (Strabone) I cannot. We can take that as a  
18          record request, if needed. I do not have that in  
19          front of me at the moment.

20                       CHAIRMAN GOLDNER: Well, the hour break  
21          will turn in handy then at lunch. Maybe we can  
22          come back. We prefer not to take record  
23          requests, --

24                       WITNESS STRABONE: Yes.

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 CHAIRMAN GOLDNER: -- and just handle  
2 it in the hearing room. So, we can come back to  
3 that.

4 WITNESS STRABONE: Noted.

5 CHAIRMAN GOLDNER: Thank you. Okay.  
6 So, 2022 capital. Okay.

7 BY CHAIRMAN GOLDNER:

8 Q So, this might be an equally difficult question.  
9 But the main spending in 2022, at least planned  
10 spending, was your SAP implementation. So, my  
11 first question is, is that finished? Are you  
12 finished implementing SAP?

13 A (Strabone) Yes, we are.

14 Q Okay. And, so, there will be no expenses that  
15 will show up in your actuals in 2023?

16 A (Strabone) I cannot comment on that, because we  
17 were at the end of year.

18 Q Okay. So, there might be some --

19 A (Strabone) So, there may be some carryover, but  
20 not as significant as 2022.

21 Q Okay. And do you have any idea if that 15.4  
22 million that was planned for 2022 is roughly  
23 correct? Or, did you see a significant  
24 difference when you implemented SAP?

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 A (Strabone) I would have to say that we are within  
2 that 15 million. I want to say, we actually came  
3 in slightly below that.

4 Q Okay. If you could check that also at the break,  
5 and just, if it's close to 15, that's fine, but,  
6 if it's significantly different, --

7 A (Strabone) Yes.

8 Q -- that would be good to know. And then, if you  
9 look at the totals on the bottom, I'm down -- I'm  
10 now on 481, you go from 37.6 million, and again  
11 we'll check that number, down to 22 million,  
12 which is mostly the SAP difference, is that still  
13 what you would expect, kind of a \$20 million sort  
14 of run rate, moving out into 2026? Is that still  
15 correct?

16 A (Strabone) That's actually the target that we  
17 look at. However, for 2023, we're slight --  
18 we're a bit below the 22 million. And that's  
19 mainly due to some of the projects not being able  
20 to complete, due to longer lead times on material  
21 than anticipated.

22 Q Okay. That makes sense. Okay. Last question on  
23 SAP.

24 Was that a cost that was shared across

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 other states or is that sort of a cost that was  
2 just for New Hampshire?

3 A (Strabone) That was Granite State Electric's  
4 portion of the total cost. So, it is a corporate  
5 initiative and project. So, there is  
6 cost-sharing Libertywide.

7 Q Do you have any idea of what your percentage was  
8 of the Libertywide total?

9 A (Strabone) No, I do not.

10 Q Another homework assignment for lunch then.

11 A (Strabone) This is getting long.

12 Q Only three questions. I'll try not to make it  
13 longer. We've got six minutes left, we'll see if  
14 I can make it -- not make it longer.

15 Okay. So, my main question with  
16 respect to the spreadsheet is, how is this tied  
17 back to the forecast and, you know, all the other  
18 work that was done here?

19 You've got hundreds of pages. There's  
20 been lots of work put in, as Commissioner Simpson  
21 pointed out. It's a very thorough filing, when  
22 we include the supplemental pieces.

23 But what I really care about is, is the  
24 capital plan tied into the rest of the LCIRP, and

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1           where can I see that?

2   A       (Strabone) So, it is in -- how you can see that?  
3           Give me a moment.

4                     Mike or Heather, have an idea how we  
5           can tie that back quickly?

6   A       (Tebbetts) Yes. Yes, sure. So, Bates Page 057  
7           provides the total amount of spending.

8   Q       Which exhibit?

9   A       (Tebbetts) Oh, I apologize. Exhibit 1 or 2.

10   Q       Fifty-seven (57)?

11   A       (Tebbetts) Yes, Bates Page 057. So, that is  
12           high-level spending. And, as the DOE requested,  
13           because we did not provide the breakdown, they  
14           asked us to provide that breakdown. "How did you  
15           get there?"

16                     And, so, when you look at all of the  
17           information within the Plan, and the appendices,  
18           all of the issues that we found, such as in the  
19           Bellows Falls Study and the Lebanon Study,  
20           looking at grid -- potential grid modernization  
21           opportunities, distribution automation, all of  
22           those things, and then the normal reliability  
23           requirements that we have, all of that is  
24           really -- all of those things are looked at to

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1       then come up with this list of projects we have  
2       to do to accommodate and ensure that we meet the  
3       requirements that we put forth in our Plan, and  
4       that list of projects provides that.

5   Q    So, as an example, you have a "Growth" row for  
6       \$28.3 million, and that ties to the -- you have  
7       a -- well, that ties to the 0.3 percent load  
8       growth that Attorney Dexter was pointing out  
9       earlier?

10  A    (Tebbetts) It doesn't tie to that. That is --

11  A    (Strabone) Sorry. If I may? That's the  
12       percentage of the overall budget that's  
13       associated with that category. So, if you look  
14       at 2022 to 2026, at 28.3 million, that should be  
15       23 percent of the 124.

16  Q    Oh, no, I understand. Thank you. Yes, I  
17       understand what the column is for. I'm just  
18       trying to say, what Liberty is putting forth is a  
19       plan to spend \$28.3 million in that five-year  
20       period. And the reason that you need growth  
21       assets is to support growth. So, you've got this  
22       0.3 percent growth chart that Attorney Dexter was  
23       asking you about earlier. I'm just trying to  
24       say, those are the two things that are tied

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1           together or something different tied together?

2   A       (Tebbetts) So, here's what I'll say. The 0.3  
3           percent growth rate you see, which is probably  
4           off, now that we've made those other adjustments  
5           for spot load, the growth for that 0.3 percent is  
6           part of what we're doing here. But the  
7           additional spot load growth that we talked about  
8           is also included in here for the next five years.  
9           And, so, that's -- we would tie back to the list  
10          of projects on Bates 4 -- it's the list of  
11          projects that you see for "growth", essentially  
12          would tie back to the fact that we have to now  
13          serve all those customers. And the potential  
14          load growth is that 0.3 percent, give or take,  
15          because, certainly, that's just an average over  
16          the years. It could be higher or lower within  
17          each individual year.

18   Q       Perfect. And what I'm really -- my encouragement  
19           here is that, I know there's a rate case coming,  
20           the nice part about the LCIRP is that it helps  
21           prepare for the rate case and helps the Company  
22           put forward its best rate case. And, if you're  
23           going to show a certain amount of growth in  
24           dollars, then that should be tied into the load

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 growth.

2 And then, in your rate case, I would  
3 encourage the Company to really take a good hard  
4 look at that, because you'll get more questions.  
5 And then, coupling onto Commissioner  
6 Chattopadhyay's comments, you know, Monte Carlo  
7 simulations and other ways of looking at the  
8 different scenarios is also heavily encouraged.

9 So, in the LCIRP, no problem. But I'm  
10 just maybe giving you some headlights for your  
11 upcoming rate case that might make the process a  
12 little easier.

13 Okay. Let me just hit -- go back to  
14 Exhibit 8, and I'll just ask maybe one more  
15 question, and then we'll take a break.

16 In that document, I can't say how many  
17 lines down, it's about 20, there's something  
18 called "AMI Placeholder - GSE", it looks like  
19 it's about \$9 million. And then, there's a line  
20 for "Grid Modernization", up two, for about \$8  
21 million. So, 17 million of the 124 million is  
22 those two line items.

23 Can you walk us through your AMI plans?  
24 Let's hold grid modernization until after the



[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 break. But can you walk us through what you mean  
2 to implement, in terms of AMI in this Plan?

3 A (Strabone) Sure. So, I did not find the line.  
4 But, with respect to AMI, the Company has -- so,  
5 originally, when this Plan was developed, we had  
6 a quote from the chosen manufacturer, which is  
7 Itron, and we entered into an agreement with  
8 Itron to roll out AMI, not only here in New  
9 Hampshire, but at our sister utilities in  
10 Missouri and over in California as well.  
11 Missouri was a bit further ahead, and they did  
12 their implementation. As we step through some of  
13 the contractual agreements, and looking at AMI  
14 technology, and in conversations with Itron, the  
15 communication network that they -- that we  
16 originally signed the contract with, which was  
17 called "OpenWay Riva", Itron was moving away  
18 from. They were still going to support it in  
19 legacy systems. But, for new AMI rollouts, it  
20 was not their communication platform that they  
21 were going to implement. It was going to be  
22 GenX.

23 Ultimately, when we were doing our  
24 analysis over the communication network and AMI,

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 we also determined that GenX was a better  
2 communication platform for AMI, because it has  
3 the capability and bandwidth to build off and be  
4 a foundational piece for grid modernization. So,  
5 anything you wanted to roll out with respect to  
6 distribution automation, or, as I mentioned  
7 earlier, you know, volt VAR compensation and  
8 optimization, islanding, those types of grid  
9 modernization technologies, the GenX platform  
10 was, as I said, more robust and capable of  
11 handling that, where OpenWay Riva wasn't.

12 So, ultimately, we went back to Itron  
13 and had discussions, and that was supported not  
14 only here at the local level, but in corporate as  
15 well. And I believe our original quote was  
16 around 2019 numbers. And we ultimately, through  
17 conversations and working with Itron, we received  
18 an updated quote for the new technology, which  
19 we're certainly working through. So, --

20 Q Just out of curiosity, was the Itron -- was  
21 OpenWay the same implementation or was it  
22 something else? What was the communication  
23 technology?

24 A (Strabone) It was "OpenWay Riva" is what they

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1           referred to. And that was the Itron's  
2           communication platform.

3   Q       Okay.

4   A       (Strabone) But that had limitations of going  
5           with, you know, distribution automation, and  
6           looking at AMI -- excuse me -- with grid  
7           modernization. And looking at AMI being a  
8           foundational piece, and trying to build off the  
9           communication network as well. And, in talking  
10          with other utilities that have had OpenWay, and  
11          were going to GenX, and other folks in the  
12          industry, GenX provided a bit more capability --  
13          a lot more capability than OpenWay.

14   Q       Okay.

15   A       (Strabone) So, currently, as part of this Plan,  
16           Liberty is not, at the moment, proceeding with  
17           the AMI rollout, as we're working through the  
18           contract with Itron, evaluating what a rollout  
19           would look like, a phased-in approach, and  
20           identifying how that implementation will work.

21                        So, there will be a proposal towards  
22           the tail end of our upcoming rate case. But  
23           we're not in a position to -- we're not -- we  
24           have not completed our analysis, and we're not in

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 a position to roll out a plan just yet.

2 Q So, you would anticipate, in your initial rate  
3 case filing, we wouldn't see it. But that it  
4 might, as you go through the analysis, it might  
5 show up later in the rate case filing?

6 A (Strabone) You'll see it in the rate case filing  
7 as more of a placeholder on the very tail end of  
8 our upcoming filing.

9 Q Okay.

10 A (Strabone) So, from this Plan, to what you're  
11 going to see in the rate case, there has been a  
12 delay as we work through the new technology and  
13 how that implementation would work.

14 CHAIRMAN GOLDNER: Okay. Thank you.

15 Okay. Let's pause there. I see that I  
16 went a little after. So, let's return at 1:05.  
17 Thank you.

18 *(Lunch recess taken at 12:04 p.m., and*  
19 *the hearing resumed at 1:05 p.m.)*

20 CHAIRMAN GOLDNER: Okay. We'll go back  
21 on the record.

22 And I think the Company was following  
23 up on some additional information at the break?

24 WITNESS STRABONE: That is correct.

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 BY CHAIRMAN GOLDNER:

2 Q I think we were starting with the actual 2022  
3 capital?

4 A (Strabone) Yes. So, actual 2022 capital was  
5 approximately \$42 million spent.

6 Q All right. So, about roughly four and a half  
7 million over the estimate?

8 A (Strabone) Correct. And the major driver was  
9 that -- for that was the reallocation of costs --  
10 excuse me -- readjustment of costs to attribute  
11 it to what we see for industry pricing, not only  
12 for material, but also for labor as well.

13 Q Okay. So, the percentage in my head is maybe 12  
14 or 15 percent, something like that?

15 A (Strabone) I'll trust, but verify.

16 Q "Trust, but verify." I like that. I can do it,  
17 too, here. See if we get the same number.

18 A (Strabone) 13.5.

19 Q Yes. Okay. Very good. And then, the -- you  
20 were going to check, too, to see if there was any  
21 significant difference over the planned SAP  
22 spending and the actual spending?

23 A (Strabone) Correct. So, in the budget, as you  
24 indicated, was approximately 15 million for SAP;

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 allocated cost in 2022 was 13.5. And I believe  
2 we also talked about what percentage that was.  
3 So, at the corporate level, which this project is  
4 funded at, that is a 3.2 percent cost allocation  
5 to Granite State.

6 Q Okay. That sounds like a good deal. And is that  
7 based on -- how did Liberty decide on the  
8 percentage? Was it based on percent revenue or  
9 something?

10 A (Strabone) I was not able to get that. I know,  
11 in the past, they usually look at customer  
12 counts, revenue size. So, I expect it's one or a  
13 combination of all of those.

14 CHAIRMAN GOLDNER: Okay. Okay. Well,  
15 I think New Hampshire paying 3.2 percent starts  
16 like a good starting place. Thank you for the  
17 follow-up on that. That saves us a record  
18 request.

19 Okay. So, I think that is all I have  
20 for capital. I'll just move to one or two other  
21 quick topics. And then, we'll see if there's any  
22 additional questions from the Commissioners.

23 BY CHAIRMAN GOLDNER:

24 Q If we go to Exhibit 1, Bates 018, that's 1-8,

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1       there's a nice chart in the middle of the page  
2       that talks about the "Summary of the Peak Demand  
3       Forecast". And, naturally, because of the timing  
4       of the filing, this shows actual data through the  
5       time of the filing. And I'm curious as to what  
6       you found since then, in the two years that  
7       followed? Was your forecast right or was it not  
8       right?

9                       They're never right, but how close was  
10       it?

11                      *[Witnesses conferring.]*

12 BY CHAIRMAN GOLDNER:

13 Q       Yes. There's a 2021 forecast, and then 2022.  
14       So, if you have the numbers for both of those  
15       years, it would be helpful to just validate your  
16       forecasting techniques and outcomes.

17 A       (Cooper) I can pull up another sheet that has the  
18       peaks. Our peak went down from '21 to '22. I  
19       believe, last year -- hold on one second.

20 Q       While you're looking for it, there's two lines  
21       for projections. There's a "Extreme Weather  
22       Forecast" in red, and then a "Normal Weather  
23       Forecast" in what looks like blue. I assume the  
24       last couple years you would categorize as

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 "normal", and then we can just see how close your  
2 forecast was to reality.

3 And, if you'd like to read a chapter  
4 ahead in the book, I'll next ask you about Bates  
5 Page 048, to see how those forecasts compared to  
6 reality. That's the SAIDI and SAIFI data.

7 A (Cooper) I don't think my laptop likes this many  
8 spreadsheets open.

9 Q Your 2021 forecast was "192.46".

10 A (Cooper) Okay. I got 2022 right now. 2022 was  
11 198.14 megawatts.

12 Q Okay. Okay. So, you're pretty close. How about  
13 2021?

14 A (Cooper) I'll have to find that one. Forgive me,  
15 I've got 2020 in front of me. Yes, "201.1"  
16 sounds correct.

17 Q 201.1. So, let's see. So, your extreme weather  
18 forecast was 207, your normal weather forecast  
19 was 192.5. It looks it was right in between. Is  
20 that -- would you characterize 2021 as an  
21 "unusual weather year" or how would you have  
22 characterized 2021?

23 Because that's about as high as you've  
24 ever been. That might even be a record. It's



[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1           hard to read the chart exactly, but it's close to  
2           a record.

3                           *[Witnesses conferring.]*

4   **BY THE WITNESS:**

5   A       (Cooper) I guess we don't know if that's  
6           weather-normalized or not. It sounds like, from  
7           what I was looking at, that was just our peak  
8           that we got from our Energy Procurement, I guess.

9   BY CHAIRMAN GOLDNER:

10   Q      So, that's you're actual number?

11   A       (Cooper) Yes.

12   Q      Yes. And then, the green line was somehow  
13           weather-adjusted, and so it's hard to directly  
14           compare, is what you're saying?

15   A       *[Witness Cooper indicating in the affirmative].*

16   Q      Yes. Okay. Do you know if the 201 that you  
17           actually achieved, is that a high for you, for  
18           the Company? Do you know if you've ever had a  
19           higher number in your history that you can see  
20           easily there? It must be close.

21   A       (Cooper) I would say it's close, --

22   Q      Yes.

23   A       (Cooper) -- if not the peak.

24   Q      Okay. That's helpful. I'm just trying to get an

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 idea of your forecasting.

2 A (Strabone) I can add to that.

3 Q Oh, please.

4 A (Strabone) So, sorry for the delay. Our all-time  
5 high, the Company's all-time high was 205.93  
6 megawatts in 2011.

7 Q 2011. Okay. That corresponds with the peak on  
8 the chart?

9 A (Strabone) That is correct.

10 Q Okay. Okay, that's helpful. I mean, that tells  
11 me that your forecasting is in the ballpark. So,  
12 I mean, that's a good thing.

13 All right. So, let's go to Bates  
14 Page 048, and look at -- it's the same question  
15 for the SAIDI and SAIFI data. Just trying to  
16 understand if your forecasting is solid or not.

17 So, the same question on the chart  
18 there, is it -- you have a projection for 2020.  
19 So, did that -- was that correct or not? For  
20 some reason, you've projected it would go the  
21 wrong way.

22 A (Cooper) Sorry, I'm locked up here a second. So,  
23 you're saying that the projection went up?

24 Q Yes. 2019 you had actual, and everything is

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 going in the right direction. And then, in 2020,  
2 you project that it goes the wrong way. And I'm  
3 just trying to understand if that was --

4 A (Cooper) 2019 was an unusually successful year,  
5 as far as reliability, and last year was as well.  
6 Just I have some new data to provide. So, I'll  
7 pull that up.

8 Q Yes. Looks like your SAIDI, if I'm -- so, your  
9 SAIDI was like at 100 in 2019. What was it in  
10 2020?

11 *[Short pause.]*

12 **BY THE WITNESS:**

13 A (Cooper) Okay. So, SAIDI, from 2019, went up  
14 from 70.66, to 104.75 in 2020; 114.46 in 2021;  
15 and then back down to 82.25 in 2022.

16 Q All right. I'm sorry, slow down. So, what was  
17 it in 2029 *[sic]*, it was a little below 100?

18 A (Cooper) 2019?

19 Q Yes.

20 A (Cooper) It was 70.66.

21 Q 70.66. But the chart says it was somewhere  
22 between 98-99, something like that?

23 A (Cooper) I think that might have been the  
24 average. We use a five-year average for that.

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 Q Okay. So, that's a rolling average?

2 A (Cooper) Uh-huh.

3 Q Okay. All right, I see that. You have that at  
4 the top. So, that's fine.

5 So, what was the -- so, the question  
6 really then is, using the same chart, what's your  
7 five-year rolling average for 2020?

8 A (Cooper) 106.61.

9 Q 106.61. So, you know, again, your estimate is in  
10 the ballpark.

11 A (Cooper) So, what happened was, in 2015, we had a  
12 really good year, too. So, we dropped that off,  
13 coming from a year offsetting --

14 Q Okay.

15 A (Cooper) -- with the larger numbers is the  
16 average.

17 Q Okay. And SAIFI is the same, the same scenario?

18 A (Cooper) SAIFI? So, same thing, five-year  
19 average, 2019 was 0.83; went up a tick to 0.88 in  
20 2020; then down to 0.76 in 2021; and then point  
21 0.73 in 2022. Those are the average, five-year  
22 average.

23 Q Okay. And I know the Department measures this  
24 closely. So, that is helpful.

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 Just a couple more questions.

2 Bates 052, same exhibit. You have a nice chart,  
3 Figure 4.6, that talks about the "Effect of PV  
4 Positioning on the System Peak". And, basically,  
5 what you say on -- what the Company says on Line  
6 2 is that "PV does not typically impact the  
7 winter peak loads, because winter peak loads  
8 occur in the evenings." And then it talks about  
9 wind resources and so forth.

10 So, I think -- so, I think that PV  
11 corresponds nicely probably to summer peak loads,  
12 but not winter, is that fair?

13 A (Cooper) Yes, that's fair.

14 A (Strabone) Yes.

15 Q Okay. And then, how does wind energy impact peak  
16 winter or summer loads? I mean, typically, in  
17 the winter, on clear, cold nights, the wind isn't  
18 blowing. So, I suspect that it's -- that the  
19 wind -- wind also does not correspond to the peak  
20 load. But I'd like to get the Company's opinion  
21 on that?

22 A (Tebbetts) We only have one customer with wind,  
23 and it's very small. So, --

24 Q Do you know how -- I'm just thinking about

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 scalability in the future, if you're leveraging  
2 more wind energy, how would that help or not help  
3 your peak load profile?

4 A (Cooper) In my opinion, I think it would help.  
5 Because, with more PV coming on line, your -- so,  
6 your winter peak is going to be behind. And  
7 then, you shift -- you peak later, because your  
8 PV is dropping that curve until the Sun goes  
9 away. So, and then, combined with all the EV  
10 charging that goes on at night, and that -- the  
11 stress that's going to apply to the system when  
12 the PV is down, I would think other sources  
13 should be equally incorporated.

14 Q And it might be more of a meteorological  
15 question, and probably none of you are  
16 meteorologists, but --

17 A (Cooper) Actually, --

18 Q But, if you are, that's perfect. But I'm just  
19 trying to understand, the wind energy as it  
20 relates to peak load, do you have any studies  
21 that show that relationship? Because I don't  
22 think -- I think, given the, you know, high  
23 pressure systems and so forth during, you know,  
24 very cold and very hot days, I don't think it

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 corresponds to the peak load, but I could be  
2 wrong.

3 A (Strabone) We do not have any studies and --

4 Q Unknown?

5 A (Strabone) -- unknown. We would look, you know,  
6 to the industry -- as we go down this path, we  
7 would look to the industry. I know I would also  
8 look to ISO to see what they had, and other  
9 resources, to see how that would correspond. But  
10 we do not have anything at our disposal at this  
11 moment.

12 Q Okay. Perfect. Yes. That's another maybe topic  
13 for rate cases and such, depending on what you're  
14 proposing.

15 Okay. I want to go quickly back to  
16 some of the OCA's comments. I don't remember if  
17 it was Ms. Tebbetts or Mr. Strabone who was, when  
18 the OCA was asking you about default service, one  
19 of you said, and I didn't record which, that your  
20 "hands are tied".

21 Is there anything that the Commission  
22 is doing to tie your hands on sort of lowering  
23 default service rates? Is there something you  
24 would be seeking from the Commission? Or was

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1       that more of a general comment, in that it's a  
2       pass-through, and you were more talking about  
3       that?

4   A     (Tebbetts) I believe, I'm trying to recall, there  
5       is a docket open.

6   Q     053?

7   A     (Tebbetts) Yes, that is looking at procurement of  
8       power. Other than that, I don't believe there's  
9       anything else that's being looked at.

10  Q     There's nothing you would like to highlight  
11       today, in terms of something the Commission could  
12       do to help untie your hands, is my question? If  
13       there's anything you would like to suggest, we  
14       would like to know about it.

15  A     (Tebbetts) I don't think there's anything that we  
16       could suggest to make change. I think that  
17       it's -- we're part of that larger market. And,  
18       until things with the larger market change, and I  
19       don't know what those answers are, pricing is  
20       going to be the way it is, even in the way we  
21       procure power, I don't know if it can get better.

22               CHAIRMAN GOLDNER: No problem. I just  
23       want to make sure it's -- we have the record  
24       straight, in terms of who's tying your hands, and



[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 I think you've answered the question.

2 So, my other point, relative to the  
3 OCA's line of questioning, was my encouragement  
4 would be, in future filings, to include that  
5 executive summary, just like if you were  
6 presenting to your CEO or president or something,  
7 a simplified slide set. And I understand that  
8 probably can't even come in the initial filing,  
9 because at that point you're still working with  
10 the parties and you're still sorting things out.  
11 But, at some point in the filing, if you just  
12 have a simplified version, I think all parties  
13 and the Commission would find that to be very,  
14 very helpful. Just an executive view of what  
15 your proposing and what you're trying to  
16 accomplish. So, I'll just leave that as a  
17 comment.

18 I also will comment on Bates 074,  
19 Exhibit 1. You have a comment related to "ADMS,  
20 AMI, and OMS integration allowing for proactive  
21 responses to outages." So, I wanted to -- and as  
22 opposed to "waiting for customers to call in".  
23 So, I wanted to highlight that that was noted in  
24 the filing, and that that looks like a path

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 forward that is encouraging.

2 BY CHAIRMAN GOLDNER:

3 Q And then, finally, we'll go to Bates 089,  
4 Exhibit 1. You have a table there called  
5 "Program Comparison - Ranked". And the top item  
6 on your table is "Conservation Voltage". And,  
7 so, I'd just like to understand how that's going?

8 This was a couple years old, I think,  
9 in your original filing. And, so, if you could  
10 maybe provide an update, in terms of if you're  
11 seeing the kind of benefits that you thought you  
12 would see from conservation voltage?

13 A (Strabone) So, this was the analysis as part of  
14 overall grid modernization. And Liberty has not  
15 embarked on any one of these line items or  
16 implemented it. So, we do not have any pilots  
17 out in the system where we can comment on what  
18 our actual savings are, compared to what was  
19 forecasted.

20 Q Okay. So, I notice in your forecast on where we  
21 started, with the capital, you had, I don't  
22 know, 8 or 9 million forecasted for grid  
23 modernization. Your point is is that you haven't  
24 actually started any of that yet, that's just,

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 today, that's all in the forecast?

2 A (Strabone) That is correct. The one thing that  
3 we are -- that we have looked at is, we're  
4 currently conducting a study with respect to  
5 distribution automation, which is not really  
6 necessarily on this graph, on this table here.  
7 But we're looking for what the next phase of  
8 distribution automation looks like with respect  
9 to automatic fault location, isolation, and  
10 system restoration.

11 As the grid modernization is building  
12 off the AMI network, that's one of the ones that  
13 we're looking at. But we're conducting a study  
14 to see what would the financial costs be, what  
15 improvements we need to make to our system, and  
16 locations of equipment we need to add.

17 Q Okay. And then, final question on this table is,  
18 AMI is coming in dead last there in the ranking,  
19 with a negative NPV of 6.7 million. I assume  
20 that's because you're treating it as an enabling  
21 technology that in and of itself has a negative  
22 NPV, but it enables other technologies. So, when  
23 coupled with other technologies, the system  
24 implementation might be positive, but AMI alone

[WITNESS PANEL: Tebbetts|Cooper|Strabone]

1 is negative. Is that fair?

2 A (Strabone) That is correct.

3 CHAIRMAN GOLDNER: Okay. Thank you for  
4 that.

5 Okay. That's all that I have for  
6 questions for the Company.

7 Let me check with my fellow  
8 Commissioners to see if there's any additional  
9 follow-up?

10 CMSR. CHATTOPADHYAY: I don't. Thank  
11 you.

12 CMSR. SIMPSON: Nothing more from me at  
13 this time. Thank you.

14 CHAIRMAN GOLDNER: Okay. Very good.  
15 Let's then move to redirect, and Attorney  
16 Sheehan.

17 MR. SHEEHAN: I don't have any  
18 questions. Thank you.

19 CHAIRMAN GOLDNER: Thank you, Attorney  
20 Sheehan.

21 So, at this time, the Liberty witnesses  
22 are excused. Thank you.

23 And DOE is invited to take the stand  
24 and be sworn in. Thank you very much.

[WITNESS PANEL: Dudley|Willoughby]

1                   *[Short pause.]*

2                   CHAIRMAN GOLDNER: When the witnesses  
3 are settled, Mr. Patnaude, you can please swear  
4 in the witnesses.

5                   *(Whereupon **JAY E. DUDLEY** and*  
6                   ***RONALD D. WILLOUGHBY** were duly sworn by*  
7                   *the Court Reporter.)*

8                   CHAIRMAN GOLDNER: Thank you,  
9 Mr. Patnaude.

10                  Mr. Dexter, please proceed with direct  
11 examination of the witnesses.

12                  MR. DEXTER: I will. And I want to  
13 first state the Department's appreciation for the  
14 Commission allowing Mr. Willoughby to testify by  
15 camera. That's a big savings, and we appreciate  
16 that.

17                  So, I have just a few questions to  
18 identify the witnesses, and then I'd like to ask  
19 a few questions of them to maybe follow up on  
20 some topics that were raised this morning. And  
21 I'll start with Mr. Dudley.

22                               **JAY E. DUDLEY, SWORN**

23                               **RONALD D. WILLOUGHBY, SWORN**

24                               **DIRECT EXAMINATION**

[WITNESS PANEL: Dudley|Willoughby]

1 BY MR. DEXTER:

2 Q Mr. Dudley, will you please state your name and  
3 position with the Department please?

4 A (Dudley) My name is Jay Dudley, and I'm a  
5 Utilities Analyst for the Electric Division of  
6 the Regulatory Support Division of Department of  
7 Energy.

8 Q And have you reviewed the materials in this case,  
9 primarily the Company's Least Cost Integrated  
10 Resource Plan, and the supplements, and the data  
11 responses that were filed pursuant to Department  
12 questions?

13 A (Dudley) I have.

14 Q I'm looking at a document that's been marked as  
15 "Exhibit 6". It's entitled "Direct Joint  
16 Testimony of Jay Dudley, Ron Willoughby, and  
17 Joe DeVirgilio". Are you familiar with that  
18 docket --

19 A (Dudley) Yes.

20 Q -- document?

21 A (Dudley) Yes.

22 Q Mr. Dudley, were you involved in the preparation  
23 of that testimony?

24 A (Dudley) I was.

[WITNESS PANEL: Dudley|Willoughby]

1 Q Do you have any corrections that you'd like to  
2 make to the testimony at this time?

3 A (Dudley) I do not have any corrections.

4 Q And, Mr. Dudley, if I were to ask you the  
5 questions that are contained in that testimony,  
6 would your answers be the same as those contained  
7 therein?

8 A (Dudley) Yes, they would.

9 Q Okay. Understanding that those questions were  
10 asked in September 2022, and we're now here in  
11 April of 2023?

12 A (Dudley) That is correct. And subject to the  
13 updated information contained in the supplements.

14 Q Right. Right. The other exhibit that's been  
15 marked in this case by the Department is  
16 Exhibit 8. Are you familiar with that document?

17 A (Dudley) Yes, I am.

18 Q And that is the Company's technical statement --  
19 I'm sorry -- the Department's technical  
20 statement, is that correct?

21 A (Dudley) That is correct, yes.

22 Q Were you involved in the preparation of  
23 Exhibit 8?

24 A (Dudley) I was, yes.

[WITNESS PANEL: Dudley|Willoughby]

1 Q And is the information in Exhibit 8 accurate, to  
2 the best of your knowledge and belief?

3 A (Dudley) Yes.

4 MR. DEXTER: I'm sorry, Mr. Chairman.  
5 I just want to take a minute. I seem to have  
6 lost Exhibit 8 from my screen.

7 CHAIRMAN GOLDNER: Go ahead. Please  
8 take your time.

9 *[Short pause.]*

10 MR. DEXTER: Thank you.

11 BY MR. DEXTER:

12 Q And, Mr. Dudley, the conclusion at the end of the  
13 text of Exhibit 8, around Page 6 and 7, is that,  
14 based on the information that you've learned in  
15 this docket, and based on your review, the  
16 Department recommends that the Commission approve  
17 the LCIRP as filed and as supplemented. Is that  
18 a fair assessment?

19 A (Dudley) Yes.

20 Q Okay. Thank you. I'd like to turn to  
21 Mr. Willoughby.

22 Mr. Willoughby, would you please state  
23 your name and your employer in connection with  
24 this proceeding?



[WITNESS PANEL: Dudley|Willoughby]

1 A (Willoughby) Sure. My name is Ron -- Ronald  
2 Willoughby. And I am the owner of Willoughby  
3 Consulting. And I'm currently under subcontract  
4 to the River Consulting Group.

5 Q And, Mr. Willoughby, I see that your name is  
6 included on Exhibit 6, which is the joint direct  
7 testimony. Were you involved in the preparation  
8 of that testimony?

9 A (Willoughby) Yes, I was.

10 Q And, Mr. Willoughby, I see that "Joseph  
11 DeVirgilio" is also listed as an author of the  
12 direct testimony. Mr. DeVirgilio is not with us  
13 today, is that right?

14 A (Willoughby) That is correct.

15 Q Are you familiar with the portions of the  
16 testimony that were prepared by Mr. DeVirgilio?

17 A (Willoughby) I am.

18 Q And are you in a position today to adopt the  
19 portions of the testimony that were written by  
20 Mr. DeVirgilio and answer questions on that  
21 testimony?

22 A (Willoughby) Yes.

23 Q So, having said that, Mr. Willoughby, do you  
24 agree that the information contained in the joint

[WITNESS PANEL: Dudley|Willoughby]

1 testimony that was prepared by you or  
2 Mr. DeVirgilio is accurate, to the best of your  
3 knowledge and belief?

4 A (Willoughby) Yes. I do.

5 Q I understand you have a couple of corrections  
6 you'd like to point out in the testimony. The  
7 first one I believe is on Bates Page 008.

8 A (Willoughby) That's correct. Line 16, at the  
9 time it was filled out, the answer was "no", I  
10 had not testified before the Commission. But,  
11 since then, that's changed. So, it should be  
12 updated to say "Yes. March 7 and 8, 2023 and  
13 April 25, 2023, I testified in regards to the  
14 Eversource Energy's LCIRP."

15 Q Thank you. And, with regard to Bates Page 034, I  
16 understand there's a sentence that just kind of  
17 got garbled. Could you point that out and  
18 indicate how that sentence was supposed to read  
19 please?

20 A (Willoughby) Yes. That would be Page 34,  
21 Line 14. It needs to be corrected by removing  
22 the "to", after "Liberty", and adding "to  
23 provide" after "the LCIRP". So, Line 14 should  
24 then read: "Commission direct Liberty in its

[WITNESS PANEL: Dudley|Willoughby]

1 supplement to the LCIRP to provide an update on  
2 each of the ten".

3 Q Okay. Thank you very much. So, with those  
4 corrections, do you adopt this testimony as your  
5 sworn testimony in this proceeding?

6 A (Willoughby) Yes, I do.

7 Q Very good. Mr. Willoughby, there was discussion  
8 this morning about, in questioning of the  
9 Company's witnesses, about reviewing capacity and  
10 reliability issues in the Bellows Falls area. Do  
11 you recall that discussion?

12 A (Willoughby) Yes, I do.

13 Q Do you have additional information or additional  
14 references to the record that you can provide at  
15 this time that would help understand those issues  
16 a little more clearly?

17 A (Willoughby) I do. I would like to call your  
18 attention, we'll use two exhibits here, the first  
19 one would be from Exhibit 1, either Exhibit 1 or  
20 2, but it would be Appendix F, and it would begin  
21 on Bates Page 426, and I'll come back to that in  
22 just a second. The second exhibit that we're  
23 going to use is Exhibit 4, and that one we would  
24 begin on Bates 014. Now, --

[WITNESS PANEL: Dudley|Willoughby]

1 Q So, let me interrupt you just for a second  
2 please. So, Exhibit 4 is the Bellows Falls  
3 Report?

4 A (Willoughby) Right. And I'm going to get back to  
5 that, because I've got one more reference for  
6 you, and that would be the Exhibit 6, Bates 027,  
7 Lines 7 through 20. That's the DOE testimony.

8 Q Okay. So, you've lost me a little bit. So,  
9 let's them one at a time. Which exhibit would  
10 you like us to look at first to talk about the  
11 situation?

12 A (Willoughby) Okay. Let's start with the DOE  
13 testimony, that would be Exhibit 6, Page 27,  
14 Lines 7 through 20.

15 Q And what does that testimony say, you know,  
16 paraphrasing?

17 A (Willoughby) Okay. Lines 7 through 12 describes  
18 the Bellows Falls Study. And the problem in that  
19 particular one that was being solved is  
20 capacity-related. And we'll look at a sheet that  
21 will help us understand that better and how it  
22 was scored.

23 Lines 13 through 20 talks about the  
24 second Bellows Falls Study, and that was

[WITNESS PANEL: Dudley|Willoughby]

1 mentioned this morning also, and that one  
2 addresses reliability issues. And we'll look at  
3 a sheet and how that is scored.

4 So, in the testimony, those two  
5 paragraphs describe each of those two Bellow Fall  
6 Studies. The capacity study, that would be  
7 Line 7 through 12, and the reliability study,  
8 that's Line 13 through 20.

9 Q Okay. And then, you were going to direct us to  
10 another exhibit to continue this discussion.

11 A (Willoughby) That is correct. Now, what I'd like  
12 for you to go to is Exhibit 1, Bates Page 426.

13 Q And this is a chart entitled "NWA Evaluation  
14 Summary"?

15 A (Willoughby) Yes. This is 426, and that's  
16 "Page 41 of 43". And this is the -- it's called  
17 "Appendix F.1". That's the Bellows Falls -- it's  
18 from the Bellows Falls 2020 System Planning Study  
19 related to capacity.

20 So, if you look at that particular  
21 sheet, let's just briefly go through it from top  
22 to bottom. It says it's an "NWA Evaluation  
23 Summary". The identified problem, it's a  
24 "Contingency problem at Michael Avenue

[WITNESS PANEL: Dudley|Willoughby]

1 Substation". There's a brief description of the  
2 problem, and in that description you will see it  
3 relating to capacity issue related to the Vilas  
4 Bridge Substation. It "doesn't have the capacity  
5 or flexibility to supply Michael Avenue during  
6 peak hours." That's the problem.

7 Under that are four potential solutions  
8 to that problem, Options 1, 2, 3, and 4.  
9 Options 1 and 2 are traditional solutions,  
10 Options 3 and 4 are NWS solutions.

11 Below that is a box that's labeled  
12 "Scoring Values". You'll see it's scoring from 1  
13 to 4; 1 being the worst or lowest rating or  
14 scoring, and 4 being the best scoring.

15 Continuing on down, you'll see how this  
16 particular project and these options were  
17 evaluated and decisions made. The "Evaluation  
18 Criteria" are listed on the left. "Total Cost",  
19 "Reliability Risk", "Feasibility Risk",  
20 "Performance Risk", "Environmental Risk".  
21 There's a "Weighting Factor" for each that's  
22 displayed in the next column. The columns to the  
23 right of that, there's a column for each of the  
24 four options. So, "Option 1", "2", "3", and "4",

[WITNESS PANEL: Dudley|Willoughby]

1       and you'll see scorings for each of those options  
2       for each one of the evaluation criteria; "1"  
3       being low, or worst case, "4" being high, or best  
4       case.

5               If you look down a little further,  
6       you'll see a line called "Total Assessment".  
7       It's highlighted in turquoise. And, if you go  
8       from left to right on there, you'll see the  
9       highest scoring option. And, at the time this  
10      study or this evaluation was made is Option 4,  
11      "2.82" is the average score. Option 4 was  
12      installing a DER at the large customer site.  
13      This particular case, that would have been a  
14      distributed generation, I believe, I think. I'm  
15      not sure about that, but I think that's what it  
16      was.

17             If you then go to the next page, 427,  
18      you'll see, at the top, the box says "Reliability  
19      Risk", and there are evaluation factors for the  
20      reliability risk. And you go down, next box,  
21      "Feasibility Risk", evaluation factors for that.  
22      The box below that is a duplicate. So, you can  
23      just ignore that. That feasibility risk was put  
24      in twice. And then, you go finally to Page 428,

[WITNESS PANEL: Dudley|Willoughby]

1 Bates 428, and you see "Performance Risk", with  
2 its evaluation factors, and "Environmental Risk",  
3 with its evaluation factors.

4 What I wanted to point out to you,  
5 Commissioner Carleton -- Commissioner Simpson,  
6 is, this is a convenient way to summarize the  
7 options that were looked at, how they were  
8 evaluated and scored, and how they determined  
9 what, in this particular case, was the best  
10 option, and the basis for it.

11 Does this help clarify that particular  
12 project at all?

13 CMSR. SIMPSON: Yes, Mr. Willoughby.  
14 Thank you for walking through this. When we get  
15 to Commissioner questions, I might have a couple  
16 of follow-ups. But I do appreciate you bringing  
17 this analysis and your overview to our attention  
18 at this time.

19 WITNESS WILLOUGHBY: Okay.

20 **BY THE WITNESS:**

21 A (Willoughby) Let's then look at one other, one  
22 other example. This now is the reliability part,  
23 Bellows Falls reliability. And that would be  
24 Exhibit 4, Bates 014. And we won't walk through



[WITNESS PANEL: Dudley|Willoughby]

1       this one in detail, but I just wanted to draw  
2       your attention to it. In a similar manner, the  
3       reliability case was evaluated, and the best  
4       decision was made. Now, because the objective  
5       here was to solve a reliability problem, the  
6       criteria, when it's evaluated, will come out  
7       differently, and the answer will be different  
8       than if you're trying to solve a capacity  
9       problem.

10               So, it's real important, and Liberty  
11       does a good job of laying it out in these kinds  
12       of worksheets, these Excel worksheets, it's very  
13       important to be very clear the problem you're  
14       trying to solve from the beginning, and then you  
15       can go about it in a systematic and actually  
16       data-driven manner to come up with an answer.  
17       Now, at the end of the day, if the answer  
18       requires some adjustment, because of some  
19       extraordinary circumstance, it would be  
20       appropriate to bring it up.

21               One more thing I wanted to point out,  
22       and I should have pointed out before, we don't  
23       have to go back to it. But, when we were talking  
24       about the Bellows Falls capacity, there was one

[WITNESS PANEL: Dudley|Willoughby]

1 more line on that first page labeled "Ranking".  
2 Don't get confused with that, because ranking,  
3 the best ranking is number 1, not number 4; the  
4 worst ranking is number 4. So, when you look at  
5 that, the ranking, you want to make sure you  
6 don't confuse the scoring system with the ranking  
7 system. They're two different, one goes one  
8 direction, and the other goes the other  
9 direction. Okay.

10 BY MR. DEXTER:

11 Q And, similarly, Mr. Willoughby, was there a part  
12 of the Company's Plan regarding the evaluation of  
13 projects that you'd like to point out to the  
14 Commission?

15 A (Willoughby) Yes, I would. In this particular  
16 case, we could go back to Exhibit 1 or 2, Bates  
17 Page 176.

18 Q And I see looks like, to me, a fairly complicated  
19 flow chart. Can you just give a quick summary of  
20 what's on this page?

21 A (Willoughby) Yes, that's the right page. And  
22 it's "Page 1 of 3", in Appendix C, if you need  
23 that information. Has everybody found it? Are  
24 we okay?

[WITNESS PANEL: Dudley|Willoughby]

1 Q Yes.

2 A (Willoughby) Okay. What Liberty has prepared for  
3 us here is a map of how they go about selecting  
4 projects, and planning for them. So, you can see  
5 that they have some, you know, from the beginning  
6 to the end, they have laid out the things that  
7 they look for. But what I wanted to draw your  
8 attention to right now is kind of in the middle  
9 of this flow chart. If you look at the middle of  
10 this flow chart, you'll see a box that says  
11 "Traditional Solutions", and to the right of that  
12 box gives you the kinds of projects that are  
13 considered "traditional solutions". If you look  
14 at the bottom, down at that same column, you'll  
15 find another blue box, it says "Non-wire  
16 Solutions", and to the right of that box you'll  
17 see the kinds of solutions or technologies that  
18 are considered to be "non-wire solutions".

19 So, then, in the center, it says  
20 "Prioritize Deficiencies & Evaluate Solutions".  
21 The way they do that is listed below that box.  
22 Now, what we just looked at just a minute ago was  
23 under the "Analysis" column -- under "Analysis",  
24 the second bullet, "Liberty's NWS Workbook",

[WITNESS PANEL: Dudley|Willoughby]

1       that's what we looked at when we looked at the  
2       Bellows Falls Study.

3               They also have, if NWS is not involved,  
4       they also have an evaluation process with  
5       scoring. It's done a little bit differently,  
6       that I don't have here immediately at my  
7       fingertips, but I just wanted to point that out  
8       to your attention.

9               And all of this is driven by doing  
10       modeling, using industry programs, based upon the  
11       approved planning criteria. And that's then how  
12       they decide what a feasible alternative is. A  
13       "feasible alternative" is something that would  
14       resolve the problem. Doesn't necessarily mean  
15       it's the best, because there are other things  
16       that you have to look at, like cost. But,  
17       technically, it would solve the problem.

18              So, I wanted to -- I wanted to draw  
19       your attention to this process diagram, because  
20       it ties together traditional and NWS into the  
21       planning process, and it kind of shows you how it  
22       fits in the overall planning stream, and, over to  
23       the right, you see a box, the "Approved Capital  
24       Budget Plan".

[WITNESS PANEL: Dudley|Willoughby]

1                   So, hopefully, this is helpful, and  
2                   it's part of the LCIRP submittal.

3    Q    Thank you.  There was discussion this morning  
4           about "thresholds" that Liberty uses for  
5           evaluating non-wires alternatives or non-wire  
6           solutions.  And I'd like to direct either Mr.  
7           Dudley or Mr. Willoughby to Exhibit 7, Bates  
8           Page 009.  That is the Company's supplemental  
9           filing.

10                   And if either of you could just point  
11           out for the record where Liberty ended up on the  
12           question of "thresholds for NWS evaluations"?

13   A    (Dudley) Mr. Dexter, that would be in the last  
14           paragraph of Section 6, which is "Review of NWS  
15           Evaluation".  And the concern of the Department  
16           at the time, when we looked at it, was that the  
17           non-wires tool was not sufficiently robust.  And  
18           by that we mean that we felt that perhaps, for a  
19           small utility, like Liberty, that the threshold  
20           levels, in terms of project cost and project  
21           duration were set too low.  Liberty has a  
22           beginning threshold of \$500,000 and a project  
23           duration of two years.  And we asked them to  
24           consider lowering those thresholds, and looking

[WITNESS PANEL: Dudley|Willoughby]

1 at that. And, as they state in the last  
2 paragraph of that section, that's what they had  
3 planned to do.

4 Q So, your -- the Department's concern was that the  
5 thresholds were too high?

6 A (Dudley) Were too high, yes.

7 Q Okay.

8 A (Dudley) Yes. Excuse me. If I misstated it, I'm  
9 sorry.

10 Q I'm not sure I heard it right, but I think the  
11 thresholds. So, the thresholds remain the same,  
12 as we understand it. But there's an  
13 understanding that they will -- that the  
14 thresholds are not absolute, that the Company  
15 will look at solutions, even if they fall -- even  
16 if they fall above those thresholds?

17 A (Dudley) Correct.

18 Q Okay. All right. Thank you. There was  
19 discussion from Commissioner Simpson this morning  
20 about whether or not some of the concerns that  
21 the Department and former PUC Staff has expressed  
22 over the years in rate cases and LCIRPs, whether  
23 or not those concerns have been addressed? And,  
24 if I understood the question right, incorporated

[WITNESS PANEL: Dudley|Willoughby]

1       into corporate documents or corporate operating  
2       manuals.

3               And I know we have one instance that we  
4       can point to that has to do with the Company's  
5       planning criteria. Mr. Dudley, could you point  
6       us in the filing where the planning criteria for  
7       the Company are located, first of all? And then,  
8       explain the concern of the Commission Staff over  
9       the years, now DOE, and how that's been resolved?

10    A       (Dudley) Yes. The concern stems from Liberty's  
11       last rate case, in Docket 19-064. And, in  
12       looking at the planning criteria, in particular,  
13       the loading criteria, we found that Liberty had  
14       lowered that criteria to 75 percent of nameplate  
15       capacity. We looked at that, studied it. It  
16       appeared to be too low, too conservative for us.  
17       And leaving it at that lower threshold would  
18       probably prompt more frequent replacements, more  
19       frequent improvements than we felt were  
20       necessary.

21               So, as a result of that, through  
22       settlement, we recommended, and Liberty agreed,  
23       to raise those thresholds back up to, subject to  
24       check, I believe it was 90 percent.

[WITNESS PANEL: Dudley|Willoughby]

1                   And what Liberty also agreed to was to  
2           allow Staff to assist them in developing those  
3           new manuals, which we did.

4   Q           And the -- I'm sorry, were you finished?

5   A           (Dudley) No.

6   Q           Oh.   Okay.

7   A           (Dudley) I mean, yes, I am.   Yes.

8   Q           Okay.   And the planning criteria that we're  
9           talking about, the document appears at Exhibit 1,  
10          Bates -- starts at Bates Page 179, it's a 24-page  
11          document, is that correct?

12  A           (Dudley) Let me just get there to confirm.   Yes.  
13           That entire section covers the loading criteria  
14           for substation and transformer.

15  Q           And our understanding -- your understanding is  
16           that this planning criteria docket -- document  
17           was worked out in settlement in DE 19-064, and,  
18           in fact, was an attachment to that Settlement?

19  A           (Dudley) That is correct, yes.

20  Q           And it's also your understanding that these  
21           criteria were used in the development of the  
22           LCIRP that's before the Commission today,  
23           correct?

24  A           (Dudley) That is correct.   Yes.



[WITNESS PANEL: Dudley|Willoughby]

1 MR. DEXTER: Correct. I don't have any  
2 additional questions for the witnesses.

3 Commissioner Simpson, I'm not sure if I  
4 captured the question that you asked. And, if I  
5 didn't, I would encourage you to ask the  
6 witnesses directly again.

7 CMSR. SIMPSON: Yes, that's helpful.  
8 Not all of us have the legacy that some of the  
9 folks at the Department have. And I'm mindful  
10 that, from case to case, year to year, some  
11 things might get lost or interpreted differently.  
12 So, I just wanted to ensure that the folks at the  
13 Department are seeing progress in a meaningful  
14 way.

15 MR. DEXTER: Thank you.

16 CMSR. SIMPSON: Thank you.

17 MR. DEXTER: That's all the questions I  
18 had for the witnesses.

19 CHAIRMAN GOLDNER: Thank you, Attorney  
20 Dexter. We'll move to the Company, and Attorney  
21 Sheehan.

22 MR. SHEEHAN: I have one simple  
23 question.

24 **CROSS-EXAMINATION**

[WITNESS PANEL: Dudley|Willoughby]

1 BY MR. SHEEHAN:

2 Q Mr. Dudley, if you turn to Page 182 of Exhibit 1,  
3 the planning criteria, the number you weren't  
4 sure of, "90 percent", was actually "100  
5 percent"?

6 A (Dudley) I would agree with that, yes.

7 MR. SHEEHAN: Other than that, I have  
8 no questions. And we appreciate the Department's  
9 work on this docket, and pushing us to create a  
10 better Plan. Thank you.

11 CHAIRMAN GOLDNER: Thank you. And  
12 we'll move to the Office of the Consumer  
13 Advocate, and Attorney Crouse.

14 MR. CROUSE: The Office of the Consumer  
15 Advocate has no questions. Thank you.

16 CHAIRMAN GOLDNER: Okay. Thank you.  
17 Moving to Commissioner questions, we'll begin  
18 with Commissioner Simpson.

19 CMSR. SIMPSON: Thank you.

20 I think I'll start with Mr. Willoughby,  
21 as that was where we started. Thank you for  
22 walking through some of those tables for us,  
23 Mr. Willoughby. I appreciate that.

24 BY CMSR. SIMPSON:

[WITNESS PANEL: Dudley|Willoughby]

1 Q Just fairly simply, you know, with respect to the  
2 analysis that was part of Exhibit 2, and then the  
3 supplemental analysis specific to the non-wire  
4 solutions. In your expert opinion, do you think  
5 that there are criteria in the evaluation or  
6 aspects of the risk analyses put forth here that  
7 are moot? Do you think that there are elements  
8 that should be added? Just overall, do you have  
9 any recommendations for what you believe would be  
10 appropriate updates, given that some time has  
11 passed?

12 A (Willoughby) I like the "workbook" concept. I  
13 like the different evaluation criteria being  
14 broken down into more discrete elements.

15 The difficulty, when you're doing an  
16 evaluation like that, is it's always subject to  
17 human opinion. So, if two different people made  
18 the same evaluation, I'm not sure the scoring  
19 would be exactly the same. So, I don't know that  
20 there's a good fix for that, because the industry  
21 deals with that all the time.

22 But I would say, I'm not quite sure how  
23 Liberty does that, but it would be better if  
24 those evaluation scores were done by a committee,

[WITNESS PANEL: Dudley|Willoughby]

1       rather than by an individual. And, if they're  
2       not done that way, then that would be my  
3       recommendation.

4   Q   Thank you. So, overall, the methodology  
5       employed, aside from the evaluation process, you  
6       feel is appropriate?

7   A   (Willoughby) I do. And let me tell you where,  
8       you know, the basis of the analysis really  
9       starts. When System Planning takes the peak  
10      forecast, and they do system studies to identify  
11      violations to the planning criteria, the  
12      challenge they have then becomes "how do I best  
13      resolve" -- "overcome the criteria? How to  
14      resolve that?" And they have to make a decision  
15      based upon timing, and what the criteria  
16      violation is on how they can do it.

17                So, for example, if it's a capacity  
18      issue, and there's ample time to plan for it,  
19      then it may or may not be appropriate for an NWS  
20      solution to be considered. That's the timing  
21      part. In which case, the -- if the Planning  
22      Department would automatically then, as part of  
23      their planning process, put it in and simulate  
24      it, using the industry tools that they have, and

[WITNESS PANEL: Dudley|Willoughby]

1 do "what ifs". "What if this happens, what's the  
2 result?" "What if this happens, what's the  
3 result?" And that would apply to, if you're  
4 investigating what technology might be the best,  
5 or what the sizing of the technology would be.

6 For example, if I have an option, if my  
7 options are three, for capacity addition, if I  
8 had an option of using wind, solar, or energy  
9 storage, if my option is any one of those three,  
10 all three of those are modeled differently, and  
11 they all have three different types of cost  
12 components associated with them. So, part of the  
13 evaluation then would need to consider the  
14 modeling that was done, under what circumstances  
15 would the capacity -- would it only be during  
16 peak conditions, or is this something that's  
17 ongoing, that kind of thing.

18 Because the one thing that I didn't  
19 see, and it might be something to investigate  
20 going forward to help us promote NWS more, would  
21 be more of a hybrid solution. And that means you  
22 would have part of the solution being traditional  
23 and part of it being NWS. The examples that we  
24 just went over, it's one or the other. But it

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1           might make sense to evaluate a possibility of  
2           combining, you know, part of it traditional, part  
3           of it NWS. Whether that means building a line  
4           that's not really to the size you otherwise would  
5           rate it, or transformer of the size not as high  
6           as you normally would, because you're going to  
7           use an NWS to offset it, or whatever that might  
8           be.

9                           That would be my only other  
10          suggestion.

11   Q       Thank you. I appreciate that.

12   A       (Willoughby) Uh-huh.

13   Q       As you know, we have statutory requirements that  
14           we need to ensure have been met. So, I'll just  
15           briefly ask you, the Company's forecast of future  
16           demands, Chairman Goldner asked some questions  
17           about that of the Company's witnesses, with  
18           respect to what was predicted versus what  
19           resulted. It appears to me that the Company has  
20           done a reasonable job of forecasting.

21                       In your view, do you feel that the  
22           Company's process for forecasting future demand  
23           is in line with industry norms?

24   A       (Willoughby) I do. But it might be instrumental,

[WITNESS PANEL: Dudley|Willoughby]

1       if you can bear with me, I have a brief summary  
2       of how I believe their forecasting process works.

3   Q     Please.

4   A     (Willoughby) Would that be okay, Commissioner?

5   Q     Yes, please. Thank you.

6   A     (Willoughby) Okay. Here is the way I believe the  
7       forecasting process works at Liberty.  
8       Econometric models are used to determine  
9       historical peak demand forecasts as a function of  
10      normal and extreme weather conditions over the  
11      most recent 20-year period. We'll come back to  
12      that in just a minute.

13               Weather conditions are based on the  
14      historical data from a weather station in  
15      Concord, New Hampshire. Growth rates are then  
16      applied to each substation and feeder, for each  
17      planning study area, and the study areas would be  
18      eastern and western, and they're studied  
19      independently, to obtain an initial forecast for  
20      each of 19 towns within Liberty's service  
21      territory.

22               System planners then use the forecasted  
23      peaks to perform system planning studies, as we  
24      just discussed briefly before, to identify

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1 performance criteria violations, and plan  
2 solution alternatives accordingly.

3 That process is very typical, it's  
4 standard across the industry. So far, what I've  
5 described is standard process across the  
6 industry.

7 Included in peak forecasts are  
8 estimated energy savings, the impacts of  
9 distributed generation, which are mostly behind  
10 the meter in Liberty's case, behind-the-meter  
11 solar, and estimated load growth from electric  
12 vehicle charging.

13 Now, once the base forecasts are  
14 developed, using the econometric models,  
15 adjustments are then made to account for  
16 anticipated spot loads. We talked about spot  
17 loads this morning with respect to Salem and the  
18 large industry customer. In this case,  
19 anticipated spot loads greater than 300 kilowatts  
20 and/or distributed generation greater than 1,000  
21 kilowatts, those adjustments are then made.

22 The process that I described is a  
23 fairly standard forecasting process. The one  
24 exception that I would say to that, normally,



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1 from my experience, the forecasting periods are  
2 10-year, not 20-year. And, so, in DOE's  
3 testimony, they're recommending that the 20-year  
4 historical basis forecast be changed to a 10-year  
5 forecast. And that would be in line with Unitil  
6 and the way Eversource does it.

7 And, other than that, I would say that  
8 the forecast is according to industry standards.

9 Q Thank you. Some of these other sections of the  
10 statute may be more in line with Mr. Dudley's  
11 area of expertise. So, I'll invite Mr. Dudley to  
12 also jump in at any point, if you have a  
13 response.

14 So, the second criteria is an  
15 assessment of demand-side management, including  
16 conservation, efficiency, load management. I  
17 think we've talked at length about this today. I  
18 just will ask, is there anything that you feel is  
19 necessary for us to consider here, beyond what  
20 we've discussed already?

21 A (Willoughby) Mr. Dudley, may I just make a  
22 comment first, and then maybe you can?

23 A (Dudley) Sure. Sure, go ahead, Mr. Willoughby.

24 A (Willoughby) One suggestion that I would offer

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1 with regards to conservation voltage reduction,  
2 the tendency is to believe that you have to have  
3 all the infrastructure in place systemwide before  
4 you can really start the program. In reality,  
5 you can implement a program a little bit at a  
6 time, let's say, at a substation. But what you  
7 can do before you implement any equipment at all,  
8 let's say, is do the system planning study that  
9 would identify which feeders would be feasible  
10 for CVR and which are not.

11 But, in a typical utility, 50 percent  
12 of the feeders would not be feasible candidates  
13 for CVR. Of the 50 percent that are candidates,  
14 50 percent of those turn out to be nonfeasible.  
15 The remaining feeders that you end up with in the  
16 system have the potential, depending on the type  
17 of load, of generating as much as one to three  
18 percent energy efficiency savings.

19 So, there's some potential there, but  
20 it has to be studied by System Planning. And I  
21 know Liberty is planning to do that. In their  
22 first five years of their ten-year plan, that's  
23 an important part of the CVR plan. And then,  
24 they had planned to change out automated -- AMR,

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1 automated meter reading, with AMI equipment as  
2 it's available.

3 But, if you have an opportunity  
4 somewhere in the system that you can at least  
5 initiate CVR a little bit at a time, you have the  
6 regulators and capacitors or controllable devices  
7 and communication in place, it would be a  
8 worthwhile thing to do. And then, prioritize how  
9 you deal with potential feeder -- feasible  
10 feeders after that.

11 Q So that you're essentially saying that the  
12 opportunity for application of conservation  
13 voltage reduction is somewhere in the  
14 single-digit percentage of a utility's overall  
15 feeders. But, through a targeted effort, despite  
16 that lower or lowly perceived probability, you  
17 can still find meaningful efficiency gains?

18 A (Willoughby) That's correct.

19 Q Okay. Thank you. On the supply side, you know,  
20 we've talked a lot about the provision of default  
21 electricity service. I note that I think that  
22 this utility, in particular, has been innovative  
23 in what they have proposed and how they have  
24 addressed some of the market failures that

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1           occurred. And I look forward to learning more  
2           about that in other proceedings.

3                       Do you think there's anything that's  
4           relevant for us to consider, with respect to how,  
5           in this restructured environment, how our  
6           incumbent distribution utilities procure  
7           electricity supply?

8   A       (Willoughby) Mr. Dudley, I think this one's for  
9           you.

10   Q       It's an easy one, so --

11   A       (Dudley) Procurement, other than solicitation  
12           through -- for default service, is that --

13   Q       Yes. So, I mean, I presume you're aware of that  
14           the Company did enter the ISO-New England market  
15           for their last --

16   A       (Dudley) Yes.

17   Q       -- energy solicitation, which is somewhat new for  
18           New Hampshire, even though it was a small portion  
19           of their load. So, they have -- they're more  
20           experienced than anybody in New Hampshire, as a  
21           utility, for at least modifying what has been the  
22           historical process. So, I think we're just  
23           wondering, within the context of an LCIRP, are  
24           there other things that we're missing?

[WITNESS PANEL: Dudley|Willoughby]

1 A (Dudley) I don't think so. I think, as you said,  
2 that was a very innovative thing to do. But, if  
3 memory serves, Liberty was faced with a situation  
4 where the RFP process just didn't work.

5 Q Right.

6 A (Dudley) And, so, they felt that that was the  
7 only alternative that they had.

8 Q Uh-huh.

9 A (Dudley) And we don't disagree with that. Going  
10 beyond that, I believe Ms. Tebbetts alluded to  
11 earlier today about Liberty evaluating the  
12 possibility of owning its own renewable  
13 generation, such as solar. And we know that at  
14 least one other utility has embarked on that, and  
15 is looking at that, as I understand it, as kind  
16 of a test project. But we have no problem with  
17 that, and we would encourage it, as one -- as one  
18 alternative.

19 But, at the moment, I can't think of  
20 what else is available to them.

21 Q And is that the type of thing that you would  
22 expect to see forward-looking in an LCIRP?

23 A (Dudley) It would be helpful, yes. That's  
24 helpful information for sure. If it is something

[WITNESS PANEL: Dudley|Willoughby]

1           that they are going to embark on, and have  
2           planned out, that would be excellent, if that  
3           were included in a future LCIRP, yes.

4   Q       Yes. And I think part of my appreciation for the  
5           LCIRP is that it gives us that forward look, as  
6           opposed to so much of what we see is looking  
7           backward.

8   A       (Dudley) Yes.

9   Q       So, it's one of those opportunities where we get  
10          to look forward into what the company is  
11          planning.

12   A       (Dudley) That is correct, yes. I agree with  
13          that.

14   Q       Okay. So, just for completeness, let's finish  
15          these out.

16                       The "assessment of  
17          transmission/distribution requirements,  
18          including...smart grid technologies", does the  
19          Department feel that the Company adequately  
20          addressed the requirements here?

21   A       (Dudley) Yes. Yes.

22   Q       And we touched on the Clean Air Act, you know,  
23          this still remains a statutory requirement, but  
24          there are some prior Commission orders. I mean,

[WITNESS PANEL: Dudley|Willoughby]

1 do you have any thoughts on reconciling that  
2 requirement?

3 A (Dudley) Well, as we state in our testimony,  
4 trying to find the Bates number, but we do  
5 address that in our testimony, in our intro to  
6 the criteria of 378:38. And we don't find it --  
7 or, at least our approach, for the last several  
8 LCIRPs, has been we don't find it as impactful as  
9 it once was, only because New Hampshire utilities  
10 are no longer vertically integrated. They no  
11 longer own generation. I don't think Granite  
12 State ever did. However, Eversource did, we went  
13 through a divestiture, a very long process. But  
14 that's no longer the case.

15 However, we do state in our testimony  
16 and in our technical statement that it still  
17 doesn't alleviate utilities of that  
18 consideration. They still should take  
19 environmental impacts in their system planning  
20 and design seriously, they should consider those  
21 things. We know that Liberty does, only because,  
22 in their project documentation that we've  
23 reviewed, they do have a section that's devoted  
24 to that; as does Eversource, as does Unitil.

[WITNESS PANEL: Dudley|Willoughby]

1 Q And then, the "long- and short-term  
2 environmental, economic, and energy price and  
3 supply impact on the state", somewhat of a  
4 holistic viewpoint, --

5 A (Dudley) Yes.

6 Q -- anything that stands out from your review?

7 A (Dudley) Well, we did, in our technical  
8 statement -- no, excuse me, in -- I'm trying to  
9 think now. I think it was in our technical  
10 statement, we had asked them to -- or, excuse me,  
11 in our testimony, we had asked them to look at  
12 the market conditions, and the impacts of certain  
13 events, such as the war in Ukraine, such as  
14 supply constraints, and if that is something that  
15 they had considered, and they had not considered  
16 it. They didn't feel that they had the skillset  
17 to look at it.

18 However, they do consider the price of  
19 gas. So, they do look at that. They do weigh  
20 it, and take it under consideration.

21 Going down -- looking down the road, we  
22 would like to see that in LCIRPs. And I believe  
23 Commissioner Chattopadhyay referred to the use of  
24 a Monte Carlo simulation, --



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1 Q Uh-huh.

2 A (Dudley) -- you know, as one way of assessing  
3 that. We find that very interesting. We  
4 certainly would like to pursue that more, and see  
5 if it is something viable.

6 The only thing, I had time to think  
7 about it over the break, and the only concern I  
8 have -- or, I would say the only observation I  
9 would have is that, when you get into a  
10 sophisticated model such as that, and I do have  
11 some experience with it from the financial world,  
12 in terms of weighing the risk and value of  
13 long-dated securities, such as mortgage-backed  
14 securities, the person putting the inputs in the  
15 model, and weighing the uncertainties in the  
16 model, has to be someone who is pretty close to  
17 the market. Has to be someone who looks at it  
18 every day, someone who's familiar with the  
19 volatility that may take place, and also someone  
20 who's familiar with the outside events that will  
21 have an impact on those inputs.

22 You don't find a lot of folks like that  
23 at the utilities. It may have to be a  
24 consultant, who's an expert in that area, in

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1 order to do that kind of modeling.

2 But it may be valuable. And we'd  
3 certainly support further exploration of that.

4 Q And then, the last one is "an assessment of the  
5 plan's consistency with the state energy strategy  
6 under RSA 12-P", which, if I'm not mistaken, this  
7 provision was updated months after the submission  
8 of this LCIRP, I know there's been some  
9 supplements. So, the Department -- it's the  
10 Department's energy strategy. You know, does the  
11 Department feel that what the Company has  
12 forecasted here is consistent with the energy  
13 strategy that the Department has promulgated?

14 A (Dudley) We do. We looked at the Energy's  
15 ten-year strategy previously, at about the time  
16 that the LCIRP filing came into the Commission.  
17 But we also looked at our most recent ten-year  
18 forecast, which was published in July of last  
19 year. And, although that forecast wasn't  
20 significantly different from the one before, but  
21 we found that Liberty did address the issues  
22 there.

23 CMSR. SIMPSON: Thank you. And then,  
24 final question, and I might look to Attorney

[WITNESS PANEL: Dudley|Willoughby]

1       Dexter. There are quite a few references to  
2       "Department recommendations" for the Company for  
3       the Commission's consideration and require of the  
4       Company in their next plan. Your technical  
5       statement that was filed February 17th of this  
6       year, on Bates Page 003 -- or, excuse me, Bates  
7       Page 006, III, you have a "Summary of  
8       Recommendations". Is this a holistic list of  
9       recommendations? And I ask, should the  
10      Commission come to an agreement and an order  
11      being issued in due course, what might we look to  
12      for a finite list of the Department's  
13      recommendations?

14               MR. DEXTER: Well, I believe this is  
15      the finite list.

16               CMSR. SIMPSON: Perfect.

17               MR. DEXTER: I don't believe that, if  
18      these recommendations aren't adopted, our  
19      position is not that the Plan should be rejected.  
20      We don't view, you know, the planning process,  
21      the LCIRP process, as, you know, as if there's  
22      only one right way to do it, you know. So, we  
23      had some recommendations that we believe should  
24      be incorporated into the next plan as an

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1 improvement. That's with respect to the ten-year  
2 weather data that Mr. Willoughby was just talking  
3 about.

4 We didn't get into a discussion today  
5 about the Department's view of the Company's use  
6 of veg. management/tree trimming in the Bellows  
7 Fall area to discuss -- to address reliability  
8 concerns that Mr. Strabone talked about, as  
9 opposed to hardening wires and things like that.

10 I could ask Mr. Willoughby to comment  
11 on that discussion and our recommendation there,  
12 if you would like more details. But, again, that  
13 was a recommendation, and it's an issue that we  
14 believe will be addressed thoroughly in the  
15 upcoming rate case, where veg. management -- or,  
16 we look at the veg. management plan has been  
17 identified as an issue up front.

18 CMSR. SIMPSON: Sure. Why don't we ask  
19 Mr. Willoughby if he might provide his  
20 perspective on that vegetation management issue?

21 MR. DEXTER: Sure. Would you like me  
22 to do an introductory question or just -- I think  
23 he knows the issue, and can probably just jump  
24 right in.

[WITNESS PANEL: Dudley|Willoughby]

1 CMSR. SIMPSON: Yes, I see him reaching  
2 for some paperwork.

3 BY CMSR. SIMPSON:

4 Q So, Mr. Willoughby, do you want me to restate a  
5 particular question?

6 A (Willoughby) No.

7 Q Great. If you'd just jump right in.

8 A (Willoughby) In case you're wondering, I'm  
9 wondering, do you think I have enough binders  
10 behind me, you know?

11 Q I like the hats.

12 A (Willoughby) The hats are better, I agree.

13 If we could all go to Exhibit 3, Bates  
14 Page 009, it would be an easier way to describe  
15 what we think is needed in Bellows Falls.

16 Q Great. I'm there.

17 A (Willoughby) Exhibit 3. And you'll see "Table 2  
18 Outage Causes". And you see that there are two  
19 sets of indices or numbers for Lines 12L1 and  
20 12L2. The left side is "Incidents", the right  
21 side is "Customer Minutes Interrupted".

22 Q Yes.

23 A (Willoughby) This is a complete list, according  
24 to Liberty, of the reliability-related issues for

[WITNESS PANEL: Dudley|Willoughby]

1       those two circuits. You notice the first two are  
2       trees fall -- are due to "Tree Fell" and "Broken  
3       Limbs". And then, you work your way down to  
4       fourth from the bottom, and you see "Tree  
5       Growth".

6   Q    Yes.

7   A    (Willoughby) Okay. So, it's our position or our  
8       recommendation that we -- we don't believe  
9       reconductoring with spacer cable will  
10       sufficiently address the reliability issues due  
11       to mechanical damage on the lines, which occurs  
12       from falling trees and broken tree limbs. The  
13       reconductoring, with either Hendrix-style or  
14       covered conductor will definitely make a  
15       difference for touching-type of interruptions,  
16       which would be the tree growth. There is a  
17       potential danger with Hendrix-type of a  
18       construction, in that it reinforces the  
19       conductors to a point that, if a tree falls on  
20       it, it's been our experience that it has the  
21       possibility of actually pulling the poles down  
22       before the lines break. And, so, we have a  
23       concern that, if the total solution is  
24       reconductoring with spacer cable, or Hendrix

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1 cable, spacer cable, that it, in some cases, it  
2 might actually not help, it might make it worse.

3 So, our recommendation that we've got  
4 in the exhibit here -- I mean, in our -- in our  
5 analysis is that, and it's found on Bates 042 of  
6 our testimony, Bates 042 on our DOE's testimony,  
7 that's "Page 42 of 47".

8 Q Exhibit 6?

9 A (Willoughby) Exhibit 6, starting with Line 3.  
10 And you'll see there "the primary causes of the  
11 poor reliability on the distribution circuits"  
12 are from "Fallen Trees" and "Tree-Broken Limbs",  
13 that's just what we saw when we looked at those  
14 tables. And we give some statistics there.

15 And then, if you work your way on down,  
16 Lines 10 and 11 says "Outages from tree limbs  
17 "touching" the circuits were insignificant in  
18 comparison". Well, that's that "Tree Growth"  
19 that we identified on the table.

20 "Generally, mechanical damage to  
21 distribution circuits...include downed wires,  
22 broken poles, broken crossarms", and so forth.  
23 That's the -- what I mentioned, can, you know,  
24 that happens, that's the kind of mechanical

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1 damage that trees can cause.

2 So, we believe that it would require,  
3 you know, one of the things that ought to be  
4 seriously investigated is more aggressive tree  
5 trimming in spot areas that would remove danger  
6 trees, and maybe the -- in conjunction with  
7 reconductoring. But reconductoring alone we  
8 don't believe is sufficient. And we're not  
9 sure -- we're not convinced that using spacer  
10 cable as much as planned is the best economical  
11 solution.

12 So, we're recommending that this whole  
13 debate/discussion be deferred until the next rate  
14 case, which I believe we have in our testimony  
15 here somewhere.

16 Q Yes. That's my understanding of Exhibit 8, Bates  
17 Page 006.

18 A (Willoughby) Okay. That's it.

19 Q III, Section (ii).

20 A (Willoughby) Yes. So that, when we went through  
21 the Reliability Report, and we had some  
22 discussions, and we had some -- I think we had a  
23 tech. session or two on this, Joe DeVirgilio, who  
24 was not able to be with us, actually worked for



[WITNESS PANEL: Dudley|Willoughby]

1 Central Hudson for a number years, and  
2 experienced this firsthand. Another one of our  
3 team members, in particular, Bob Grant, who's the  
4 president of RCG Consulting, worked for Boston  
5 Edison for eight to ten years, and actually  
6 experienced Hendrix cable pulling down poles.  
7 So, he knows what can happen, and he's the one  
8 that raised the red flag on this.

9 Are there any particular questions  
10 about that or does that explanation help?

11 CMSR. SIMPSON: That's very helpful for  
12 me. I don't have anything further on that issue.

13 MR. DEXTER: Along the lines of trying  
14 to point out things that might be helpful to the  
15 Commission. Mr. Willoughby, I believe it was  
16 yesterday you had pointed me to a page, and I  
17 can't remember where it is right now exactly,  
18 that talked about the number of instances where  
19 Liberty had solutions in the Bellows Falls area  
20 listed sort of down a page, and you noted that  
21 several of those were spacer cable solutions, and  
22 that veg. management solutions fell sort of to  
23 the bottom of that chart.

24 Do you think you could find that chart

[WITNESS PANEL: Dudley|Willoughby]

1 and point it out?

2 WITNESS WILLOUGHBY: I can. It would  
3 be Bates Page 406. Let me get my exhibit here.  
4 "Page 21 of 43", Appendix F of the LCIRP. So,  
5 that would be Exhibit 1 or 2. That table is  
6 "Table 18", titled "Grid Needs Assessment for  
7 Potential Non-Wires Solutions". Did you find the  
8 table okay?

9 MR. DEXTER: Yes.

10 WITNESS WILLOUGHBY: Okay. If you look  
11 at the -- the first column is the  
12 "Facility/Location" that's being addressed. The  
13 second column is what's being done. If you go  
14 down that second column, the solution is "Spacer  
15 Cable", "Spacer Cable", "Spacer Cable", "Spacer  
16 Cable", "Spacer Cable", "Spacer" -- a lot of  
17 spacer cable. And I'm not making a judgment call  
18 one way or the other, I'm just noting that. And  
19 then, you go down a little bit farther, and you  
20 see some circuit ties being constructed, which  
21 are good. And then, you go down to second from  
22 the bottom and third from the bottom, there are  
23 some ties -- circuit ties being built actually to  
24 Circuits 12L -- well, third from the bottom,

[WITNESS PANEL: Dudley|Willoughby]

1 circuit's "12L2 feeder". "Construct new...  
2 circuit ties with the 12L1 [and] 12L2 feeders."

3 We're just suggesting that, if you look  
4 at the -- that particular circuit tie, which is  
5 good for distribution automation, and it  
6 certainly improves reliability, is scheduled for  
7 2025, that's the fourth column over. And what's  
8 planned for this year, actually, in 2023, the top  
9 four are spacer cables. And we're suggesting  
10 that we ought to -- we ought to just maybe relook  
11 at that and make sure we're doing the appropriate  
12 vegetation management in conjunction with that.  
13 In particular, removing danger trees, and  
14 anything else that might result in mechanical  
15 damage to the circuit.

16 CMSR. SIMPSON: And that evaluation you  
17 would like to make in the Company's upcoming rate  
18 case, correct?

19 WITNESS WILLOUGHBY: That's correct.

20 MR. DEXTER: Well, yes. It's been  
21 identified as an issue. We were here, I think it  
22 was just last week, talking about the Company's  
23 Veg. Management Plan, and a four-year versus a  
24 five-year cycle, what was able to have been done

[WITNESS PANEL: Dudley|Willoughby]

1 with the budget that was settled on in the last  
2 rate case, versus what the Company was actually  
3 able to do.

4 So, yes. We believe that that will  
5 be -- we were told that there will be a Veg.  
6 Management proposal in the upcoming rate case.  
7 And, yes, we will take a look at that proposal in  
8 that case.

9 CMSR. SIMPSON: And I'll just ask  
10 Mr. Sheehan. Would you agree with deferring a  
11 explicit look into that particular issue until  
12 the Company's upcoming rate case?

13 MR. SHEEHAN: Sure. I mean, what's in  
14 front of you today is this Plan, and we talk  
15 about it. And I think this whole conversation  
16 started with any conditions that may come out of  
17 the DOE recommendations. And, if that's the  
18 recommendation, absolutely. All the people in  
19 this room have been reviewing testimony all week  
20 to get ready to file. And, yes, what you've just  
21 heard, it will be part of the rate case.

22 CMSR. SIMPSON: Okay. Anything else?

23 MR. DEXTER: Yes. And I'm not sure  
24 that it needs to be deferred. Again, we view

[WITNESS PANEL: Dudley|Willoughby]

1 LCIRPs as a planning document and a planning  
2 docket. The fact that the Company has identified  
3 the various potential solutions, like  
4 Mr. Willoughby pointed out on this Page 406 of  
5 Exhibit 1, is an indication to us that these  
6 issues are being reviewed by the Company. To us,  
7 that's what's important in an LCIRP, is that  
8 appropriate issues are identified and examined in  
9 a systematic process, which I believe is what we  
10 have here.

11 So, I don't know that it's an issue  
12 that needs to be decided. You know, I don't  
13 think, actually, that the LCIRP would be the  
14 place where you would decide the best solution,  
15 *per se*, for a situation like they have in the  
16 Bellows Falls situation.

17 But I think it is important, that's why  
18 I asked Mr. Willoughby to go to this page, to  
19 point out that the Company has been evaluating  
20 different ways to approach this problem.

21 You know, we also didn't go to the far  
22 right-hand column on this page, which is cost  
23 estimate. So, that all has to be evaluated, is  
24 all I'm saying, and we believe that Liberty has a

[WITNESS PANEL: Dudley|Willoughby]

1 process in place to evaluate, in this particular  
2 case, this is an evaluation of non-wire  
3 solutions.

4 CMSR. SIMPSON: Thank you. And,  
5 Attorney Sheehan, with respect to the DOE's  
6 summary recommendations in Exhibit 8, Bates 006  
7 and 007, you can address it in closing, or, if  
8 you have anything to add right now, you may, any  
9 concerns with what the DOE has recommended?

10 MR. SHEEHAN: No. None at all. And  
11 just a sidenote on the chart: The ranking of  
12 those options wasn't a ranking. It was a listing  
13 of potential fixes. There was no intent there to  
14 have the spacer cable as the prime option and  
15 then vegetation is at the bottom. It was simply  
16 a listing of what could be done. And, as Mr.  
17 Dexter said, obviously, price would play a role  
18 when we start choosing one. So, as a  
19 clarification.

20 CMSR. SIMPSON: All right. Thank you.  
21 Thank you, Mr. Willoughby. Thank you, Mr.  
22 Dudley.

23 I don't have any further questions for  
24 the Department.

[WITNESS PANEL: Dudley|Willoughby]

1 CHAIRMAN GOLDNER: Okay. So, let's  
2 take a short break, returning at a quarter till.  
3 When we come back, I will offer the parties an  
4 opportunity for close. And then, we'll also  
5 invite or we'll grant leave for briefs. So, just  
6 to prepare your mind for when we come back. We  
7 can talk about those things after Commissioner  
8 Chattopadhyay and I ask a few questions, and we  
9 go to redirect.

10 So, with that, let's take a quick  
11 break, returning at a quarter till.

12 *(Recess taken at 2:35 p.m., and the*  
13 *hearing resumed at 2:47 p.m.)*

14 CHAIRMAN GOLDNER: Okay, we'll go back  
15 on the record again, with questions from  
16 Commissioner Chattopadhyay.

17 CMSR. CHATTOPADHYAY: Give me 30  
18 seconds.

19 *[Short pause.]*

20 CMSR. CHATTOPADHYAY: Okay. So, I  
21 appreciate the back-and-forth that you had with  
22 Commissioner Simpson. You already indicated your  
23 support for a Monte Carlo. I think it was  
24 slightly reserved, but that's fine.

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1 BY CMSR. CHATTOPADHYAY:

2 Q So, let's -- what I want to understand is, you  
3 know, it relates to what I was asking the Company  
4 previously in the morning today. So, if we go to  
5 Exhibit -- I think it was Exhibit 7, and it's  
6 Bates Page 007. Let me know if you are there?

7 A (Dudley) I'm there.

8 Q So, again, going to the description below the  
9 heading "Future of Energy Pricing", Section 4,  
10 the Company says that "DOE's testimony  
11 recommended that Liberty address the substantial  
12 impacts of the current global natural gas market  
13 on electric rates and the longer-term  
14 availability of capacity." So, this was --  
15 obviously, this is verbatim, you know, what was  
16 in DOE's testimony. So, what did you mean by  
17 "longer-term availability of capacity" here?

18 A (Dudley) In terms of the longer-term availability  
19 of gas market capacity, is what we're interested  
20 in, given that -- given that approximately  
21 50 percent of New England's power comes from  
22 gas-fired generating.

23 Q So, you didn't necessarily mean "capacity" as we  
24 understand in the electric world. So, you're



[WITNESS PANEL: Dudley|Willoughby]

1           basically talking about gas capacity?

2   A       (Dudley) And its contribution to generation, yes.

3   Q       And, with respect to electric rates, you were  
4           essentially talking about retail electric rates?

5   A       (Dudley) Yes.

6   Q       And, as I see, in Section 4, there's quite a bit  
7           of discussion about gas-fueled generation, and  
8           there's also how the storage market, the dynamics  
9           there, ended up impacting things. I just wanted  
10          to bring that into attention as a context.

11                 Because you can then go to the  
12          technical statement, and that was Exhibit 8. And  
13          let me know when you're there. And it's Bates  
14          Page 005.

15   A       (Dudley) Yes. I am there.

16   Q       And I'm going to read what you had under "Future  
17          of Energy Pricing". "In the Department's direct  
18          testimony filed in this docket, the Department  
19          highlighted the fact that developing impacts on  
20          natural gas supply and global markets due in part  
21          to the recent war in Ukraine, and corresponding  
22          impacts on New England's natural gas supply,  
23          rendered Liberty's original 2021 assessment of  
24          the energy markets under RSA 378:38, Supply

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1 Options, out of date." So, as a result, as you  
2 say, DOE had asked to update its energy supply  
3 assessment in the supplement.

4 So, I'm just trying to understand, then  
5 you said what Liberty has provided "it adequately  
6 addresses the supply issues currently confronting  
7 the utility and the region." And I'm just trying  
8 to understand. Did you really, when you said  
9 "update its energy supply assessment", what they  
10 did was -- was that what you were expecting to  
11 take a look at, or do you have any opinions?

12 A (Dudley) Well, what we were looking for is, we  
13 were looking for whether or not Liberty had  
14 actually considered these issues and looked at  
15 them. Given that they were recent developments,  
16 substantial developments, and they were not  
17 considered -- obviously, they were not considered  
18 in the 2021 LCIRP, but this was a supplement.  
19 And a supplement to supplement information that  
20 was contained in the original Plan. And we were  
21 actually curious as to whether or not Liberty had  
22 given any thought to these things.

23 Our review of the response was that  
24 they had given some thought to it, to the best of

[WITNESS PANEL: Dudley|Willoughby]

1           what their knowledge base at the Company had.  
2           But, being a small utility, that was limited. We  
3           don't expect them to be completely plugged into  
4           the markets, like a large utility, like  
5           Eversource, for example, probably is. They do  
6           have a division at the corporate level that looks  
7           at these things all the time.

8                       But we were curious as to whether or  
9           not Liberty had considered those things. And we  
10          were trying to weigh their awareness of those  
11          issues.

12   Q       So, going forward, because a plan is about what,  
13           you know, what we can do into the future, you did  
14           indicate, in the back-and-forth with Commissioner  
15           Simpson, that it is helpful to also consider  
16           perhaps variations in the energy supply market  
17           situation, and assess what could be the right  
18           approach, and essentially going to the point  
19           about Monte Carlo.

20   A       (Dudley) Uh-huh.

21   Q       Do you -- are you aware of, in a recent docket  
22           from another utility, which was about  
23           utility-scale solar, like PV, you know, project,  
24           about a PV project, that there were some Monte

[WITNESS PANEL: Dudley|Willoughby]

1 Carlos conducted?

2 A (Dudley) And I'm generally aware of that, yes. I  
3 am not directly involved in that docket. But I  
4 am generally aware of it, yes.

5 Q Yes. And do you have some thoughts on what kind  
6 of variables do you think should be allowed to  
7 vary or, you know, be part of the Monte Carlo  
8 simulations?

9 A (Dudley) In terms of electricity prices?

10 Q Yes.

11 A (Dudley) Yes.

12 Q No, I'm just saying, in terms of scenario  
13 analysis and what might be the right solutions.  
14 So, I'm asking, in terms of this docket, what  
15 variables do you think would be useful to be  
16 considered "variables", meaning they are  
17 stochastic?

18 A (Dudley) Well, the big -- the big variable, of  
19 course, is the price of gas. And the events and  
20 circumstances that are impacting that price. As  
21 you know, in prior years, the price of gas was  
22 fairly stable, it was fairly cheap. These, the  
23 current events that are impacting the price of  
24 gas, you can probably characterize them as kind

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1 of a "black swan" type event. Yes, it was  
2 probably predictable, up to a point, that the  
3 Ukraine situation would escalate to where it is  
4 now.

5 But it would be the price of gas that  
6 would be factoring in; RECs; it would be  
7 factoring in information on the wholesale prices  
8 at ISO. Whoever did this, which is why I said  
9 before that the person doing this would have to  
10 have some pretty good expertise, in terms of the  
11 market and watching the trends in the market.  
12 But they would have to put together all those  
13 things.

14 Q Would you also consider weather variables to be  
15 perhaps also useful?

16 A (Dudley) Sure.

17 Q Okay. With respect to Monte Carlo simulations, I  
18 mean, you mentioned that it would be helpful if  
19 whoever does it is into it, and knows exactly  
20 what it is. And, sure, a consultant may be the  
21 right approach. But are you aware that, even  
22 within the Excel, you know, software, there are  
23 add-ons that companies can actually use, in the  
24 sense that you may talk to other stakeholders and

[WITNESS PANEL: Dudley|Willoughby]

1 figure out what those variables are, it may be  
2 relatively easy to do?

3 If you're not aware of it, that's fine.  
4 I'm just asking.

5 A (Dudley) I am aware of off-the-shelf versions of  
6 the model that you can purchase, sure. But I  
7 think the old rule, Commissioner Chattopadhyay,  
8 of "garbage in, garbage out" applies here. And,  
9 for me, just based on my experience in the  
10 financial and banking world, the person doing the  
11 inputs has to have a pretty good feel for what  
12 the trends in the marketplace are, what all of  
13 the uncertainties are that need to be measured.  
14 And they have to have a good grasp of that. And,  
15 in the smaller utilities, that skillset may not  
16 be available. In the larger utilities, I am  
17 aware that it is. They have entire divisions  
18 that devote most of their time to watching these  
19 things.

20 So, in the case of Liberty, and perhaps  
21 some of the smaller utilities, bringing on a  
22 consultant to at least help them get started,  
23 maybe even to train an individual, probably would  
24 be the wiser thing to do.

[WITNESS PANEL: Dudley|Willoughby]

1 CMSR. CHATTOPADHYAY: Of course, one  
2 can take the view that Liberty, as part of a --  
3 the parent company is large enough that there are  
4 other, you know, affiliates, and it's probably  
5 easy to get somebody who knows about this.

6 So, I think I'm going to stop there. I  
7 appreciate your responses to me. And also,  
8 importantly, to the questions that Commissioner  
9 Simpson was asking you. So, thank you.

10 WITNESS DUDLEY: Thank you.

11 CHAIRMAN GOLDNER: Okay. I have no  
12 further questions. And we can move to redirect,  
13 and the DOE.

14 MR. DEXTER: I don't have any redirect.

15 CHAIRMAN GOLDNER: Okay. Very good.

16 So, at this time, I'll excuse the  
17 Department of Energy witnesses. Thank you.  
18 Thank you for your help today.

19 So, at this point, I'll strike  
20 identification on Exhibits 1 through 8 and enter  
21 them into the record.

22 I'll invite the parties or grant leave  
23 for the parties to prepare briefs regarding the  
24 statutory standards discussed today, with any

1       briefs filed due in two weeks after the final  
2       hearing transcript is filed, with reply briefs  
3       due two weeks after that.

4                Would that timeframe work for  
5       everyone?

6               MR. SHEEHAN: We chatted briefly during  
7       the break, and counsel, frankly, don't see a need  
8       for briefing, and we'd rather avoid it if we can.  
9       But, if there's a particular question that the  
10      Commission is -- would like input on, we'd be  
11      happy to. But --

12              CHAIRMAN GOLDNER: I anticipated that  
13      answer. And it's really directed, I think, at  
14      the OCA. The OCA objected to the LCIRP. And,  
15      so, really, it's an offer for the OCA to file a  
16      brief, if there's something you would like to ask  
17      about or to put on the record?

18              MR. CROUSE: I appreciate the  
19      opportunity to write a brief. When I talked with  
20      the other counsel members, I think I'm palatable  
21      to a decision that the Commissioners come up  
22      with. But I can always circle back and let you  
23      know after, if I feel the need to. But I don't  
24      think I need to at this point.



1                   CHAIRMAN GOLDNER: Okay. We can, just  
2                   in terms of wrapping up the hearing, what I would  
3                   suggest is, we can have a closing statement from  
4                   everyone. And then, Mr. Crouse, I guess I would  
5                   just need an answer from you on leaving the  
6                   record open, and providing the opportunity for  
7                   the brief, or closing the record, and then moving  
8                   on?

9                   MR. CROUSE: I think I can just say I'm  
10                  in favor of closing the record. I don't see the  
11                  need to draft a brief. Thank you.

12                  CHAIRMAN GOLDNER: Okay. Attorney  
13                  Sheehan looks very happy.

14                  MR. CROUSE: You're welcome.

15                  CHAIRMAN GOLDNER: Not to mention Mr.  
16                  Dexter, who is probably also happy.

17                  CMSR. SIMPSON: Normally, attorneys,  
18                  love writing briefs.

19                  CHAIRMAN GOLDNER: It's an opportunity.

20                  Okay. So, very good. So, we will not  
21                  have briefs in this docket, in this proceeding.

22                  And we'll move forward with closing  
23                  statements, beginning with the Office of the  
24                  Consumer Advocate.

1 MR. CROUSE: Yes. Thank you.

2 I will try not to belabor my earlier  
3 points, and keep my closing statements brief.

4 From the OCA's perspective, the OCA  
5 believes that Liberty has not thoroughly assessed  
6 the statutory requirements in RSA 378:38, and  
7 therefore recommends the Commission does not  
8 accept the LCIRP as presented.

9 Thank you.

10 CHAIRMAN GOLDNER: Okay. Thank you.  
11 And moving to the Department of Energy.

12 MR. DEXTER: Thank you, Commissioners.

13 Respectfully, the Department comes to  
14 the opposite conclusion. We have spent a lot of  
15 time analyzing the Company's initial filing.  
16 We've spent a lot of time prompting a  
17 supplemental filing. And, importantly, in  
18 Exhibit 8, we attached the Company's response to  
19 Department Data Request 10-1, where we tried to  
20 bring in a lot of information that we believed  
21 was necessary for the Commission to be able to  
22 adequately review the Plan, and determine that  
23 the statutory requirements were met. And, so,  
24 that's why I spent my time today trying to point

1 out to you the areas that were important to  
2 meeting the statutory requirements.

3 You know, the foundation of an LCIRP,  
4 from the Department's perspective, is a demand  
5 forecast, which we think is vitally important.  
6 And, in this case, we pointed out some  
7 deficiencies in the Plan -- in the originally  
8 filed demand forecast, and pointed out the  
9 situations where the demand forecast was improved  
10 by the inclusion of some spot load adjustments  
11 that were significant. And, so, we believe the  
12 demand forecast is adequate for purposes of  
13 meeting the LCIRP statute.

14 We asked the witnesses to discuss how  
15 demand-side management programs were considered  
16 in the load forecast, how distributed generation,  
17 and electric vehicle growth was considered, and  
18 we believe that was adequately explained by the  
19 Company.

20 We had a long discussion today of  
21 supply options, a long discussion of default  
22 service. There is a process in place for default  
23 service that, obviously, is not set in stone, but  
24 has a fairly long history. We believe that

1 changes to the default service situation may come  
2 about, but we don't believe that those changes  
3 need to come out of an LCIRP docket. I think  
4 it's important that the Company recognized the  
5 role that default service procurements play.

6 But I think we would agree with Ms.  
7 Tebbetts' assessment that some of the criteria  
8 laid out in the statute are legacy, and we  
9 believe that things like examination of supply  
10 options and implementation -- integration of the  
11 impacts of the Clean Air Act fall into that  
12 "legacy" category, and be given the weight that  
13 they are appropriately afforded in a  
14 post-restructured environment that we have here  
15 for Liberty.

16 Obviously, if a utility was in the  
17 process of choosing between, you know, a coal  
18 plant or a windmill, you know, then the Clean Air  
19 Act could be very important. But, given the  
20 situation that this utility faces in this day and  
21 age, we believe that the correct -- that the  
22 attention they paid to those legacy criteria was  
23 adequate for the Commission to find that they met  
24 their statutory requirement.

1           We spent a lot of time in this case  
2           trying to assess the extent to which the capacity  
3           improvements that were made in the Salem area,  
4           trying to quantify those, and trying to match  
5           those to the spot load additions that were being  
6           predicted, and we believe we accomplished that.  
7           Again, that all came together in Response DOE  
8           10-1, which was included with our technical  
9           statement.

10           So, on the whole, we believe that this  
11           Company, in this instance, has met the criteria  
12           for the statute. We made some recommendations  
13           for the future. As I said earlier, those are  
14           recommendations that we think would improve  
15           future plans. We don't believe that those need  
16           to be addressed in this Plan for a plan to have  
17           met the statutory requirements. There are  
18           different ways to approach programs, problems,  
19           and the fact that the various approaches were put  
20           forth in the original Plan, and discussed by the  
21           DOE and the parties, and improvements were made,  
22           we think is an indication that this Plan  
23           satisfies the process that was laid out.

24           Most importantly, for the Department,

1 is one sentence that's contained in RSA 378:39,  
2 and I'll read it into the record. It says "The  
3 commission's approval of a utility plan shall not  
4 be deemed a pre-approval of any action taken or  
5 proposed by the utility in implementing the  
6 plan." We think that's important. We had a  
7 discussion this afternoon about how to address  
8 the situation, the reliability situation, in the  
9 Charlestown/Walpole area, the use of spacer cable  
10 versus the use of more targeted vegetation  
11 management. Again, the fact that that discussion  
12 took place, that the different alternatives were  
13 analyzed is important to the planning process.  
14 But the responsibility for the ultimate decision  
15 will come after-the-fact, as it always has,  
16 usually in a company's rate case. Nothing  
17 that -- I'm glad the statute says it, because our  
18 recommendation that this Plan be approved is in  
19 no way an endorsement by the Department of Energy  
20 that any of the actions that are laid out here,  
21 you know, are preapproved. That prudence  
22 determination must continue, according to  
23 statute, after-the-fact, in rate cases, when cost  
24 recovery is requested for the various actions

1           that were taken.

2                       So, in summary, we do recommend that  
3           the Commission find that this Plan meets the  
4           statutory requirements as laid out in 378:38  
5           and :39.

6                       Thank you.

7                       CHAIRMAN GOLDNER: Thank you. And,  
8           finally, Attorney Sheehan.

9                       MR. SHEEHAN: Thank you.

10                      To address a couple items that came up  
11           during the hearing, I think the reference to  
12           "handcuffs" on the energy supply piece, I  
13           understood it to be, as Mr. Dexter just  
14           mentioned, we have a Commission-approved process  
15           that's been around for a while. And we are not  
16           free to do something different for this July's  
17           service, for example. And, if there are changes,  
18           that would have to be something that would go  
19           through a process, and that's all appropriate.  
20           And the Commission has opened a docket to review  
21           that.

22                      So, I think that's -- to the extent we  
23           can't, on an IRP or on our own, come up with a  
24           better way to do default service, that was, I

1 think, the rationale behind the "handcuffs"  
2 comment, which is a simple way of saying all of  
3 that.

4 We have considered options for that, of  
5 course. We filed comments in that other docket.  
6 We are -- or, actually, we have now completed --  
7 about to complete the three months of self-supply  
8 for that one block. As you can tell from the  
9 reports we filed, it's been going well. How that  
10 plays a role in that other docket of procurement,  
11 it is up to all of us to discuss, and we're  
12 looking forward to that conversation.

13 Bringing that back to the IRP, I don't  
14 think the IRP requires too much in that vein,  
15 again, because we're restructured, and we don't  
16 have a lot of leeway in how we procure our supply  
17 options. Our supply option right now is an RFP;  
18 whoever is the lowest price gets it.

19 So, the other factual issue that came  
20 up right at the end, and Mr. Dexter referred to  
21 it, is the options between, for example, spacer  
22 cable versus enhanced trimming for the  
23 Charlestown area. We don't see it as an  
24 "either/or", we see it as a "combined". And I



1 think what -- the conversation in the rate case  
2 will be to find the right mix of those. How much  
3 trimming, how much spacer cable, or whatever the  
4 hard solution is. But that is a conversation for  
5 the rate case, when, you know, we'll make a  
6 proposal that we want to do this much trimming  
7 and that much spacer cable, and that's what we'll  
8 do.

9 As far as -- let me back up. Most of  
10 the rate case is backwards-looking, approving  
11 stuff we've done, and adjusting rates, but a good  
12 chunk of it is going to be the Veg. Management  
13 Program going forward, how much is in rates, and  
14 what are we expected to do with that. So, that's  
15 where we'll have that push-pull over capital  
16 projects versus veg. management spending.

17 So, last, the conditions in DOE's  
18 letter are fine with us. The 10-year forecast --  
19 the 10-year lookback versus 20 is fine. We've  
20 adjusted forecast periods on the gas side  
21 recently. And there may be a transition period  
22 when we come up and we use a different period,  
23 there could be a little adjustment to extend it  
24 different from the 20-year.

1           The other condition was "defer any  
2           consideration of the Veg. Management until the  
3           rate case." I think Mr. Dexter is correct, that  
4           here we talk about what's in the Plan, what could  
5           happen, in the rate case is where we have to  
6           decide what's the nuts and bolts of what we're  
7           going to do going forward.

8           So, to conclude, this is a docket where  
9           I think the process worked well. We filed a  
10          Plan. We got pushback from DOE and OCA on things  
11          we could have done better; we responded. We got  
12          pushback again; we responded again. And I think  
13          we're here today with a Plan that does check all  
14          the boxes, and does demonstrate that we are  
15          complying with the statute and the planning  
16          process. And it is a better product today than  
17          what it was in January of 2021.

18          So, we appreciate the support of DOE.  
19          We respectfully disagree with OCA's argument that  
20          we have not met the requirements. And we ask for  
21          an order approving of the Plan.

22                 Thank you.

23                 CHAIRMAN GOLDNER: Okay. Thank you.

24                 Are there any objections to canceling

1 tomorrow's hearing?

2 MR. DEXTER: No objection.

3 CHAIRMAN GOLDNER: No objection. Okay.

4 All right. Very good. We'll cancel tomorrow's  
5 hearing. We'll also send out a short PO, just to  
6 make sure that anybody not here can see it as  
7 well.

8 Is there anything else that we need to  
9 attend to today?

10 MR. DEXTER: No.

11 MR. SHEEHAN: No, sir.

12 CHAIRMAN GOLDNER: Okay. Seeing none.  
13 We'll take the matter under advisement. And we  
14 are adjourned.

15 ***(Whereupon the hearing was adjourned***  
16 ***at 3:15 p.m.)***

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