1   **STATE OF NEW HAMPSHIRE**

2   **PUBLIC UTILITIES COMMISSION**

3

   October 6, 2022 – 1:32 p.m.
4   21 South Fruit Street
     Suite 10
5   Concord, NH

6

               [Hearing also conducted via Webex]
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8   RE: **DE 19-197**
                 ELECTRIC AND NATURAL GAS UTILITIES:
9   **Development of a Statewide, Multi-Use**
                 Online Energy Data Platform.
10   *(Status Conference)*

11

   PRESENT: Chairman Daniel C. Goldner, Presiding
12   Commissioner Pradip K. Chattopadhyay

13   Tracey Russo, Clerk
                 Doreen Borden, PUC Hybrid Hearing Host
14

   APPEARANCES: **Reptg. Public Service Company of**
15   **New Hampshire d/b/a Eversource Energy:**
                   Jessica A. Chiavara, Esq.
16   Riley Hastings

17   **Reptg. Unitil Energy Systems, Inc.,**
                   and Northern Utilities, Inc.:
18   Matthew J. Fossum, Esq.
                   Justin Eisfeller
19   Jeremy Haynes

20   **Reptg. Liberty Utilities (Granite State**
                   Electric) Corp. and Liberty Utilities
21   **(EnergyNorth Natural Gas) Corp.:**
                   Michael J. Sheehan, Esq.
22   Missy Samenfeld

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

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APPEARANCES: *(C o n t i n u e d)*

**Reptg. the City of Lebanon and
the Data Platform Governance
Council:**
Clifton Below, Assistant Mayor

Reptg. Clean Energy NH:
Chris Skoglund, Dir./Energy Transition
Ethan Goldman *(Resilient Edge)*

Reptg. Mission:data Coalition:
Michael Murray, President

Reptg. Residential Ratepayers:
Donald M. Kreis, Esq., Consumer Adv.
Office of Consumer Advocate

Reptg. New Hampshire Dept. of Energy:
Mary E. Schwarzer, Esq.
(Regulatory Support Division)

I N D E X

P R O C E E D I N G

CHAIRMAN GOLDNER: Okay. Good afternoon, everyone. I'm Chairman Goldner. I'm joined today by Commissioner Chattopadhyay.

We're here this afternoon in Docket DE 19-197 for a status conference regarding the electric and gas utilities' development of a statewide, multi-use online energy data platform. The conference was requested by the Parties to present the customer interface, the API, which allows customers and third party users to register and to access and share data.

Also, at the parties' request, we will address three additional issues as time permits. One, the utilities' need for contracts with outside resources to develop the Cost/Benefit model; the closely related sole-source contract with Dunsky Energy Consulting, and, finally, an alternative approach to the sequence of deliverables required by the Commission in this docket.

So, let's take appearances, beginning with Eversource.

MS. CHIAVARA: Good afternoon -- good

1 afternoon -- should I just yell?

2   [Laughter.]

3   (Referring to an issue with the

4   microphone.)

5   MS. CHIAVARA: Good afternoon. Jessica

6 Chiavara, counsel for Public Service Company of

7 New Hampshire, doing business as Eversource

8 Energy. And I'm here with Riley Hastings today.

9   CHAIRMAN GOLDNER: Okay. Thank you.

10 And we'll move to UES and Northern.

11   MR. FOSSUM: Good afternoon,

12 Commissioners. Matthew Fossum, here for Unitil,

13 UES and Northern. With me at the front table

14 here is Mr. Justin Eisfeller. And, on the line,

15 consistent with the Commission's grant, I think,

16 two weeks ago, is Mr. Jeremy Haynes.

17   CHAIRMAN GOLDNER: Perfect. Thank you.

18 Liberty Utilities?

19   MR. SHEEHAN: Good afternoon. Mike

20 Sheehan, for the two Liberty entities, Granite

21 State Electric and EnergyNorth Natural Gas. And

22 with me, and the Liberty representative on the

23 Governance Council, is Missy Samenfeld.

24   CHAIRMAN GOLDNER: Very good. The

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1        Office of Consumer Advocate?

2                  MR. KREIS:  Good morning, Mr. Chairman,

3        Commissioner.  I'm Donald Kreis, the Consumer

4        Advocate.

5                  CHAIRMAN GOLDNER:  All right.  Very

6        good.  Is the City of Lebanon here?  I see it is.

7                  MR. BELOW:  Yes.  Clifton Below,

8        Assistant Mayor, but also I am here as a member

9        of the Governing -- Data Platform Governance

10       Council.

11                 CHAIRMAN GOLDNER:  Very good.  Clean

12       Energy New Hampshire?

13                 MR. SKOGLUND:  Chris Skoglund, Director

14       of Energy Transition with Clean Energy New

15       Hampshire.  And we will be represented, I

16       believe, by Ethan Goldman, who should be

17       appearing on the screen at some point.

18                 MS. HASTINGS:  He says he's getting a

19       message that the meeting hasn't started.

20                 MR. EISFELLER:  He may have the wrong

21       link.

22                 MR. SKOGLUND:  All right.  I'll be

23       doing some IT work in the background then.

24                 CHAIRMAN GOLDNER:  Very good.  Thank
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1   you, Mr. Skoglund.

2   The New Hampshire Department of Energy?

3   MS. SCHWARZER: Yes. Excuse me, Mr.

4   Chairman. I was wondering where my colleague is.

5   Mary Schwarzer, here for the Department of

6   Energy.

7   CHAIRMAN GOLDNER: Okay. Very good. I

8   also have "Community Choice Partners" on the

9   list. Is there anyone here from Community Choice

10   Partners?

11   *[No indication given.]*

12   CHAIRMAN GOLDNER: No. Is there anyone

13   here from the Town of Hanover?

14   *[No indication given.]*

15   CHAIRMAN GOLDNER: No. And are there

16   any -- is there anyone else here today that would

17   like to participate in today's proceeding?

18   *[No indication given.]*

19   CHAIRMAN GOLDNER: Okay.

20   MS. CHIAVARA: Mr. Chairman?

21   CHAIRMAN GOLDNER: Yes.

22   MS. CHIAVARA: Michael Murray, from

23   Mission:data, is presenting, and he's also having

24   access problems.

1   CHAIRMAN GOLDNER: Okay. Right. Do we

2   want to pause while we work through the access

3   issues or would we like to steam boldly ahead for

4   a little while until we need them, need him?

5   It's your call.

6   MR. FOSSUM: Well, Mr. Chairman, this

7   is Matthew Fossum here. I think we had, as --

8   I'll speak for a moment on behalf of the

9   Governance Council, we had discussed sort of an

10   order of activities for this afternoon that we

11   thought was sensible. And that would actually

12   put Mr. Murray and the need for his direct

13   involvement farther on the schedule.

14   So, I think we can move forward, and

15   hope that Mr. Murray will connect soon and be

16   available to us when the time comes.

17   CHAIRMAN GOLDNER: Okay. Okay, that

18   sound good.

19   So, I think our plan was to start off

20   with the demonstration, and then move to the

21   three questions at the end of the hearing. And,

22   Mr. Fossum, I think you have some advice on how

23   to proceed with the demonstration?

24   MR. FOSSUM: I guess my advice would be

1   to not do it in that order. So -- but, by way of

2   a little bit of table-setting, so, this, you

3   know, goes back to where the Commission approved

4   the Settlement and the creation of the Governance

5   Council, and, at the time, had a number of

6   deliverables in there, and the request for a

7   status conference at the end of this year.

8   But that was at a time before we had

9   done our sort of detailed work and had spent some

10   time on a few things. The Governance Council has

11   spent a tremendous amount of time on a number of

12   deliverables since then. And, so, there's a need

13   to adjust.

14   One item, as you mentioned, that we

15   spent some time on is preparing this working

16   model, and we had asked for this opportunity to

17   present that, and that's what Mr. Murray would be

18   presenting. And, so, -- but our thought had been

19   that, hopefully, we can address the other issues

20   up front, and fairly swiftly, and then spend some

21   time on the working model.

22   And, so, that would be our proposal, is

23   to address the three sort of what I would call

24   "additional issues" that were added most

1   recently, and then spend the remainder of the

2   time, or however long is necessary, addressing

3   the working model that the Commission had

4   requested to see.

5   CHAIRMAN GOLDNER: And I think that

6   would be fine. That would be fine.

7   So, if you'd like to lead, Attorney

8   Fossum, that would be great. I would just say

9   that, in terms of our, you know, preparation for

10   the meeting, would you agree that Item 1 and 2 is

11   really the same thing or are those two different

12   items?

13   MR. FOSSUM: I believe they're related,

14   yes. They are very closely related. And the

15   Venn diagram on them is almost a complete circle.

16   CHAIRMAN GOLDNER: Very good. So, yes.

17   So, I think it would be great to hear more about

18   that. We have some questions on this "100K"

19   piece of it, and, you know, if the Parties have

20   had any discussions with Dunsky, *et cetera*. But,

21   please proceed, and we'll just ask questions as

22   we go.

23   MR. FOSSUM: Certainly. So, actually,

24   hopefully, I won't have to do a whole lot more

1   talking, and you'll hear from people who are much

2   more knowledgable about these sorts of things

3   than I am.

4   I'll set the table very quickly, is

5   that one of the items that had been in the

6   Commission's order was a requirement to inform

7   the Commission when outside resources were going

8   to be procured and when outside spending was

9   going to be done. So, that is sort of the basis

10   of that request regarding Dunsky.

11   The other item on the table for today

12   is the alternate scheduling. Now that the

13   Governance Council has had time to really get

14   into the requirements and needs of the Platform,

15   there's been an opportunity to map out all the

16   various requirements, which things are dependent

17   upon others, both in terms of their schedules and

18   in terms of their actual ability to complete

19   them.

20   So, with that, I would actually turn to

21   Mr. Eisfeller here, who has been sort of leading

22   the Governance Council, and who can walk us

23   through, I think fairly quickly, the proposed --

24   I don't know if it's proposed amendments to his

1   schedule or the proposed schedule for creating

2   and delivering the Platform, as well as providing

3   the information about the various milestones that

4   need to be met along the way.

5   And that will be accompanied by the

6   presentation that will be on the screen.

7   CHAIRMAN GOLDNER: Okay. Very good.

8   MR. GOLDMAN: Excuse me, can I --

9   CHAIRMAN GOLDNER: Go ahead.

10   MR. GOLDMAN: May I interject? This is

11   Ethan Goldman. I've been -- I had some trouble

12   getting into the meeting with the new

13   registration link that was sent around this

14   morning, and was able to get in with the old

15   registration link. Michael Murray has been

16   trying to get in for a while, but hasn't been

17   able to get either of the links to work, it just

18   says "Waiting for Host."

19   I don't know if there's anyone

20   available at the meeting who can help him get the

21   right link, so that he can join while this other

22   presentation is taking place?

23   MS. RUSSO: Hi. We just resent him a

24   new link. So, he should be able to join shortly.

1   MR. GOLDMAN: I'll let him know.

2   MS. RUSSO: Oh, and he is actually

3   there.

4   MR. GOLDMAN: Perfect. Thank you.

5   MS. RUSSO: No -- yes, Michael Murray,

6   right?

7   MR. GOLDMAN: Yes.

8   MS. RUSSO: Okay. Perfect. Thank you.

9   MR. GOLDMAN: Yes.

10   MR. EISFELLER: Okay. Thank you for

11   allowing us some changes to the schedule. No pun

12   intended.

13   So, just first, I have just three

14   slides. The first couple slides just are on

15   project management basics. And then, I have a

16   high-level schedule that we can go through

17   that -- and where I can highlight some changes,

18   and the impacts on the various milestones

19   referenced in the order.

20   So, first slide here is on "Project

21   Structure". This is the structure that we use

22   for our decision-making in the Project, we

23   have -- representing the regulatory oversight of

24   the Commission. So, there's an expectation in

1   the orders that we have this interaction with the

2   Commission to keep them informed throughout.

3   The Steering Committee, the Governance

4   Council is acting as a "steering committee". So,

5   all decisions on daily progress on this Platform

6   being made by the Steering Committee.

7   And then, we have various working teams

8   and a project manager. Most of the work is being

9   done by our Core Working Team and Technical

10   Committees, and there are basically subcommittees

11   on the Governance Council.

12   And then, we expect that we'll have

13   several consultants that are helping us in this

14   initial phase of the Project.

15   The Project Approach is basic project

16   management. You know, we are now in the

17   "Initiate/Plan" phase. We're moving towards the

18   "Vendor Selection" phase. And then, further on,

19   as we "Develop", "Test", and "Deploy" the system.

20   And then, we would expect a post "Hypercare"

21   period as well. So that we're following basic

22   project management principles.

23   And then, lastly, the last slide I have

24   here, and also a handout that I provided, so you

1   can hopefully see a little bit better some of the

2   detail. There's quite a bit on this slide. So,

3   I'm going to try to walk through it slowly. We

4   may have to do it iteratively as well.

5   But, before I do that, I wanted to

6   discuss several decisions that were made by the

7   Governance Council that affect the schedule.

8   The first decision that was made was a

9   decision to pursue a two-phase selection of

10   vendor selection process. The first phase being

11   an RFI process, a Request For Information

12   process, where we solicit proposals and

13   presentations by the vendors. And we're now

14   working on that, that process right now in

15   earnest. The idea was that that will help us

16   inform the development, our design of the

17   Platform, and provide us with some specifics on

18   what may be available in the market.

19   The next big decision that was made,

20   and I'll lump these all into one, was that the

21   Third Party Use Survey, the RFP for the Back End

22   Consultant Review would inform the Platform

23   design. So, there's an expectation that the

24   results we get from the survey, as well as the

1   discussion with the back end consultant, would

2   provide some valuable input into the design and

3   the RFP development. So, those are now, you

4   know, basically, critical path elements of the

5   development of the RFP for the Platform.

6   Those decisions, those three decisions,

7   had the impact of pushing the schedule out quite

8   a bit, as you can see here.

9   So, having said that, now I'll walk

10   through each of the work streams. What you'll

11   see here, and they're color-coded, are the

12   various work streams that we are currently

13   working on. There's other work streams as well.

14   The first one here being the "RFI for

15   the Platform". The RFI has already been -- is in

16   process right now. We've sent out an RFI to more

17   than a dozen vendors, and have gotten back a

18   series of questions from them. We're in the

19   question-and-answer phase right now. And then,

20   we expect to start scheduling demonstrations by

21   the vendors that seem capable. That we hope to

22   conclude those vendor demos by mid-November.

23   The next work stream presented here is

24   the "Third Party Use Survey". The statement of

1	work for that is complete. We are now soliciting
2	vendor proposals. We did not provide an RFP for
3	that process. The expectation is that this, the
4	cost of this survey is less than the threshold
5	that we would expect in RFPs. So, we are
6	soliciting proposals for that work right now.
7	And, once we are ready to select a vendor, we
8	would -- we plan on notifying the Commission, and
9	you'll see that in red.
10	The other thing we tried to do to
11	highlight on this schedule is any expected
12	communications with the Commission is in red
13	text. So, you'll see that throughout. And
14	milestones that were referenced in the order,
15	we've tried to indicate with an asterisk, a red
16	asterisk. So, you'll see those in there, too.
17	And I'll try to point them out as we go through
18	this.
19	Also, in the Third Party Use Survey
20	work stream is that, you know, hiring of the
21	consultant, and performing the study. There's an
22	expectation in the order that we would share that
23	study with the Commission. So, that's the
24	asterisk indicated there. And that is not likely

1 going to happen until February. You'll see the

2 "February 22nd" date there. That's the estimate

3 for that work to be complete.

4   Moving on to the RFP for the Back End

5 Consultant, the next work stream, the RFP for

6 that work is underway. We expect to have that

7 done by early November. The order requires us to

8 review that with the Commission. We expect that

9 that will be ready for review in November. And

10 then, we also expect that the Commission would

11 provide some guidance or approval of that RFP

12 before distribution. Oops. Okay. So, you'll

13 notice that milestone in November.

14   Then, we'll process the RFP. The plan

15 for processing the RFP is a very formal process.

16 It's a 12-week process. Eversource will be

17 leading that effort. That schedule is reflected

18 here. And then, once we have processed that,

19 part of the processing is the recommendation for

20 a selection, the Governance Council will make

21 that recommendation, and then we will notify the

22 Commission of the selection.

23   And then, the work on that, that the

24 consultant will perform, will continue from that

1   point forth. And, as I mentioned, that work

2   would also inform the Platform RFP itself.

3   So, that leads us to the next work

4   stream, which is the "RFP Platform" work stream.

5   The work on that, on the RFP, has just started.

6   We expect that RFP to be informed by those other

7   work streams. And that, next year, in June, late

8   May to June timeframe, that will be ready for

9   presentation to the Commission, and the following

10   approval of that RFP. And that will commence --

11   after that, we'll commence the RFP processing,

12   which is a 12-week process, which will lead to

13   the next phase of the Project, which is the

14   selection of the vendor, and moving on to

15   decisions on whether we implement or not.

16   The last work stream presented here is

17   the "Cost/Benefit Study". We've -- and I'll let

18   Riley speak to that in detail, but that the

19   proposal has already been developed, and

20   discussions with Dunsky are underway. We are

21   notifying the Commission today of that selection.

22   We'll be working with Dunsky to update the model

23   over a period of time, through January. We would

24   expect that we would notify the Commission of the

1   model changes that were discussed in the order,

2   and that are now reflected in the model. That

3   would likely lead to a presentation in January,

4   if so deemed appropriate.

5   And then, the work for that will

6   continue on, but will not be complete until we

7   have costs for the -- for the Platform. That's

8   not expected until we finish the RFP processing

9   for the Platform. So, you'll see that those are

10   linked.

11   And then, once that report is done,

12   there's an expectation that that report will be

13   shared with the Commission. And that's the last

14   milestone indicated.

15   So, you know, having presented this

16   high-level schedule, we do have a detailed

17   schedule behind this. This is just for

18   presentation here. It's obvious that a status

19   conference in December has its limitations as to

20   what could be presented. And that, potentially,

21   a different model might be more effective.

22   We did not come prepared to recommend a

23   specific model. But, as you can see by the dates

24   here, I think that the expectation is that a

1   majority of these milestones are expected to be

2   presented at once at a status conference. We

3   would generally recommend a status conference

4   next May or early June.

5   Others on the call or in the room are

6   welcome to elaborate, if I had missed anything?

7   *[No indication given.]*

8   MR. EISFELLER: Okay. Any questions?

9   Does that make sense?

10   CHAIRMAN GOLDNER: So, this was -- was

11   this intended to cover 1, 2, and 3, or just 3?

12   MR. EISFELLER: Just the schedule.

13   CHAIRMAN GOLDNER: Just the schedule,

14   okay.

15   MR. EISFELLER: Okay. Next up would be

16   Riley, to discuss the Dunsky report.

17   MS. HASTINGS: All right. Thank you.

18   Riley Hastings, with Eversource. I have been

19   leading our communications with Dunsky on this

20   Cost/Benefit analysis.

21   As others have indicated, we've

22   notified the Commission that we'd like to use

23   outside resources, and, in addition to that,

24   we're also looking to sole-source the Dunsky

1   Cost/Benefit analysis. And, because the

2   utilities are not planning to conduct a

3   competitive request for proposals, or RFP, we'd

4   like to provide some justification on doing so,

5   and ask the Commission to determine whether such

6   a course of action is reasonable and prudent.

7   I have -- we did receive about an

8   18-page proposal from them, with the "not to

9   exceed $100,000", and a proposed completion --

10   CHAIRMAN GOLDNER: Can I just pause you

11   there?

12   MS. HASTINGS: Yes.

13   CHAIRMAN GOLDNER: In the filing, it

14   said it was -- specifically, that it was "not a

15   "not to exceed"." Is the contract "not to exceed

16   100" or "not not to exceed 100"?

17   MS. HASTINGS: Not to exceed 100.

18   CHAIRMAN GOLDNER: So, there's a cap of

19   100 on the proposal?

20   MS. HASTINGS: Right.

21   CHAIRMAN GOLDNER: Okay. Thank you.

22   Yes, that was perhaps my misunderstanding, but I

23   read the filing differently.

24   MS. HASTINGS: Okay.

1   CHAIRMAN GOLDNER: So that there's a

2   cap of $100,000 on the Dunsky Report proposal?

3   MS. HASTINGS: Correct.

4   CHAIRMAN GOLDNER: Okay. Thank you.

5   MS. HASTINGS: Yes. To conclude in

6   February, you know, we'd like to -- we did a lot

7   of research that we had presented previously on

8   whether such a model existed, and Dunsky appears

9   to be the only vender that's ever created a model

10   or done an analysis of this type. It's not --

11   many other vendors have done studies for us, for

12   example, in energy efficiency and the

13   Cost/Benefit analysis. But this study is very

14   unique, in that it's not a, for example, a

15   measure that's already been installed for years,

16   like a lightbulb, or a refrigerator, where we've

17   measured the energy savings, and we have a pretty

18   good sense of what those savings are, and we have

19   a, you know, an energy efficiency, an avoided

20   cost study, that allocates the -- you know,

21   calculates the benefits that go along with these

22   savings.

23   Because this is an enabling technology,

24   there are a whole bunch of sets of assumptions

1   underlying their model, market adoption,

2   assumptions, *et cetera*. And, because they're the

3   only ones who have an existing model, we think

4   that it would be considerably less expensive than

5   if we tried to pursue this analysis with any

6   other vendor.

7   CMSR. CHATTOPADHYAY: Chairman Goldner,

8   can I?

9   CHAIRMAN GOLDNER: Please.

10   MS. HASTINGS: Sure.

11   CMSR. CHATTOPADHYAY: I'm going back to

12   the letter that Eversource had filed, and I'm

13   reading it exactly the way it says: "This

14   estimate is not a "not to exceed" price." So,

15   the letter had said that, but it also had pointed

16   that "Dunsky has provided an initial estimate of

17   100,000 to complete the required work."

18   What you are sharing here, right now,

19   is that a more firmed up number, that's why

20   you're now saying it's -- you know that it's not

21   to exceed?

22   MS. HASTINGS: Yes. I mean, the

23   language in the proposal says "The table below

24   provides our best estimate of the effort and

1   costs required to conduct the research tasks

2   described in this proposal. We would propose to

3   conduct this work on a Time and Materials basis,

4   with an upset limit of $100,000, adjusting the

5   scope and detail in the analysis and reporting to

6   balance the budget and the Council's needs

7   accordingly."

8   CMSR. CHATTOPADHYAY: Thank you.

9   MS. HASTINGS: And then, there are five

10   tasks, with estimated hours, for $100,000.

11   CMSR. CHATTOPADHYAY: Okay. Thanks.

12   CHAIRMAN GOLDNER: Thank you. Yes. We

13   were confused by the filing if it was a cap or

14   not a cap. So, you've clarified for us it's a

15   cap.

16   I did want to clarify one other item on

17   the Venn diagram that Attorney Fossum was

18   referring to. So, it's $100,000 or less for the

19   benefit-to-cost model. I know this from the

20   presentation there were a couple of other models

21   that were needed, I think, or a couple of other

22   sort of consulting efforts that were needed on

23   the back end, and there was one other on the

24   chart.

1   Has that been scoped out yet, in terms

2   of the other consulting contracts? If you could

3   go back to the prior slide to this one please?

4   I'm sorry, one more. First slide, I guess.

5   MR. EISFELLER: So, the "Back End

6   Consultant is --

7   [Court reporter interruption.]

8   MR. EISFELLER: Sorry. The "Back End"

9   Consultant indicated here is the back end

10   consultant for the review, review of the back

11   end. The "Third Party Survey" is the third party

12   survey consultant that we're looking to select.

13   So, those are one in the same. And then, the

14   "Cost/Benefit Model" is Dunsky.

15   So, those are the consultants that are

16   under review right now, are being considered.

17   None of them have been selected or awarded the

18   contract.

19   CHAIRMAN GOLDNER: Yes. And I think,

20   Commissioner Chattopadhyay, please weigh in, it

21   makes sense to us that, since Dunsky has done all

22   the prior report -- or, the prior work,

23   leveraging their work here, with a cap of

24   100,000, we can see the logic of that proposal.

1   I do want to just kind of make sure I

2   understand what's happening on the "Back End" and

3   "Third Party Survey" piece. Those are not

4   Dunsky, that's something different, and that you,

5   today, you haven't scoped that out or have an

6   estimate, you're just giving us a heads up that

7   that's coming?

8   MR. EISFELLER: So, Jeremy, can go to

9   the "Schedule" slide again? You'll see those

10   same work streams for those selections here. The

11   "3rd Party Use Survey", which is the "Third Party

12   Consultant" referenced on the other slide, we

13   would expect to notify the Commission of that

14   selection in November. So, that process is

15   underway. We're, you know, basically,

16   interviewing consultants right now, asking them

17   for proposals. We have one in-hand already. We

18   have not selected any vendor yet.

19   CHAIRMAN GOLDNER: So, you have a

20   scoping document?

21   MR. EISFELLER: Correct.

22   CHAIRMAN GOLDNER: They're giving you

23   feedback on "We'll charge you 50K", "We'll charge

24   you 75K"?

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 1                    MR. EISFELLER:  Correct.

 2                    CHAIRMAN GOLDNER:  You'll weigh all

 3          that, look at the cost, look at the other --

 4                    MR. EISFELLER:  Yes.

 5                    CHAIRMAN GOLDNER:  -- features of the

 6          consultants, and make a choice?

 7                    MR. EISFELLER:  That's exactly correct.

 8                    CHAIRMAN GOLDNER:  And then, your

 9          idea -- the proposal here is to let us know of

10          that decision on the 17th of November?

11                    MR. EISFELLER:  That's the schedule

12          right now, yes.

13                    CHAIRMAN GOLDNER:  Okay.  Okay.  And

14          any idea what we're talking about?  Are we

15          talking about $10,000 here?  Are we talking about

16          $12 million?  What --

17                    MR. EISFELLER:  We're talking in the

18          order of 40 to $60,000.

19                    CHAIRMAN GOLDNER:  Okay.  Okay.  And

20          would that be true for the other consulting

21          contract as well?

22                    MR. EISFELLER:  So, the other

23          consulting contract is the Back End Consultant.

24          That RFP draft is early in its phase, it's about
```

1	20 percent done right now. We have vendors that
2	we've, you know, selected to send the RFP to, but
3	we have not started having discussions. So,
4	that's pretty early in the process. So, I --
5	CHAIRMAN GOLDNER: Would you say it's
6	larger or smaller than the Third Party one?
7	MR. EISFELLER: I would expect it would
8	be much larger than the Third Party Survey. And
9	I would expect also, on that one, there is a
10	requirement in the order that we share the RFP
11	with the Commission. So, that's on the schedule
12	as well. So, you'll have an opportunity to
13	review that RFP before it gets sent out. And
14	then, we're going to follow a very formal RFP
15	process. We're going to be using the Eversource
16	12-week process. It's very staged. And then, at
17	the end of that, we'll have a vender that we are
18	proposing, that will be presented to the
19	Commission per the order.
20	CHAIRMAN GOLDNER: Okay.
21	MR. EISFELLER: And that's reflected in
22	that same schedule. And the estimated dates are
23	indicated as well.
24	CMSR. CHATTOPADHYAY: And, at this

         point, you don't have any idea of how much that's

         going to cost?

                   MR. EISFELLER: No.

                   CMSR. CHATTOPADHYAY: Okay.

                   MR. EISFELLER: But it will be more

         than the Third Party Survey, we're assuming.

                   CHAIRMAN GOLDNER: "61K" you just said.

                   [Laughter.]

                   CHAIRMAN GOLDNER: No, that sounds

         good. Any -- just making sure that we're -- any

         other questions, Commissioner?

                   [Cmsr. Chattopadhyay indicating in the

                   negative.]

                   CHAIRMAN GOLDNER: Okay. All right.

         Very good.

                   Anything else on the Dunsky Report or

         any of the other consult contracts you'd like to

         highlight?

                   MR. FOSSUM: No, I think that's

         adequate for this afternoon. The opportunity to

         present that information to you, to inform the

         Commissioners about the schedule, in light of the

         indication in the order about a status conference

         in December, Mr. ISO has indicated may not be

1   particularly fruitful. And, on the Dunsky

2   Report, the opportunity to present that to you,

3   explain our reasoning, and get an understanding

4   of where that sits for cost issues.

5   So, on those items that were most

6   recently added, I think that is sort of

7   sufficient for this afternoon, subject to any

8   further questions you may have.

9   And, so, I think, unless somebody stops

10   me, we would be fine to turn over -- oh,

11   apparently, I'm getting an indication there might

12   be one other item, before we turn it over to Mr.

13   Murray.

14   MR. EISFELLER: So, just one more

15   comment. I would just want to reiterate that

16   there's a couple of approaches we could take to

17   this, as far as presenting to the Commission.

18   And, you know, one approach, and it's sort of

19   indicated here as to when these events may

20   happen, is that we could present as indicated by

21   the asterisks in this presentation. We could

22   basically move the Project along. When it's

23   ready, when we're ready to present specific

24   milestones to the Commission, we could have a

1   meeting like this, or we could culminate them in

2   one status review next May or June.

3   CHAIRMAN GOLDNER: Yes. No, thank you

4   for the flexibility. We'll take it back and talk

5   about it some more.

6   I think what, and I'll cover this at

7   the end again, but I think we want to be very

8   responsive to your needs. So, we'll provide a

9   quick order after this meeting with the Dunsky

10   Report, and making sure that that's

11   ticked-and-tied.

12   I would ask, Attorney Fossum, if you

13   could drop this schedule into the file, into the

14   docket?

15   MR. FOSSUM: Certainly.

16   CHAIRMAN GOLDNER: That would be --

17   that would be helpful. And then, that will -- we

18   can even perhaps attach that to the order, so

19   that everyone is using the same document, even if

20   they're not in the room here today.

21   MR. FOSSUM: Certainly. Yes. I will

22   look to -- I'll file this presentation, well,

23   I'll look to do that this afternoon.

24   CHAIRMAN GOLDNER: Thank you.

1   MR. FOSSUM: So, yes. And then, I'd

2   just like to highlight, I think this is

3   indicative, this Governance Council, the people

4   on it have spent, you know, a great deal of time

5   and effort working on this. It's an important

6   Project, and we'd like to see it, you know,

7   successful. So, whatever we can do to help you

8   get the information you need to assure that it

9   will be successful, that's good for all of us.

10   CHAIRMAN GOLDNER: Thank you.

11   CMSR. CHATTOPADHYAY: Can I?

12   CHAIRMAN GOLDNER: Go ahead.

13   CMSR. CHATTOPADHYAY: Probably I was

14   being a little bit naive in my thinking. So, the

15   way I'm looking at this is, the Final Report

16   would be -- is expected to happen, I'm talking

17   about the Cost/Benefit study, which will be the,

18   you know, will be the most informative aspect for

19   us, because we have to rely on it to decide. So,

20   that's going to be September in 2023?

21   [Mr. Eisfeller indicating in the

22   affirmative.]

23   CMSR. CHATTOPADHYAY: How firmed up is

24   this, the whole schedule? Like, is there any

1   flexibility? Do you have a possibility of doing

2   this sooner? I'm just curious.

3   MR. EISFELLER: So, the critical path

4   in the schedule is the fact that we have sort of

5   a stacked process. The Governance Council

6   decided that the RFP -- the consultants working

7   on the RFI Back End review would inform the RFP

8   development for the front end of the Platform.

9   So, those, the process of bidding the RFP for the

10   Back End Consultant, and the process of bidding

11   the RFP for the Platform, those are 12-week

12   processes by themselves. That's sort of a given.

13   I can't change that. That's an Eversource

14   process. And I've tried to change it.

15   CHAIRMAN GOLDNER: I'm assuming that

16   the Unitil process is eight weeks or something,

17   is that --

18   MR. EISFELLER: We could do, you know,

19   much faster.

20   [Laughter.]

21   MR. EISFELLER: No. No, we have a

22   formal process as well. It takes time. But they

23   have a 12-week process. We're going to follow

24   that. It's a good process. We're going to

1   follow that. There's not much leeway there.

2   So, that is a critical path, the RFP

3   for the Back End Consultant review, and then the

4   RFP development for the front end, and then the

5   RFP processing for the Platform, those can't be

6   moved much.

7   Before the decision was made to make

8   those series events, the schedule was much

9   quicker. Many of these work streams were done in

10   parallel; and now they're not. So, it would --

11   for us to move the schedule up much, or quite a

12   bit, you know, if you wanted to meet the status

13   conference in December, we'd have to do all these

14   work streams in parallel, there would be some

15   compromise on the design. There was an expect --

16   you know, there was a concern that we wouldn't

17   have all the information we wanted for the

18   initial draft of the RFP, and we may not get the

19   best RFP result.

20   So, this process of RFI and vendor

21   reviews, and then the consultants, both the

22   survey and the back end review, bringing that

23   information into the RFP for the front end, we'll

24   have -- will result in the best RFP, I think,

1   that we can design or craft.

2   CMSR. CHATTOPADHYAY: So, talking about

3   how firmed up this schedule is, there's the other

4   end of it as well. Do you -- are you pretty

5   confident this is a good schedule? I mean, it

6   won't get delayed further?

7   MR. EISFELLER: I wouldn't stake my job

8   on that end date. You know, we are -- this is a

9   Council, this is a committee working on this.

10   There's many parties involved, which adds to the

11   difficulties of us implementing these tasks. And

12   it takes time getting everyone in the room

13   together to make decisions. You know, there's a

14   consensus decision process. I mean, the

15   decisions typically take two weeks in themselves

16   for a review, the recommendations from the teams

17   that are working on specifics, present them to

18   the Governance Council. There's review done,

19   usually changes are made, and then a decision is

20   made on a particular item. That takes time. And

21   we've incorporated some of that time in here, but

22   I don't control that time. You know, that's not

23   something that Unitil controls by themselves, or

24   any of the entities in the room.

                    We all, everyone on the Governance

Council, I would say, has a desire to do this as

fast as possible. And I give everyone credit,

everyone is working hard to do that. But there's

a lot of moving parts, many entities that aren't

controlled by any of the utilities. And we're

trying to reach consensus on items that will

become more difficult as we get into the design

of the Platform. There's aspects that each of

the parties may want to see as part of the RFP,

there will be debate. We want to have time for

the debate.

                    So, no, I can't guarantee the end date.

Right now, that's an estimate. We have time in

the Project Schedule for discussion, but not a

ton of time. You know, the decisions, we've

allowed two weeks for the decisions along the

way, where there's decision points. But

sometimes those take longer.

                    CMSR. CHATTOPADHYAY: Thank you.

                    MR. EISFELLER: Okay. Thank you.

                    CHAIRMAN GOLDNER: So, yes, first, as

we wrap up on this topic, I would like to relay

our appreciation for the presentation and the

1	clear schedule. This is very helpful, and
2	appreciated. And it looks -- it looks promising.
3	The only thing I would request, just as
4	a slight modification for next round, is just if
5	you can mark out the critical path. I can kind
6	of see with the red drop-down arrows. And we
7	used to crosshatch the critical path, or you can
8	use triangulation, whatever you want, using
9	Microsoft Project or whatever tool you're using.
10	But, if the critical path were a little clearer,
11	it would be helpful to us, it just helps us
12	monitor and see how things are going. And, when
13	a date's missed, it's not critical path, it's not
14	that big a deal. Obviously, if it's critical
15	path, then it gets a schedule delay on the final
16	as well.
17	So, just for next time around, if the
18	critical path could be made a little more clear,
19	crosshatch it or something, that would be very
20	helpful.
21	Excellent. Very good. Anyone else
22	have any comments on the presentation or Items 1,
23	2, and 3 on the additional item list?
24	*[No indication given.]*

1   CHAIRMAN GOLDNER: Everybody is good?

2   Okay, Commissioner?

3   [Cmsr. Chattopadhyay indicating in the

4   affirmative.]

5   CHAIRMAN GOLDNER: Okay. Let's move to

6   the feature presentation.

7   MR. FOSSUM: And I'll talk just long

8   enough to say that Michael Murray, I'm hoping

9   you're still on the line? Yes, he is. All

10   right. So, Michael Murray will have that

11   presentation.

12   MR. MURRAY: Wonderful. Thank you,

13   everyone, Mr. Chairman and Commissioner. Can

14   everyone hear me okay?

15   CMSR. CHATTOPADHYAY: Yes.

16   CHAIRMAN GOLDNER: Yes.

17   MR. MURRAY: Okay. Beautiful. My name

18   is Michael Murray. And I'm with Mission:data

19   Coalition. And I was selected by the Governance

20   Council today to do a live presentation regarding

21   the consent process for sharing your

22   energy-related information with navigation.

23   So, if you'll recall, it was a few

24   months ago now, we did a presentation just with

1   static PowerPoint images of how the customer

2   would walk through it. And then, you had asked

3   for a more live demonstration to see, you know,

4   really get your hands on, to see visually how

5   this would work if you were in the customer's

6   shoes. And, so, that's what I'm here to do

7   today.

8   I would like to share my screen. Is

9   there a way that I can do that easily?

10   MS. RUSSO: Yes. Bear with us one

11   moment, we are trying to get you those

12   privileges.

13   *[Short pause.]*

14   MR. MURRAY: Okay. I see it now.

15   MS. RUSSO: Great.

16   MR. MURRAY: I will -- let me know when

17   you can see that?

18   MS. HASTINGS: We can see it.

19   CMSR. CHATTOPADHYAY: We can.

20   MR. MURRAY: Okay. Wonderful. So,

21   what I'm going to do first is just a high-level

22   overview. I'll briefly, very briefly, summarize

23   some information provided previously in our

24   consent process. I'll show you some of the steps

1   that are going to be involved, and then we'll

2   enter the live demonstration. You know, once we

3   get into that, please interrupt with questions as

4   they come up.

5   So, at high level, what we're going to

6   be showing you today is an example where a

7   customer is sitting on the couch looking at their

8   tablet computer, wondering what can they do to

9   save on their energy bills. Maybe there's a heat

10   pump retrofit of some sort that they heard a

11   friend of theirs did, and that's saving them some

12   money. They're curious, they want to learn more.

13   You, through the process that we'll detail for

14   you, you click a button that says "Would you like

15   to share your information with Acme Energy

16   Consulting?" And then, you get some results on

17   that iPad showing you, you know, what cost

18   savings opportunities there may be that are

19   tailored based on the software processing of your

20   specific information. So, this is the steps that

21   we're going to go through in more detail today.

22   Two things that I wanted to emphasize

23   here are on previous information that we had

24   provided. On the left is a wireframe diagram of

1   the authorization form itself. This is a

2   web-based form, which I'll show you momentarily.

3   This wireframe was in the Settlement Agreement

4   that the Commission approved. This is a

5   guideline for the Council -- the Governance

6   Council to use in designing this process. And,

7   you know, we're trying to make this as, you know,

8   as informative as possible. We want consent to

9   be informed and freely given, and so forth, but

10   it also needs to be -- it needs to comport with

11   sort of modern web-based practices.

12   And, so, the demonstration that I'm

13   going to show you, keep in mind it's just a demo

14   from one particular system that's out there. The

15   Governance Council, you know, has not decided on

16   the finality of the design by any means. But,

17   nevertheless, I think it's going to be

18   instructive, and you'll get a sense for how this

19   works.

20   And, so, on the right, this was just an

21   example that we provided previously of how this

22   might look with "Unitil" branding. It would work

23   on a mobile device or a tablet or a Web browser,

24   and we'll get into that shortly.

1   And the last thing before getting into

2   the demo that I wanted to highlight is this

3   multistep process, where there's a handoff, where

4   you begin at the third party's website, in this

5   example, it's going to be Acme Energy. And then,

6   you go to the utility's website to authenticate

7   yourself, this is Step 2. You authorize the

8   utility. This is all securely done on the

9   utility's website. And then, the customer is

10   sent back to the third party's website. And this

11   is -- there's a reason for this flow that

12   involves, you know, technical and security

13   reasons. This is a pretty widely established

14   process on the internet today using a technology

15   called "OAuth". And, so, I'll be sure to point

16   out, you know, when you started at the third

17   party site, and when you're going onto the

18   utility's website to make the authorization.

19   Okay. I will begin showing you how

20   this works with Lakefront Utilities. This is an

21   Ontario, Canada, utility. They have about 10,000

22   customers. And, once again, just wanted to

23   highlight that this is just an example. So, the

24   details of the design will be finished in due

1   course by the Governance Council.

2   So, I am the customer. And this is

3   Acme Energy Consulting. Okay? I'm going to show

4   you this view, as the customer, and I'm also

5   going to show you a view as it appears to the

6   third party, so that you can see when they're

7   granted authorization and when it's revoked.

8   So, if I switch tabs, I go to a

9   dashboard. This is -- will be a similar to a

10   type of interface for third parties that the

11   Platform hub would facilitate. And, right now,

12   this says, and please tell me if you can't see

13   this well, but it says "It doesn't look like you

14   have any authorizations." So, this screen is

15   blank right now. That's okay, because I haven't

16   granted an authorization yet. And what I'm going

17   to do is pretend to be a customer, go through

18   this flow, and then we'll see that authorization

19   and access to the information appear on that

20   dashboard screen.

21   So, I was -- I'm interested in Acme

22   Energy Consulting, maybe I've heard about it on

23   Facebook, maybe a neighbor told me about it. I

24   want to experience this, their recommendations.

1   I have reason to trust them and their service.

2   So, my first step is to select the utility, my

3   utility. So, I'm going to choose Lakefront

4   Utilities for this example. And then, I click

5   "Share my data."

6   Now, I'm in Step 2, where I need to

7   verify my identify. This is the authentication

8   step. And notice I am -- the URL bar here, it

9   says "*lakefrontutilities.com*". So, I'm at the

10   website of the utility. I'm going to verify my

11   identity here.

12   This is just an example, but this is

13   one way of doing it. I have an account number

14   which I can enter in, and my information from my

15   last bill, to make sure that I'm the right

16   person. So, I'm going to select "March 31st" as

17   my last bill date, and the amount due was

18   "$140.00" even. I'm going to click "Verify".

19   And I was successfully verified.

20   Now, I see the authorization screen.

21   This is the real version of the wireframe that I

22   showed before. And the customer gets to see what

23   types of information they're going to share with

24   the third party, over what time period, and then

1   for which services. In this case, this is the

2   meters that are associated with my account. So,

3   let's take a look at this top level for account

4   details.

5   So, I can choose or unchoose certain

6   things, if I want to share my account details

7   with them. Let's say my energy usage, but not my

8   bills, I could choose to do that. And, if you

9   want more information about exactly what's

10   covered in each of these categories, you can see

11   that, you know, "utility bills", by deselecting

12   this, I'm choosing not to transmit my bill start

13   and end date, what rate plan I'm on, you know,

14   total usage for the month, actually, that

15   actually sounds pretty useful for the heat pump

16   analysis that I'd like to do, so why don't I go

17   back and I'll check this to make sure that

18   information is sent.

19   The customer has some choice here. On

20   the timeframes, there's a question for the user,

21   which is both historical and ongoing. So, how

22   much historic information do I want to share?

23   Here, I'm going to leave it with "two years",

24   that gives the third party a chance to do a

1   weather normalization analysis based on my energy

2   usage over heating and cooling seasons.

3   And then, for ongoing data, it's

4   defaulted to "three years", but I could put that

5   to "indefinite", or I could say "No ongoing

6   data". So, let's say I just want to do a

7   one-time analysis with my historic record, I'm

8   going to choose "No ongoing data" should be

9   shared.

10   And then, finally, I'll select my

11   services or my meters under my account. This

12   particular utility is actually a municipal water

13   and electric utility. So, I'm going to just

14   choose the electric portion, and I'm not going to

15   share any of my water information at this time.

16   And then, at the bottom, we see "How

17   will your data be used?" This is a statement

18   written by Acme Energy Consulting, and it says

19   "For a heat pump cost saving analysis tailored to

20   your home." If I agree with that Statement of

21   Purpose, then I can click "Authorize". If I

22   don't like the Statement of Purpose, or I have

23   second thoughts about it, I can either close the

24   browser window or click the "Decline" button.

```
 1          So, I will choose to "Authorize".

 2                And, now, I'm leaving Lakefront

 3     Utilities, and I'm going back to Acme Energy

 4     Consulting.  While this was loading, it was

 5     getting the sample information for this demo from

 6     the utility in the background.  It shows me my

 7     kilowatt-hour consumption, and this is just an

 8     example of what my energy savings might be if

 9     I -- or, cost savings, after moving, let's say,

10     to a heat pump.

11                So, there's a whole wide range of

12     different energy services that you could envision

13     here, you know, from rooftop solar, to, you know,

14     behind-the-meter DERs of various types.  All of

15     this can pull in, you know, rate information, so

16     you're looking at the most current cost

17     information that pertains to that customer.  And,

18     so, this is a, you know, a wide range of

19     creativity is possible here.  It's really up to

20     the marketplace to, you know, make the innovation

21     that will show up here on this screen.

22                So, now, I'm going to go back to the

23     third party's view, and then I'll show you how

24     this authorization has been created.  So, I'm
```

1   going to just refresh this webpage.

2   And, now, I see that my customer, John

3   Doe, has granted this authorization about 57

4   seconds ago. And it appears to be -- you get a

5   little bit of information about this here. So,

6   this is now listed as available and accessible to

7   Acme Energy. And it's fairly straightforward.

8   There's both, in this particular example, a

9   visual way of, you know, seeing, of downloading

10   the information that's been granted. But there's

11   also an automated application programming

12   interface with API that can be used as well.

13   So, this is kind of how the flow works.

14   Before I go any further, do you have any

15   questions?

16   CMSR. CHATTOPADHYAY: Just out of

17   curiosity, in the previous, you know, slide, you

18   were -- maybe not the previous one, but where you

19   had like the blue choices, three choices, then

20   you clicked on the blue button. They don't look

21   too big here, but -- the other one, not this one.

22   And you clicked on it, and you had a drop-down

23   for -- and, when you did that, does the customer

24   have the choice to -- right, stay there, and

1   click on one of the blue items? Yes. You click

2   on it. Not that, basically, you're looking at

3   what information do these include.

4   Here, can you select just some of them

5   to be shared, or do you have to have them

6   consolidated, the way it's being presented?

7   MR. MURRAY: Yes. It's a good

8   question. This is exactly the type of detail

9   that the Governance Council will be deciding upon

10   in the design phase. There are different

11   philosophies to this approach.

12   One philosophy is that the average

13   customer is really not educated enough to know

14   exactly what decisions, like, for example, their

15   meter number, they might not know if that's

16   significant or meaningful to the service being

17   provided.

18   I can tell you, as, you know, someone

19   familiar with demand response, there may be meter

20   numbers and other account details, it sounds a

21   bit eclectic and hard to understand, but those

22   may be essential to participate in ISO-New

23   England's wholesale markets, for example.

24   And, so, one school of thought is that

1   "The customer should actually have relatively

2   little choice, because the third party knows what

3   they need in order to deliver their service."

4   And, so, there should actually be less, you know,

5   fewer choices.

6   Another school of thought is "No, we

7   actually want customers to be fully informed and

8   consent to each and every individual line item."

9   There's pros and cons to both approaches, and

10   this is something that is going to be, you know,

11   balanced and worked out by the Governance

12   Council.

13   CMSR. CHATTOPADHYAY: Thank you. Thank

14   you.

15   CHAIRMAN GOLDNER: Just one additional

16   question. Is the -- the speed is pretty fast.

17   It looks very user-friendly. You're clicking on

18   buttons, it moves immediately to the next one.

19   I'm sure this is a test bench. Do you expect

20   this kind of speed in real life?

21   MR. MURRAY: Yes, I would. You know,

22   there's some pretty good evidence that, you know,

23   these types of processes are, you know, consumers

24   have very high expectations for how they ought to

1   work. We're used to using Microsoft and Google

2   services, which are very, very quick.

3   And I'm not saying that we'll have

4   their scale of infrastructure. But, you know,

5   this is just one utility vendor that, you know,

6   we've already sent the RFI out to twelve

7   different vendors.

8   You know, the Settlement Agreement,

9   which was approved sometime ago, actually

10   specified some sort of minimum performance

11   criteria, which are, you know, I think very, very

12   reasonable and easy to achieve.

13   So, there really shouldn't, you know,

14   in a well-designed system, it should operate just

15   like this. It's pretty fast, pretty streamlined.

16   The only time where there might be some

17   delays is when you make this final step to the --

18   back to the third party, and, if I'm sending 24

19   months of historical 15-minute usage data, that

20   might take some time. And, so, it's not going to

21   be, you know, instantaneous. It could take, you

22   know, several minutes or longer for that

23   information to be transferred.

24   But, you know, the customer experience

1   is an important part of the design. And it's

2   definitely that something that the Governance

3   Council is aware of.

4   CHAIRMAN GOLDNER: Okay. Thank you.

5   MR. MURRAY: So, I wanted to show you

6   how a revocation works. Customers are in control

7   of this information. So, let me just -- let's

8   pretend I'm the customer, and I'm going to my

9   *lakefrontutilities.com* website. Let's say I got

10   my heat pump report, and I now no longer wish to

11   have that authorization anymore. I either, you

12   know, I'm not choosing to use them as a service

13   provider, or I'm concerned with my privacy, or

14   whatever the reason might be.

15   So, I'll click into "My

16   authorizations". And I can see that I granted

17   Acme Energy Consulting seven minutes ago an

18   authorization to share this type of information,

19   only historic information on service account on

20   my energy usage and my bill history. And this

21   was the purpose it was for. And this is how I

22   did it, with an online interface. I can actually

23   see a receipt as to, you know, remind me that I

24   did, in fact, complete this transaction. And I

1   will just click "Revoke". It asks to confirm, I

2   will put "Yes, I do wish to revoke." And I have

3   no more authorizations.

4   And then, from the third party's

5   perspective, we'll just jump back here, we'll

6   reload this page, and the John Doe record has

7   disappeared. So, again, this is all using pretty

8   standard technology that's been developed in

9   other areas of the internet.

10   One last slide I'll show you, and then,

11   you know, please, if you have any additional

12   questions, I'm happy to answer them.

13   I just wanted to end with "OAuth".

14   This is a technology that manages secure

15   authorizations. And it's widely used across the

16   internet. So, while there are some novel aspects

17   of the system that we're building in New

18   Hampshire, I want the Commission to understand

19   that, from a security perspective, a lot of this

20   is, you know, using well-established

21   technologies.

22   PayPal transacts billions of dollars

23   every day using exactly this type of secure

24   authorization system. Microsoft and Google also

1   do the same. And Open Banking, which is the

2   system for the United Kingdom and all of Europe

3   to share customer banking information to access

4   new financial services. That all uses OAuth as

5   the backbone as well. So, I think that's

6   important context for, you know, this technology

7   that we're building as a whole.

8   And that, with that, that concludes my

9   presentation, and would be happy to answer any

10   further questions that you may have.

11   CMSR. CHATTOPADHYAY: So, give me a

12   sense of whether something like this has been --

13   is already being used anywhere?

14   MR. MURRAY: I'm sorry, could you say

15   that again, Commissioner? I had trouble hearing

16   you.

17   CMSR. CHATTOPADHYAY: Give me a sense

18   of whether there are applications like this that

19   are already being used in the utility sphere?

20   MR. MURRAY: Yes. There are about

21   17 utilities in the United States, covering

22   37 million electric meters, that have already

23   implemented a system very like this. But this is

24   the State of Texas, the State of California.

1   Colorado just went live with theirs a few months

2   ago. New York State utilities have recently gone

3   live with theirs. So that there's quite a few.

4   And then, in Canada, all of the --

5   there's about 50 electric and gas utilities in

6   the Province of Ontario, serving about 5 million

7   customers. And they -- that's where this example

8   is from. And they are under a regulatory

9   requirement to implement this system by twelve

10   months from today, so, October 2023.

11   So, it's definitely had some

12   experience. But I wouldn't say the majority of

13   American utilities offer something like this.

14   But, you know, 37 million is a significant number

15   for the installed base.

16   CMSR. CHATTOPADHYAY: Thank you. Thank

17   you.

18   CHAIRMAN GOLDNER: Does it have any

19   aggregation capability? So, if the City of

20   Lebanon wants to look at the City of Lebanon, can

21   it do that? Or, is it just one-by-one, by

22   individual?

23   MR. MURRAY: That's a great question.

24   This, the example that I showed, is often, with

1   permission, for every single record that gets

2   transmitted.

3   I believe, and maybe others can correct

4   me if I'm wrong, we -- according to the

5   Settlement Agreement, we will be providing some

6   aggregated information, and that does not require

7   customer consent, because it's at such an

8   aggregate level. And that's definitely a subject

9   of ongoing discussion.

10   But I'm not as knowledgeable on that

11   topic. So, I would defer to others to answer

12   that.

13   CHAIRMAN GOLDNER: So, I think -- so,

14   that might be available in a later demo. But,

15   today, it's just sort of the one-on-one

16   individual that's available today, in your demo?

17   MR. MURRAY: That's correct. Yes.

18   CHAIRMAN GOLDNER: Okay. So, I was

19   hoping to see the City of Lebanon today, but not

20   going to happen. Some of us would like to see it

21   more than I would.

22   MR. BELOW: I would just mention, I

23   believe New York State has a live website where

24   you can get municipal aggregated, at least

1   electricity, possibly also gas data, by town.

2   And I think it's open access to anyone, I

3   believe. I've been to it in the past. I don't

4   have the URL handy, but --

5   CHAIRMAN GOLDNER: I'm remembering this

6   back --

7   MR. MURRAY: That's right. It's the

8   Utility Energy Registry.

9   CHAIRMAN GOLDNER: Okay. I'm

10   remembering this back from the last reading, but,

11   as long as there was -- it was some fixed number,

12   20 or 30 or 40 people, as long as the aggregation

13   was larger than that, then you got out of the

14   privacy issues, and that was no longer a worry.

15   So, it sounds like that's already been -- had

16   been thought through.

17   So, is that piece of the software, is

18   that a big deal to have this aggregation piece?

19   Or, is that -- I mean, is that a whole additional

20   software project? Or, is that something that's

21   not a big deal?

22   MR. MURRAY: That's a good question. I

23   think that the utilities should probably chime

24   in. But my initial sense, based on how I've seen

           it done in New York and in California, is that

           aggregating all the information, all the usage

           data, it is a bit complex. But, then, you don't

           have any of this consent-based user flow. It's

           simply just a record, it's just a listing of

           aggregated datasets that can be downloaded.

                     And, so, the technology on the website

           is actually very simple. You're just downloading

           pre-generated datasets. But creating those in

           the first place is going to require some time and

           effort.

                     CHAIRMAN GOLDNER: So, is part of your

           scoping document to have predefined aggregation

           set up, so, by city, by county, by whatever, is

           that part of the scope? Does anybody know?

                     MR. MURRAY: I believe so. And I

           would -- yes, I would need to double-check the

           Settlement Agreement. I think the lion's share

           of sort of technical development is going to be

           on this consent-based flow. And, so, that's why

           we've been focusing on that.

                     CMSR. CHATTOPADHYAY: I think I'm going

           to ask a related question that the Chairman is

           asking about.

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 1                    Is the software design modular enough
 2         that you can, as long as you're not creating any
 3         privacy issues, in the future, you can change the
 4         software to allow data to be processed at a more
 5         aggregated level?  I mean, just -- or, is the
 6         design that is out there right now doesn't allow
 7         that?  So, you have to go to the drawing board
 8         again to make those changes.
 9                    So, really, the question is about how
10         modular is this?
11                    MR. EISFELLER:  This is Justin.  I'll
12         try to address that question.
13                    MR. MURRAY:  Justin?
14                    MR. EISFELLER:  Go ahead.
15                    MR. MURRAY:  Justin, is that you?
16         Sorry.
17                    MR. EISFELLER:  Yes.
18                    MR. MURRAY:  Okay.  Yes, you want to
19         take that question?
20                    MR. EISFELLER:  I'm going to defer the
21         question.  So, no, that's part of the RFI
22         process, where we'll be discovering some of those
23         details.
24                    And my initial response is "It
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1   depends." So, if we're aggregating monthly usage

2   data, it's a pretty simple dataset, aggregating

3   those accounts by town, or by county, or whatever

4   it may be, there's not as many data points. If

5   you're aggregating interval data, there's a lot

6   of moving parts, there's a lot more data, it's

7   more complex; definitely some concern.

8   If you're aggregating disparate

9   datasets, interval data, monthly data, hourly

10   data, you know, all those things need to be

11   discovered as to what extent of the design we

12   want to deploy.

13   But the basic level is monthly usage

14   data, by town, fairly simple. That functionality

15   is available in the market.

16   How modular it is? I don't know.

17   We'll know better as we get into the discussions

18   with the vendors. And that will help inform the

19   RFP, that's the basic approach that we're taking.

20   If the Commission desires a further

21   presentation after the RFI process, that's

22   something we can probably schedule. If you want

23   to see more of that other capability?

24   And, to some extent, you're seeing just

1   one utility here. This is one utility. The

2   Platform combines data from all three utilities,

3   and potentially other entities in the future.

4   So, you know, the design is a little more complex

5   than this, but also a lot more capable.

6   So, I don't know if I addressed your

7   question directly, but I definitely deferred it.

8   And that was what I was hoping to do.

9   CHAIRMAN GOLDNER: Let me follow up on

10   the follow-up a little bit as well.

11   So, to Commissioner Chattopadhyay's

12   question on "modularity", that also sort of goes

13   into maintenance. So, five, ten, twenty years

14   from now, what's the -- what's the plan for

15   maintaining the Platform and debugging? And, so,

16   it's not working, how do you deal with the

17   maintenance down the road?

18   MR. EISFELLER: The maintenance

19   contract -- go ahead, Michael, if you want to

20   take that, but --

21   MR. MURRAY: Sure, just briefly. The

22   Settlement Agreement does contemplate a sort of

23   minimum response times to bugs or issues that

24   come up. And I think it's our intention that,

1   through the RFP process, we would select a vendor

2   that is, you know, really, it has a long-term

3   interest in making this work, you know, and just,

4   you know, constant, you know, security updates,

5   and, you know, tweaks and changes that are going

6   to be necessary, as with any software project.

7   So, I think, between the Settlement

8   Agreement and the vender selection, I think that

9   that's how we can be assured that, you know,

10   there's -- years into the future it's going to be

11   working well.

12   And I will point out that National

13   Grid, in New York, and ConEdison, the biggest

14   utilities, they also have -- they have invested

15   in this as well under Commission orders in New

16   York. There's, you know, one utility hired a

17   vendor to do it. And, in the case of ConEd, they

18   actually built it themselves. And I think one of

19   the cautionary tales that we learned from that is

20   that, if you try to build it yourself, there's a

21   lot, you know, so much of software is in the

22   maintenance of it over time, it's not in the

23   up-front build. And, so, there's some issues

24   that we've heard about with Consolidated Edison

1   of just, you know, bugs not being fixed, and

2   documentation was lacking, and things like that.

3   That, by using an outside vendor, who's

4   really a specialist in this, I think we can

5   eliminate a lot of those issues.

6   CHAIRMAN GOLDNER: Another cautionary

7   tale --

8   MR. GOLDMAN: And I also --

9   CHAIRMAN GOLDNER: I'm sorry. I was

10   just going to say, another cautionary tale would

11   be, if you have somebody developing the software,

12   and they hand it off to another vendor who

13   inherits the buggy code of the prior vendor, that

14   can yield bad results, too. So, I would just say

15   that's something to watch for in the process.

16   I've seen that many times, probably you have,

17   too.

18   MR. MURRAY: Yes.

19   MR. GOLDMAN: Can I chime in as well?

20   This is Ethan Goldman.

21   Just from a sort of structural

22   perspective, one thing that gives me some

23   confidence about the way New Hampshire is

24   pursuing this is that the existence of the data

1   council as an interface for members of the

2   public, either customers or the third party

3   vendors, to be able to not only get more

4   information, but also file bug reports or

5   complaints, concerns about performance, things

6   like that, as a way to help sort out between "Is

7   this the vendor?" "Is this a particular

8   utility?" "Is this a design decision based on

9   the initial constraints of the Agreement?"

10   I think, rather than having this simply

11   live as a small side project for the utility, but

12   have a dedicated group that's responsible for

13   reviewing any concerns and complaints, and seeing

14   the resolution through, as it passes through all

15   the parties, that, you know, the vendor and the

16   different utility players, I think we have a much

17   better chance of maintaining this, given that

18   level of oversight.

19   CHAIRMAN GOLDNER: Yes. And my final

20   point on the maintenance piece of it, is that

21   would be very interesting for the Commission to

22   know, before approving the software package

23   itself, because that long-term stream of

24   revenue -- or, long-term stream of costs, rather,

1   is something that could be the biggest portion of

2   the cost in the long term. So, we would be very

3   interested in understanding the maintenance costs

4   as we move along through time.

5   MR. EISFELLER: This is Justin. I want

6   to add to that discussion a little bit.

7   So, I would expect the RFP to cover

8   many of those topics. So, how is maintenance

9   performed? What are the costs of maintenance?

10   What's ongoing costs? How do you perform

11   patches/upgrades? How do you involve the

12   customer in your upgrade path, you know, planning

13   for the future?

14   Those are all going to be part of our

15   questionnaire to the vendors. So, we'll have an

16   understanding of each of the vendors. That

17   becomes part of the selection process. You know,

18   it's one of the reasons that upfront costs isn't

19   the most deciding factor in selecting a vendor.

20   You want somebody who has robust processes like

21   those, follows a customer in their development

22   and such.

23   The other -- the other aspect of the

24   design, and I think it's worth noting, is that

1   we're using common standards, and we're using a

2   portable design. The components that we're

3   assembling into a package here are portable. We

4   could go to another company. And, obviously,

5   with the interest we got on the RFI, there's many

6   companies out there that provide this

7   functionality. So, you'd want it to be portable

8   as well. If you don't like this vendor, three

9   years from now, we want to be able to pick up and

10   take our pieces, the modules that we're using,

11   and have someone else provide that.

12   So, that's all part of the design. If

13   the architecture is designed such, then your

14   likelihood of long-term success is better.

15   So, that's what we'll be looking for to

16   include in the design. I think we have a good

17   team assembled here that thinks the same way,

18   when it comes to performance and longevity and

19   support. So, those are aspects that we're going

20   to be including in the design. You'll have a

21   chance to see those things reflected, and

22   comment, as we develop that RFP.

23   CMSR. CHATTOPADHYAY: My point about

24   modularity was really driven by sort of the, you

1   know, the importance of making sure whoever is

2   providing this facility service, you know, the

3   Platform, they understand that this has to be

4   able to respond to changes in, you know,

5   behavior, and new technologies coming into place,

6   and all of that, and be able to react accordingly

7   within the construct that you first created.

8   So, that was why I was asking it, about

9   modularity. So, I think that's going to be an

10   important piece, as you go out and do the RFPs,

11   you know.

12   So, if somebody is able to say "Yes, we

13   can change stuff, you know, quite easily", that

14   matters.

15   MR. EISFELLER: Just one more item.

16   Obviously, there's going to be a few players here

17   in maintaining the Platform on an ongoing basis,

18   the utilities play a part. I would expect that

19   we'll have a RACI diagram, a responsibility

20   matrix --

21   [Court reporter interruption.]

22   MR. EISFELLER: -- a RACI diagram,

23   R-A-C-I.

24   MR. PATNAUDE: Thank you.

          MR. EISFELLER: "Responsibility,

Accountability", help me out, guys? Basically, a

project management tool that defines who's

responsible for what, who's accountable for what.

Who should be informed if there's changes, that's

what the "I" stands for. And, you know,

basically, how you work together to support the

Platform.

          We'll include that as part of the RFP,

for the vendors to describe their working model

with their customers. And that becomes part of

the decision-making as well. If they have a

robust approach, if they involve the various

companies? We'll want to understand that,

because we'll have to work together going forward

to keep the Platform running as expected.

          MR. GOLDMAN: Can I also please weigh

in on the question of "modularity", and the

ability to change the Platform over time? I

think this is another issue that is important to

think about, in terms of how we evaluate the RFP

responses. Typically, what we see is a spectrum

between flexibility and reliability. So, we'll

have some products that come in and they're very

1   inflexible, but they do what they do very well,

2   they're maintaining it for a large number of

3   customers, and they're going to keep it

4   up-to-date. But, you know, it's like a lot of

5   products you buy, right? It does what it does.

6   And, if you don't like it, buy another product.

7   On the other end of the spectrum, you

8   have products where it's a completely custom

9   software vendor, and they'll do exactly whatever

10   you want. But you know they're going to be

11   figuring things out for the first time for you.

12   And, so, there's a concern that, you know, there

13   will be more bugs to deal with, and how are they

14   going to maintain it over time.

15   And, typically, you might want to find

16   somewhere in between, right? Where you have a

17   vendor who has some components, is willing to

18   customize it a little bit around what you do or

19   allow you ways to build things on top of it.

20   And, so, that's, you know, something

21   that we want to look for, when we look at the

22   proposals, is what are the tradeoffs between

23   flexibility and reliability, and the number of

24   other customers that are sharing the costs for

1   developing the new features effectively, rather

2   than everything being custom just for the New

3   Hampshire context.

4   So, it's an important question. It's

5   not an easy answer, though.

6   CHAIRMAN GOLDNER: Yes. And I assume

7   you have a pipeline to the vendors who have done

8   this before. You said one was in-house, the

9   state did it kind of internally. The other ones

10   have external vendors. I assume you know who

11   those vendors are, and those are people that

12   you're reaching out to for the RFPs?

13   MR. MURRAY: That's correct, Mr.

14   Chairman. We developed a list of I think it was

15   a dozen that received the RFI already. And, yes,

16   and it's a mix. You know, some utilities have

17   chosen to do it themselves. Some, to Ethan's

18   point, some utilities, in Texas, hired IBM to

19   make a completely custom system for all four of

20   the major utilities in the competitive areas of

21   Texas. And then, others have decided to just,

22   you know, use a single vendor or a combination of

23   vendors.

24   So, those are all -- and we certainly

1	are aware of who those companies are. I think we
2	have a really good list, just based on our, you
3	know, experience across the U.S.
4	CHAIRMAN GOLDNER: Okay. Thank you.
5	MR. MURRAY: Is there anything else, as
6	far as, you know, the Commission's original
7	request to get a sense of the look and the feel
8	in the navigation? Did I satisfy your desire for
9	information or is there anything else more that I
10	can provide?
11	CHAIRMAN GOLDNER: Yes. I think, just
12	speaking for myself, this is what we were
13	expecting. So, thank you.
14	Commissioner Chattopadhyay?
15	CMSR. CHATTOPADHYAY: Same here. It
16	was really helpful. You know, it's always better
17	to visualize, you know, see how things actually
18	work. So, thank you.
19	MR. MURRAY: Excellent. Thank you so
20	much. I appreciate the opportunity.
21	CHAIRMAN GOLDNER: All right. Is there
22	anything else we need to cover today?
23	*[No indication given.]*
24	CHAIRMAN GOLDNER: No? Okay. We'll

1   get home in time for dinner.

2   So, we will issue an order following

3   the conference to address the issues here. And

4   I'll thank everyone. And we are adjourned.

5   *(Whereupon the status conference was*

6   *adjourned at 2:52 p.m.)*

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