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

Reptg. the Town of Hanover:
April Salas, Sustainability Director

Reptg. Clean Energy NH:
Kelly Buchanan, Director of Reg. Affairs

Reptg. Community Choice Partners:
Samuel Golding, President

Reptg. Mission:data Coalition:
Michael Murray, President

Reptg. Packetized Energy Technologies:
Paul Hines, Chief Executive Officer

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

Reptg. PUC Staff:
Brian D. Buckley, Esq.
Stephen Eckberg, Electric Division

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E X H I B I T S

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16	Rebuttal Testimony of Devin Hampton (Marked as documentary evidence only)	<i>premarked</i>
17A	Utility Back-end Scope and Pricing Estimates {CONFIDENTIAL VERSION}	<i>premarked</i>
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P R O C E E D I N G

CHAIRWOMAN MARTIN: Good morning.

We're here this morning in Docket DE 19-197 for a hearing regarding the development of a statewide, multi-use online energy data platform. I understand we have a Settlement Agreement for consideration today.

I have to make findings because this is a remote hearing.

As Chairwoman of the Public Utilities Commission, I find that due to the State of Emergency declared by the Governor as a result of the COVID-19 pandemic, and in accordance with the Governor's Emergency Order Number 12, pursuant to Executive Order 2020-04, this public body is authorized to meet electronically. Please note that there is no physical location to observe and listen contemporaneously to this hearing, which was authorized pursuant to the Governor's Emergency Order. However, in accordance with the Emergency Order, I am confirming that we are utilizing Webex for this electronic hearing.

All members of the Commission have the ability to communicate contemporaneously during

1 this hearing, and the public has access to
2 contemporaneously listen and, if necessary,
3 participate. We previously gave notice to the
4 public of the necessary information for accessing
5 the hearing in the Order of Notice. If anyone
6 has a problem during the hearing, please call
7 (603)271-2431. In the event the public is unable
8 to access the hearing, the hearing will be
9 adjourned and rescheduled.

10 Okay. We have to take roll call
11 attendance of the Commission. My name is Dianne
12 Martin. I am the Chairwoman of the Public
13 Utilities Commission. And I am alone.

14 Commissioner Bailey.

15 COMMISSIONER BAILEY: Good morning,
16 everyone. Kathryn Bailey, Commissioner at the
17 Public Utilities Commission. And I am alone.

18 CHAIRWOMAN MARTIN: We need to take
19 appearances before we move on. So, let's start
20 with the utilities. Who do we have for
21 Eversource today?

22 MS. CHIAVARA: Good morning,
23 Commissioners. I'm Jessica Chiavara. I am here
24 on behalf of Public Service Company of New

1 Hampshire, doing business as Eversource Energy.

2 CHAIRWOMAN MARTIN: Okay. Thank you.

3 And for Liberty?

4 MR. SHEEHAN: Good morning, everyone.

5 Mike Sheehan, for Liberty Utilities (EnergyNorth

6 Natural Gas) Corp. and Liberty Utilities (Granite

7 State Electric) Corp.

8 Thank you.

9 CHAIRWOMAN MARTIN: Okay. And for

10 Unitil?

11 MR. SIMPSON: Good morning. Carleton

12 Simpson, attorney for Unitil Energy Systems,

13 Incorporated, and Northern Utilities,

14 Incorporated. I'm also joined by my co-counsel,

15 Patrick Taylor, today.

16 Thank you.

17 CHAIRWOMAN MARTIN: Okay. Thank you.

18 And I'm just going to read through the list that

19 I have. If you're not on it when we get to the

20 end, I'll have you put your appearance in then.

21 Representative McGhee?

22 MS. MCGHEE: I'm here, and alone.

23 CHAIRWOMAN MARTIN: Thank you. For the

24 City of Lebanon? Not sure if that cut out, I

1 apologize. For the City of Lebanon?

2 MS. CARMODY: Can I interrupt? Because
3 we have so many people, I have to bring some --
4 take some out to bring him in. So, we have to
5 figure out how we want to work this.

6 CHAIRWOMAN MARTIN: Okay. Do we have
7 anyone who is on the screen currently who does
8 not need to speak, who is secondary or will not
9 be testifying?

10 MS. BUCHANAN: Chairwoman Martin, I can
11 leave for now. I'll be giving our closing
12 statement at the end of today's proceeding. But
13 I'm happy to step away for now.

14 CHAIRWOMAN MARTIN: Okay. Thank you
15 very much for that, Ms. Buchanan.

16 MS. BUCHANAN: You're welcome.

17 MR. TAYLOR: This is Patrick Taylor,
18 from Unitil. If you need space, you can also
19 remove me as well. And I can just communicate
20 with our team offline.

21 CHAIRWOMAN MARTIN: Okay. Thank you.
22 And you should be able to observe just the same.
23 So, if we can move Mr. Taylor as well.
24 Hopefully, that frees up enough space.

1 Ms. Carmody, just let us know when
2 you're all set.

3 MR. PATNAUDE: Sorry to interrupt.
4 Maybe Ms. Buchanan can enter her appearance now,
5 just to get that out of the way.

6 CHAIRWOMAN MARTIN: Excellent
7 suggestion.

8 Ms. Buchanan, can you put in your
9 appearance?

10 MS. BUCHANAN: Yes. Thank you. Kelly
11 Buchanan, representing Clean Energy NH. And I am
12 here today without our usual counsel. But Don
13 Kreis has graciously volunteered to assist our
14 consultant, Ethan Goldman, adopt his testimony
15 today.

16 So, thank you.

17 CHAIRWOMAN MARTIN: Okay. Excellent.
18 So, you will just come back in for the closing,
19 is that right?

20 MS. BUCHANAN: Yes, I will. That's
21 correct.

22 CHAIRWOMAN MARTIN: Okay. Excellent.
23 Thank you. And thank you, Mr. Kreis.

24 MR. BELOW: Good morning,

1 Commissioners. This is Assistant Mayor Clifton
2 Below, for the City of Lebanon. And with me here
3 today is Dr. Amro Farid, who also has testimony
4 to adopt.

5 I have a minor procedural matter that
6 I'd like to be heard on, either now or in a
7 minute.

8 CHAIRWOMAN MARTIN: Why don't we take
9 it after appearances, --

10 MR. BELOW: Okay.

11 CHAIRWOMAN MARTIN: -- when we take
12 preliminary issues.

13 MR. BELOW: Sure. Thanks.

14 CHAIRWOMAN MARTIN: All right. Great.
15 Thank you.

16 All right. Moving on to the Town of
17 Hanover? Do we have someone here from Hanover?

18 *[No indication given.]*

19 CHAIRWOMAN MARTIN: Seeing no one, we
20 will move on. We heard from Clean Energy. So,
21 Community Choice Partners, Incorporated?

22 MR. GOLDING: Good morning. Samuel
23 Golding, with Community Choice Partners,
24 President.

1 MS. CHIAVARA: Excuse me, Chair Martin.
2 April Salas, from the Town of Hanover, is in the
3 attendees, and she just messaged that she cannot
4 speak at this time, but if she can get moved into
5 the participants pool?

6 CHAIRWOMAN MARTIN: Okay. Thank you,
7 Ms. Chiavara. Ms. Carmody, can we move her up?

8 MS. CARMODY: Okay. So, I need to move
9 somebody out. Does anybody have a preference?

10 MR. BELOW: You could move Professor
11 Farid out temporarily, but he'll need to come
12 back to adopt his testimony and be sworn in.

13 MS. CARMODY: Could he raise his hand,
14 so I know where he is. Ah. Thank you.

15 MS. SALAS: Good morning, Chairwoman.
16 This is April Salas, Sustainability Director for
17 the Town of Hanover. I'm here, and alone.

18 CHAIRWOMAN MARTIN: Great. Thank you.
19 And sorry about that.

20 Okay. Mission:data Coalition?

21 MR. MURRAY: Good morning. Michael
22 Murray, here for Mission:data Coalition.

23 CHAIRWOMAN MARTIN: Thank you. Direct
24 Energy Services, LLC, are they participating?

1 MR. BUCKLEY: Madam Chair, I don't know
2 that they will be. I did reach out to Direct
3 Energy Services, Freedom Energy Logistics, the
4 Greentel Group, and none of those three responded
5 about either the Settlement or participation in
6 the hearing.

7 CHAIRWOMAN MARTIN: Okay. Great.
8 That's helpful.

9 All right. What about UtilityAPI?

10 MR. BUCKLEY: I left off UtilityAPI, as
11 they likewise responded that they -- or, failed
12 to respond, rather.

13 CHAIRWOMAN MARTIN: Okay. And did I
14 miss Packetized Energy? Anybody from there?

15 MR. BUCKLEY: They are here. I believe
16 they are in attendee mode and need to be promoted
17 as well, just temporarily.

18 CHAIRWOMAN MARTIN: Okay. Ms. Carmody,
19 can we make that happen?

20 MS. CARMODY: I would need to know the
21 name of the person?

22 MR. BUCKLEY: That's Paul Hines.

23 MR. HINES: Hello. I'm Paul Hines,
24 from Packetized Energy. And it's a pleasure to

1 be here. I am alone.

2 CHAIRWOMAN MARTIN: Thank you,
3 Mr. Hines. Okay. And Mr. Kreis.

4 MR. KREIS: Good morning, Chairwoman
5 Martin, Commissioner Bailey, colleagues. I am
6 Donald Kreis, the Consumer Advocate, here on
7 behalf of residential utility customers. I'm
8 working with our Staff Attorney, Christa Shute,
9 who does not need to be promoted. And I look
10 forward to the hearing.

11 CHAIRWOMAN MARTIN: Okay. Thank you.
12 And Mr. Buckley.

13 MR. BUCKLEY: Good morning, Madam
14 Chair, Commissioner Bailey. My name is Brian D.
15 Buckley. I am appearing on behalf of the
16 Commission Staff participating in this
17 proceeding. And with me today is Mr. Stephen
18 Eckberg of the Electric Division.

19 CHAIRWOMAN MARTIN: Okay. Is there
20 anyone else who needs to put in an appearance
21 that I haven't recognized?

22 *[No indication given.]*

23 CHAIRWOMAN MARTIN: Okay. Great. Is
24 there anyone else from the public who will

1 comment today?

2 MS. CARMODY: I don't believe so.

3 CHAIRWOMAN MARTIN: Okay. Great. All
4 right. Then, we'll move on to preliminary
5 matters.

6 I have Exhibits 1A and 1B, and 2
7 through 16, and 17A and 17B, premarked and
8 prefiled for identification. I also have two
9 Motions for Confidential Treatment from
10 Eversource.

11 The first is a Motion for Confidential
12 Treatment related to the cyber security plans.
13 Are there any objections to that motion?

14 *[No verbal response.]*

15 CHAIRWOMAN MARTIN: Okay. Seeing none.
16 The second motion is for confidential treatment
17 of Exhibit 17A, the "Utility Back-end Scope and
18 Pricing Estimates". Are there any objections to
19 that Motion for Confidential Treatment?

20 MS. CHIAVARA: Chair Martin, that
21 motion is made on behalf of Eversource and Unitil
22 as well.

23 CHAIRWOMAN MARTIN: Okay. Great.
24 Thank you for the clarification. And I see no

1 objections on that motion either.

2 We will take those motions under
3 advisement and issue an order. But we will ask,
4 as always, that the parties refrain from
5 identifying confidential information in the
6 public session today. If you absolutely must
7 refer to confidential information, please let me
8 know before doing so.

9 Okay. Other preliminary matters?
10 Mr. Below, you indicated you had one?

11 MR. BELOW: Yes. Thank you, Chair
12 Martin.

13 In anticipation of settlement,
14 Dr. Farid accepted an invitation from the New
15 York Academy of Sciences to participate in an
16 expert workshop on developing an architectural
17 framework to look holistically at public and
18 civic infrastructure.

19 So, if it's okay with the Commission,
20 we would ask that he be able to adopt his
21 testimony immediately after being sworn in, and
22 be excused from the rest of the proceeding so he
23 can participate in that other workshop. If you
24 have any questions for him, he could respond now

1 or I could recall him later by texting him to
2 come back and respond to questions about his
3 testimony.

4 CHAIRWOMAN MARTIN: Okay. Thank you.
5 I think it might be helpful to hear, Mr. Buckley,
6 what is the plan to proceed today? Are we
7 hearing from the Settling Parties panel all as
8 one, and could we take Mr. Farid first to adopt
9 his testimony?

10 MR. BUCKLEY: Yes. So, I think the
11 best way to proceed today is to have the court
12 reporter swear in everybody in two shifts, sort
13 of at the very outset, starting with the utility
14 witnesses and then the non-utility witnesses,
15 just as a means of splitting the group into two
16 because of the limited number of squares. And
17 then, after that, we will actually have the
18 witnesses of each of the parties adopt their
19 testimony, beginning with Mr. Farid, I suppose.
20 And then, after all of the testimonies are
21 adopted, we would proceed to the actual panel
22 that has been proposed, unless anybody objects to
23 that process.

24 CHAIRWOMAN MARTIN: Any objection to

1 proceeding that way?

2 [No indication given.]

3 CHAIRWOMAN MARTIN: Great. Seeing
4 none, let's proceed in that fashion.

5 Just want to be clear, Mr. Buckley.
6 Are we swearing in just utility witnesses or
7 could we do the Settling Parties panel first, and
8 then all of those who are just adopting testimony
9 second, or vice versa? That's the way I have
10 them grouped.

11 MR. BUCKLEY: Yes. It's at the
12 pleasure of the Chair.

13 CHAIRWOMAN MARTIN: Okay. Why don't we
14 do the Settling Parties panel as a group, it will
15 be easier to see that smaller number with their
16 hands up. And then, we'll just take all of those
17 who are just adopting their testimony and
18 available for Commissioner questions in the
19 second group.

20 So, I'll read out who I have, and you
21 can let me know, Mr. Buckley, if I missed anyone.
22 I have Christopher Leigh, Brian Rice, Justin
23 Eisfeller, Ethan Goldman, Michael Murray, and
24 Stephen Eckberg. Is that right?

1 MR. BUCKLEY: That is correct.

2 CHAIRWOMAN MARTIN: So, let's get all
3 of those witnesses on the screen. And, if I just
4 called your name, if you could put your hand up,
5 so that we can identify that you're here.

6 *(Brief off-the-record discussion to*
7 *ensure all witnesses to be sworn in are*
8 *on the Webex screen.)*

9 *(Whereupon **Christopher Leigh,***
10 ***Brian Rice, Justin Eisfeller,***
11 ***Ethan Goldman, Michael Murray,** and*
12 ***Stephen Eckberg** were duly sworn by the*
13 *Court Reporter.)*

14 CHAIRWOMAN MARTIN: Okay. Thank you.
15 And now we will need the other witnesses. I will
16 read that list.

17 Ms. Carmody, are we going to be able to
18 do all of these people on the screen?

19 MS. CARMODY: Well, I'm going to have
20 to pull some folks off, and maybe I'll take that
21 panel that was just swore in out, so I can bring
22 in more. Is that okay?

23 *(Brief off-the-record comment by the*
24 *court reporter.)*

1 CHAIRWOMAN MARTIN: So, I have
2 Christina Jamharian, I apologize if I'm not
3 saying your name right, Riley Hastings, Jeremy
4 Haynes, Kimberly Hood, Dan Goodwin, Heather
5 Tebbetts, Melissa Samenfeld, Clifton Below, who
6 we already have, April Salas, Representative
7 McGhee, Samuel Golding, and Dr. Farid.

8 MR. SIMPSON: Chairwoman Martin, we
9 also have Paul Hines, from Packetized Energy, who
10 is also here to adopt his testimony and will be
11 available for questions.

12 Thank you.

13 CHAIRWOMAN MARTIN: Oh. Okay. Thank
14 you.

15 MS. CARMODY: Can Riley Hastings raise
16 your hand? Okay.

17 MR. SHEEHAN: Heather Tebbetts needs to
18 be promoted for this purpose as well.

19 MS. CARMODY: Yes.

20 CHAIRWOMAN MARTIN: Once Ms. Carmody
21 moves everybody up, if counsel can just make sure
22 that your people are all on the screen, that will
23 be helpful.

24 MS. CARMODY: Moving Dan Goodwin.

1 MS. CHIAVARA: Riley Hastings is
2 probably listed as "Christine Hastings". Oh,
3 she's here.

4 MS. CARMODY: Yes.

5 MS. CHIAVARA: Never mind. Sorry.

6 MS. CARMODY: Heather, okay.

7 Ms. Samenfeld? Thank you. Chris, April --
8 Ms. Salas? Thanks.

9 So, I think I have everybody. Can you
10 all raise your hands? We should have twelve.

11 MS. CHIAVARA: I -- oh, never mind.

12 CHAIRWOMAN MARTIN: Steve, just let us
13 know when you're ready and you have everybody on
14 your screen.

15 (Whereupon **Christina Jamharian,**
16 **Riley Hastings, Jeremy Haynes,**
17 **Kimberly Hood, Dan Goodwin,**
18 **Heather Tebbetts, Melissa Samenfeld,**
19 **Clifton Below, April Salas, Kat McGhee,**
20 **Samuel Golding, Amro Farid,** and
21 **Paul Hines** were duly sworn by the Court
22 Reporter.)

23 CHAIRWOMAN MARTIN: Okay. So, these
24 witnesses are going to be adopting their

[WITNESS: Farid]

1 testimony. Who is managing that process? Is
2 that going to be one attorney or are each utility
3 and parties doing their own adopting?

4 MS. CHIAVARA: I believe we're going to
5 divide it up. Each utility attorney is going to
6 swear in their own people. I was going to start
7 with Dr. Farid, since he has that other
8 commitment, and then start with the Eversource
9 witnesses and take it from there.

10 CHAIRWOMAN MARTIN: Okay. Great.
11 Thank you.

12 MS. CHIAVARA: Are we okay to begin?

13 CHAIRWOMAN MARTIN: Yes. Go ahead.

14 MS. CHIAVARA: Okay. Great.

15 **AMRO FARID, SWORN**

16 **DIRECT EXAMINATION**

17 BY MS. CHIAVARA:

18 Q Professor Farid, can you please state your name
19 and your role for purposes of this proceeding for
20 the record?

21 A (Farid) Yes. My name is Amro Farid. And I am a
22 volunteer technical expert for the City of
23 Lebanon.

24 Q And have you testified previously before this

[WITNESS: Farid]

1 Commission?

2 A (Farid) No.

3 Q Did you file testimony in this docket on August
4 18th, 2020, and again on October 23rd, 2020,
5 marked respectively as "Exhibits 9" and "15"?

6 A (Farid) Yes, I have.

7 Q Do you have any corrections or adjustments to
8 make to that testimony at this time?

9 A (Farid) No, I don't.

10 Q And do you adopt this testimony as it was
11 written?

12 A (Farid) Yes, I do.

13 MS. CHIAVARA: Okay. Thank you very
14 much.

15 WITNESS FARID: Thank you.

16 CHAIRWOMAN MARTIN: Okay. Thank you.
17 Mr. Farid, will you remain, in case the
18 Commissioners have a question, or are you
19 departing immediately?

20 WITNESS FARID: As Assistant City Mayor
21 Below has mentioned, I'll be departing. But, if
22 I need to be brought back, then he can contact me
23 by text message and I can rejoin.

24 CHAIRWOMAN MARTIN: Okay. Let me just

[WITNESS: Farid]

1 preliminarily ask Commissioner Bailey. Do you
2 have any questions for this witness that you're
3 already aware of?

4 COMMISSIONER BAILEY: I have a question
5 for each of the witnesses. And that is, "can you
6 tell me what you think the benefit of the online
7 data platform is?"

8 CHAIRWOMAN MARTIN: Mr. Farid, could
9 you answer that question now, before you're
10 excused?

11 **BY THE WITNESS:**

12 A (Farid) Yes. So, the online data platform has
13 many benefits for all of the various stakeholders
14 that we have in our grid. The first of which is
15 for consumers to know how they have consumed
16 their electricity, and then they can try to
17 change their behavior and be informed customers.

18 Beyond that, the additional data can
19 bring about all sorts of operational benefits
20 across the grid for all the various stakeholders
21 that participate.

22 CHAIRWOMAN MARTIN: Anything else,
23 Commissioner Bailey?

24 COMMISSIONER BAILEY: No. But I'd like

[WITNESSES: Hastings|Jamharian|Rice|Leigh]

1 to hear maybe from some of the other witnesses
2 about the operational benefits that the platform
3 will help with.

4 Thank you, Dr. Farid.

5 CHAIRWOMAN MARTIN: Do you have any
6 issue with releasing this witness now, subject to
7 recall if you have other questions or I have
8 other questions later?

9 COMMISSIONER BAILEY: No objection.
10 Thank you.

11 CHAIRWOMAN MARTIN: Okay. Great. The
12 witness is released. Thank you.

13 Okay. Go ahead, Ms. Chiavara.

14 MS. CHIAVARA: Okay. I'm going next to
15 Ms. Hastings.

16 **CHRISTINE RILEY HASTINGS, SWORN**

17 **CHRISTINA JAMHARIAN, SWORN**

18 **BRIAN RICE, SWORN**

19 **CHRISTOPHER LEIGH, SWORN**

20 **DIRECT EXAMINATION**

21 BY MS. CHIAVARA:

22 Q Ms. Hastings, can you please state your name,
23 your title, and your role and responsibilities
24 with Eversource for the record?

[WITNESSES: Hastings|Jamharian|Rice|Leigh]

1 A (Hastings) My name is Christine Riley Hastings.
2 I am Lead Analyst of Strategic Data Management
3 for Energy Efficiency at Eversource. And, in
4 that role, I manage our statewide energy
5 efficiency data efforts in Massachusetts, and
6 ensure consistency of energy efficiency data
7 reporting across the three states in which
8 Eversource operates.

9 Q Thank you. And have you ever testified before
10 this Commission?

11 A (Hastings) No.

12 Q Did you file testimony in this docket on August
13 17th, 2020, and again on October 23rd, 2020, --

14 A (Hastings) Yes.

15 Q -- marked respectively as "Exhibits 4" and "13"?

16 A (Hastings) Yes.

17 Q And was this testimony prepared by you or at your
18 direction?

19 A (Hastings) Yes.

20 Q Do you have any corrections or adjustments to
21 make to that testimony at this time?

22 A (Hastings) Yes. Testimony was also filed on
23 August 17th, 2020, by Thomas Belair, who no
24 longer works for Eversource. I adopt his

[WITNESSES: Hastings|Jamharian|Rice|Leigh]

1 testimony at this time.

2 Q Okay. Thank you. And do you adopt this
3 testimony as it was written?

4 A (Hastings) Yes.

5 Q Okay. Thank you very much. Next is
6 Ms. Jamharian.

7 Ms. Jamharian, can you state your name,
8 your title, and your role and responsibilities
9 with Eversource for the record?

10 A (Jamharian) Good morning. My name is Christina
11 Jamharian. I'm the Manager of Enterprise
12 Application Services for IT at Eversource, where
13 I'm responsible for enterprise-led application
14 portfolio and risk management and application
15 performance management strategy.

16 Q Thank you. Have you ever testified before this
17 Commission?

18 A (Jamharian) No.

19 Q And did you file testimony in this docket on
20 October 23rd, 2020, marked as "Exhibit 13"?

21 A (Jamharian) Yes.

22 Q Was this testimony prepared by you or at your
23 direction?

24 A (Jamharian) Yes.

[WITNESSES: Hastings|Jamharian|Rice|Leigh]

1 Q And do you have any corrections or adjustments to
2 make to that testimony at this time?

3 A (Jamharian) Yes. Dennis Moore, who is no longer
4 participating in the docket, filed testimony on
5 August 17th, 2020, which I adopt at this time.

6 Q And do you adopt this testimony as it was
7 written?

8 A (Jamharian) Yes.

9 Q Thank you very much. Next in this is Mr. Brian
10 Rice.

11 Mr. Rice, can you please state your
12 name, your title, and your role and
13 responsibilities with Eversource for the record?

14 MS. CHIAVARA: He may not be here at
15 the moment. I believe Brian Rice needs to be
16 promoted.

17 CHAIRWOMAN MARTIN: Ms. Carmody, you
18 can move down those who have already been --
19 adopted their testimony.

20 COMMISSIONER BAILEY: Well, Madam
21 Chair, I would like to hear from them.

22 CHAIRWOMAN MARTIN: Oh, that's true.
23 You want to ask each person that question?

24 COMMISSIONER BAILEY: Yes.

[WITNESSES: Hastings|Jamharian|Rice|Leigh]

1 CHAIRWOMAN MARTIN: Why don't we do
2 that now, before we move those folks, and then we
3 can move them down. Or, we can take all the
4 questions for people who aren't part of the
5 Settling Parties panel at the end. How would you
6 like to handle, Commissioner Bailey?

7 COMMISSIONER BAILEY: Whatever makes it
8 easier for the screen.

9 CHAIRWOMAN MARTIN: I don't think
10 there's any "easy for the screen" today. That's
11 what it seems like.

12 Ms. Carmody, have you moved those
13 people down already or are they still here?

14 MS. CARMODY: No, I haven't moved
15 anything -- excuse me -- anybody, except for
16 Mr. Rice is now in the room.

17 CHAIRWOMAN MARTIN: Okay.

18 MS. CARMODY: So, I had room for him.

19 CHAIRWOMAN MARTIN: Let's have
20 Commissioner Bailey ask that question of these
21 people before we move them, and then we'll only
22 bring back those we have additional questions
23 for.

24 So, Commissioner Bailey, if you want to

[WITNESSES: Hastings|Jamharian|Rice|Leigh]

1 just start and run through those three so far.

2 COMMISSIONER BAILEY: Okay.

3 BY COMMISSIONER BAILEY:

4 Q Can each of you please tell me what you believe
5 the benefit of the online data platform is?

6 A (Hastings) This is Ms. Hastings. As a member of
7 the utilities, we think that this question is
8 best answered by the users of the platform, the
9 other third party intervenors.

10 Q Well, do you agree with Dr. Farid that there are
11 some operational benefits to the grid from the
12 platform or that there could be? Or, is that a
13 better question for somebody else?

14 A (Hastings) That's probably a better question for
15 somebody else.

16 Q Okay. Thank you. Ms. Jamharian, do you have any
17 thoughts on that question?

18 A (Jamharian) As the IT representative for the
19 team, my responsibility would be more toward
20 figuring out how to implement the solution,
21 rather than identifying the potential benefits.
22 So, I agree with Christine, that it's a bit out
23 of my place to answer.

24 Q Okay. I do have an IT question for you.

[WITNESSES: Hastings|Jamharian|Rice|Leigh]

1 A (Jamharian) Sounds good.

2 Q What will be required to ensure cyber security of
3 the interface between the utility back-end
4 integration and API and the platform hub?

5 A (Jamharian) That's all internally within the
6 Eversource space or within each individual
7 utility space. So, it would be contained within
8 all of our normal parameters.

9 Chris Leigh, do you have anything to
10 add to that?

11 Q Well, the platform hub isn't necessarily a
12 utility. My question is, what kind of cyber
13 security measures have you taken to ensure
14 security between the systems that reside at the
15 utility and the platform hub, which may be at a
16 third party?

17 A (Jamharian) Oh. Sorry. I misunderstood. So,
18 the utilities are still responsible for the
19 entire platform, which would include the external
20 API, whether it's run by a third party or not.
21 All of the -- all of the infrastructure would be
22 set up to accommodate the security measures that
23 are defined in the requirements. The API is the
24 more -- is a more modern structure, and in itself

[WITNESSES: Hastings|Jamharian|Rice|Leigh]

1 safer because of that measure. We're not
2 necessarily -- we're not sending open files, *per*
3 *se*, as in older technologies.

4 Did that kind of address the
5 question?

6 Q Maybe, but I guess I have a misunderstanding of
7 the whole platform. The way, when I read the
8 testimony, that I drew it out was that there's
9 going to be some back-end systems that you have
10 to integrate, and you're going to take
11 information from there and put it in the API,
12 which can -- which each utility will have an API,
13 and there will be an API of APIs that
14 consolidates all the utility information. And
15 then, there's a platform hub that the outside
16 people will interface that information, you know,
17 get access to that information.

18 So, I want to know about the cyber
19 security measures between access from the outside
20 to your internal systems?

21 A (Jamharian) Okay. So, let me see if I can
22 explain it a little better than I did, I think I
23 understand your context.

24 So, when we say "integrating the

[WITNESSES: Hastings|Jamharian|Rice|Leigh]

1 back-end data", what that's really referring to
2 is kind of, within each utility space, gathering
3 the data from our various and disparate
4 foundation systems, and collating them into one
5 place so that we can eliminate that time when it
6 comes to share that data, and also standardize it
7 to make sure it means the same thing across all
8 its uses.

9 The API is a technology that allows us
10 to share the data in real-time, but it's not
11 actually stored once it leaves the utility. So,
12 it's exposed, it's made available. It
13 communicates in the same format with the API of
14 APIs that can pull the data from all the
15 different utilities into one gathering, so that
16 the user who is trying to pull the data can see
17 it all in one shot, rather than making separate
18 calls to each of the utilities. So, it just is a
19 way to make it a little more streamlined for the
20 use of the downstream users.

21 So, for example, if a third party
22 market participant wanted to pull data, and
23 happened to be from all three of the utilities,
24 they would have a software program that is also

[WITNESSES: Hastings|Jamharian|Rice|Leigh]

1 fitted with the Green Button Connect My Data
2 standard, and they would use an API to link to
3 the API of APIs, which would link to the utility
4 APIs to immediately transfer the data. It
5 wouldn't stop anywhere.

6 WITNESS LEIGH: Commissioner -- I'm
7 sorry. That question I believe is -- I'm the
8 cyber security expert. So, maybe that will be
9 better when my testimony is adopted.

10 COMMISSIONER BAILEY: Okay. Thank you
11 very much. I appreciate that.

12 WITNESS JAMHARIAN: Yes.

13 COMMISSIONER BAILEY: Sorry about that.

14 WITNESS JAMHARIAN: Thank you, Chris.

15 WITNESS LEIGH: No problem.

16 CHAIRWOMAN MARTIN: Okay. I think we
17 need to have Mr. Rice adopt his testimony, before
18 we take questions for him.

19 MS. CHIAVARA: Yes. Thank you.

20 **DIRECT EXAMINATION (resumed)**

21 BY MS. CHIAVARA:

22 Q Mr. Rice, can you please state your name, your
23 title, and your role and responsibilities with
24 Eversource for the record?

[WITNESSES: Hastings|Jamharian|Rice|Leigh]

1 A (Rice) My name is Brian Rice. I'm Manager of
2 Regulatory Projects at Eversource. My
3 responsibilities include managing analysis and
4 regulatory requirements for initiatives across
5 Eversource's operated businesses.

6 Q Great. Thank you. And have you ever testified
7 before this Commission?

8 A (Rice) No.

9 Q And did you file testimony in this docket on
10 October 23rd, 2020, marked as "Exhibit 13"?

11 A (Rice) Yes.

12 Q Was this testimony prepared by you or at your
13 direction?

14 A (Rice) Yes.

15 Q And do you have any corrections or adjustments to
16 make to this testimony at this time?

17 A (Rice) Yes. Testimony was also filed on October
18 23rd, 2020, by Benjamin Byboth, who no longer
19 works for Eversource. I adopt his testimony at
20 this time.

21 Q Thank you. And do you adopt this testimony as it
22 was written?

23 A (Rice) Yes.

24 Q All right. Thank you very much. I am now moving

[WITNESSES: Hastings|Jamharian|Rice|Leigh]

1 to Christopher Leigh.

2 Mr. Leigh, can you please state your
3 name, your title, your role and responsibilities
4 with Eversource for the record?

5 A (Leigh) Yes. Good morning. So, my name is
6 Christopher Leigh. I am the Director and Chief
7 of Cyber Security Compliance and Networks for
8 Eversource. In these roles, I am primarily
9 responsible for the protection of Eversource
10 computing systems, data systems, technical data,
11 and customer employee data, as well as ensuring
12 compliance with all of these technology
13 requirements.

14 Q And have you ever testified before this
15 Commission?

16 A (Leigh) No, I have not.

17 Q And did you file testimony in this docket on
18 October 23rd, 2020, marked as "Exhibit 13"?

19 A (Leigh) Yes.

20 Q And was this testimony prepared by you or at your
21 direction?

22 A (Leigh) Yes.

23 Q Do you have any corrections to make to that
24 testimony at this time?

[WITNESSES: Hastings|Jamharian|Rice|Leigh]

1 A (Leigh) No, I do not.

2 Q And do adopt this testimony as it was written?

3 A (Leigh) Yes, I do.

4 MS. CHIAVARA: Thank you very much.
5 That is all of the Eversource witnesses. And I
6 believe Liberty is next.

7 WITNESS LEIGH: Jessica, do you want me
8 to address the Commissioner's question while
9 we're at this phase or should that be done later?

10 CHAIRWOMAN MARTIN: Just a minute,
11 Mr. Leigh.

12 WITNESS LEIGH: Oh.

13 CHAIRWOMAN MARTIN: Ms. Carmody, can
14 you move down Ms. Hastings and Ms. Jamharian.
15 And let's have Commissioner Bailey ask her
16 question of Mr. Rice and Mr. Leigh.

17 COMMISSIONER BAILEY: Thank you.

18 BY COMMISSIONER BAILEY:

19 Q Mr. Leigh, can you explain how cyber security has
20 been covered by this plan please?

21 A (Leigh) Yes. So, we've addressed it in the two
22 main methods. One would be around the folks, the
23 third parties who will be getting access to the
24 platform. We have documented in the testimony

[WITNESSES: Hastings|Jamharian|Rice|Leigh]

1 process for them requesting, validating that they
2 have the right rational basis for having access
3 to the data, security requirements that they need
4 to have to protect the data that they receive,
5 and then procedures around how to address issues
6 and validation of customer approvals for those
7 third parties that have the data.

8 On the technical system side of the
9 house, many of the security requirements will be
10 written up as part of the requirements for system
11 design. But, fundamentally, the utility side
12 will already have security controls for our
13 systems in how we prepare data, it is then then
14 processed up through those APIs, which is a
15 secure way of just -- it's considered a bridge.
16 It's how I bring data from Point A to Point B.
17 When it gets into the platform, that will be
18 through the system requirements we decide. But,
19 fundamentally, they will be required to have
20 testing of the design. So, we'll lay out things
21 like validating the data that's going in, if you
22 input something, making sure it's what you're
23 supposed to input, like a data field or a
24 request, secured coding practice, etcetera.

{DE 19-197} [Morning Session ONLY] {05-05-21}

[WITNESSES: Hastings|Jamharian|Rice|Leigh]

1 As it's written, we'll be testing the
2 code, as normal utility IT organizations do, to
3 make sure it's free of critical errors that could
4 put it at risk. And, because this is
5 internet-facing, our recommendations would be to
6 do what we call a "penetration test" of the
7 end-to-end system, to try to break in, see if
8 there's any identified vulnerabilities, misses in
9 the development process, and validate that it's
10 working as intended. These are standard
11 processes we do today, and would recommend the
12 same in the final design and development.

13 Q Okay. Thank you. And, Mr. Rice, do you have any
14 information about the benefits of the platform
15 and its possible improvements to grid operation?

16 A (Rice) The platform is expected to expand the
17 availability of the utility customer data to the
18 benefit of customers as an initial matter. There
19 are a range of potential use cases that have been
20 identified by other participants in the
21 proceeding that are hoped to provide a variety of
22 benefits. And I expect some of them will be able
23 to provide more insight on those benefits and
24 those use cases.

[WITNESSES: Tebbetts|Samenfeld]

1 As for operational benefits, I wouldn't
2 be the person to represent any expectations that
3 there will be any at this time or that there will
4 not be any.

5 COMMISSIONER BAILEY: Okay. Thank you.

6 CHAIRWOMAN MARTIN: Okay. And I
7 apologize, which utility was going to have their
8 witnesses adopt testimony next?

9 MR. SHEEHAN: That would be Liberty
10 please.

11 CHAIRWOMAN MARTIN: Go ahead,
12 Mr. Sheehan.

13 MR. SHEEHAN: Thank you. Liberty has
14 two witnesses here, Ms. Tebbetts and Ms.
15 Samenfeld.

16 **HEATHER TEBBETTS, SWORN**

17 **MELISSA SAMENFELD, SWORN**

18 **DIRECT EXAMINATION**

19 BY MR. SHEEHAN:

20 Q Ms. Tebbetts, can you please state your name,
21 title, and role with Liberty?

22 A (Tebbetts) Yes. My name is Heather Tebbetts.
23 And I am the Manager of Rates and Regulatory
24 Affairs for Liberty Utilities Service

[WITNESSES: Tebbetts|Samenfeld]

1 Corporation. And I'm responsible for providing
2 rate-related services for EnergyNorth Natural Gas
3 and Granite State Electric Corp.

4 Q And we might as well take both at once. Ms.
5 Samenfeld, can you please introduce yourself,
6 provide your title and your responsibility with
7 the Company?

8 A (Samenfeld) Yes. My name is Melissa Samenfeld.
9 And I am an Analyst in the Rates and Regulatory
10 Affairs Department for Liberty Utilities Service
11 Corp. And I'm responsible for providing
12 rate-related services for Liberty Utilities
13 (EnergyNorth Natural Gas) and Liberty Utilities
14 (Granite State Electric).

15 Q Ms. Tebbetts, have you testified before the
16 Commission before?

17 A (Tebbetts) Yes, on many occasions.

18 Q And Ms. Samenfeld?

19 A (Samenfeld) No.

20 Q Ms. Tebbetts, did you file testimony with
21 Ms. Samenfeld in this docket on August 17, 2020,
22 which has been marked as "Exhibit 3"?

23 A (Tebbetts) Yes.

24 Q And, Ms. Samenfeld, did you participate in the

[WITNESSES: Tebbetts|Samenfeld]

1 drafting of that testimony as well?

2 A (Samenfeld) Yes.

3 Q And do either of you have any corrections to make
4 to that joint testimony?

5 A (Tebbetts) No.

6 A (Samenfeld) No, I do not.

7 Q And, Ms. Tebbetts, do you adopt the testimony as
8 it was written today?

9 A (Tebbetts) Yes.

10 Q And Ms. Samenfeld?

11 A (Samenfeld) Yes, I do.

12 MR. SHEEHAN: Thank you. That's all
13 Liberty has for now.

14 CHAIRWOMAN MARTIN: Okay. Thank you,
15 Mr. Sheehan.

16 Commissioner Bailey, do you want to ask
17 these two witnesses your general question?

18 COMMISSIONER BAILEY: Sure. I will ask
19 them the same question, if they can identify any
20 benefits from the system.

21 And also, Mr. Sheehan, is there going
22 to be a Liberty witness on the Settlement panel?

23 MR. SHEEHAN: There is not. And the
24 reason, briefly, is as follows: As you can see,

[WITNESSES: Tebbetts|Samenfeld]

1 there are a lot of people involved in this
2 docket, and the Settlement encompasses many
3 different parties. And, so, we spent a lot of
4 time deciding who would be on the Settlement
5 party, to make sure we had a broad array of
6 expertise who could basically answer any
7 questions. So, that was the deciding factor.
8 And it just so happened that the other parties'
9 expertise just, with all due respect, nudged out
10 Ms. Tebbetts and Ms. Samenfeld.

11 So, that was sort of the thinking
12 behind it, is how we could give you the broadest,
13 most complete group. And, of course, it couldn't
14 include everyone, to keep it manageable.

15 But they're both here, and we -- all
16 three of us were involved in this process
17 throughout.

18 COMMISSIONER BAILEY: Okay. Then,
19 maybe I'll ask one of the questions that I had
20 for the panel of Ms. Tebbetts.

21 BY COMMISSIONER BAILEY:

22 Q But can we start with, do you have any
23 information about the benefits of this platform
24 to add?

[WITNESSES: Tebbetts|Samenfeld]

1 A (Tebbetts) Sure. So, the Company believes that,
2 you know, the benefits of this platform really
3 are that customers with multiple utilities
4 serving them will have one location to get their
5 data, and will be able to share that data as they
6 choose, with the full authority to determine who
7 may receive that data.

8 Q So, "customer", in that sense, is not end-user
9 customers, is that correct?

10 A (Tebbetts) Yes. They could be an end-user
11 customer, absolutely. They could be, in the
12 event that a third party would like information,
13 that customer has the authority to give that
14 third party permission to get that data. It's
15 going to be up to the customer to make that
16 determination if they want to share or not.

17 Q In your first answer, you said something that I
18 didn't understand about "customers would have
19 access to use at multiple locations". What did
20 you mean by that?

21 A (Tebbetts) So, just multiple utilities. For
22 example, I am an Eversource electric customer and
23 a Liberty gas customer. So, I wanted to use this
24 platform, I could go there and get the data for

[WITNESSES: Tebbetts|Samenfeld]

1 both of that, rather than logging into my Liberty
2 account and then having to log into my Eversource
3 account. It's a one-stop shopping for customers
4 who have multiple utilities.

5 Q Okay. Thank you. And, then, Ms. Samenfeld, do
6 you have anything to add?

7 A (Samenfeld) Yes. I think another benefit also
8 is, we've been dealing with Liberty Utilities'
9 Battery Storage Pilot Program, and we have
10 learned that customers want information about
11 their energy usage. And, as Ms. Tebbetts has
12 said, having this all in one place for them I
13 think would be a big benefit for our customers to
14 see all that come together.

15 Q Okay. Thank you. Now, the question that I have
16 for the panel is about implementation of the
17 back-end integration. And the Settlement
18 Agreement says that there are expected challenges
19 and constraints of implementing the back-end
20 integration and the API. Do you know what the
21 environmental and architectural challenges are
22 for Liberty or will be for Liberty?

23 A (Tebbetts) So, at this time, we don't. We
24 actually are going to be moving to SAP. And,

[WITNESSES: Tebbetts|Samenfeld]

1 until we have moved to SAP, we are really unsure
2 as to exactly what that will entail. We do know
3 that SAP is coming in 2022. So, once we've
4 converted next year, we will have a better
5 understanding of exactly how all that back-end
6 will work.

7 CHAIRWOMAN MARTIN: Commissioner
8 Bailey, I just want to interject.

9 If the witnesses could please use full
10 words instead of acronyms wherever possible, that
11 will help both with the record and with the
12 public's ability to understand what we're doing
13 here today.

14 Thank you.

15 BY COMMISSIONER BAILEY:

16 Q And that was my next question. Tell me what
17 "SAP" is and tell me what it means?

18 A (Tebbetts) Sure. So, we're going to be going to
19 -- what we're calling it actually is "Customer
20 First". And I can give you a little bit of
21 information on that. Give me one second. I
22 actually have some information for you here. So,
23 essentially, "Customer First" is it leverages the
24 capabilities and experience of our entire

[WITNESSES: Tebbetts|Samenfeld]

1 organization, because it's going to be going
2 across the country. We're going to be moving to
3 a new system. It's actually going to replace a
4 few systems, things like billing and our back-end
5 financial systems, which right now we have a lot
6 of issues with, in the sense that just we don't
7 have the capabilities that we would like.

8 So, we've gone through some top-tier
9 software vendors, and then selected SAP. And I
10 don't know what that stands for, that's just the
11 brand name of it. So, that's going to be our
12 core enterprise technology platform for what
13 we're calling "Customer First". It's expected to
14 be implemented in 2022, and will replace the
15 current billing of Cogsdale, which, as I noted,
16 has significant limitations, and has struggled to
17 meet our business needs.

18 Customer First is also going to replace
19 Great Plains, which is our financial system, that
20 we use for general and plant accounting, which
21 also has limited capabilities, and it actually
22 lacks visibility into any data outside the
23 system. So, we have some challenges there. And
24 those systems are going to replace with SAP to

[WITNESSES: Tebbetts|Samenfeld]

1 allow the Company to process things smarter, and
2 manage and access billing and financial data.
3 And included in that suite of solutions, our
4 systems can enhance customer engagement, improve
5 employee recruiting, on-boarding, and also this
6 improves system monitoring and resiliency.

7 And we're expecting this conversion to
8 happen in 2022, I think third quarter or so.

9 Q So, you're saying that the Company is in the
10 process of updating and replacing some of its
11 back-end systems now, and you expect that the new
12 system will be able to meet the challenges of the
13 data platform needs. And, if you look at Exhibit
14 17A, which is confidential, it shows what the
15 Company expects the incremental costs to be to
16 integrate the back-end systems and develop the
17 API. And can you confirm to me that that
18 information is accurate?

19 A (Tebbetts) Yes. Let me, I just need to -- I have
20 it open, but I think I have too many things open
21 at the moment. Excuse me for one minute please,
22 I just want to open it up. Okay. Yes, that is
23 correct, what we provided in there.

24 COMMISSIONER BAILEY: Okay. Thank you

[WITNESSES: Eidfeller|Haynes|Hood|Goodwin]

1 very much.

2 CHAIRWOMAN MARTIN: Okay. Thank you.
3 Ms. Carmody, you can move those two witnesses
4 down.

5 Then, I believe we will take the Unitil
6 witnesses next.

7 MR. SIMPSON: Thank you, Chairwoman
8 Martin.

9 **JUSTIN EISFELLER, SWORN**

10 **JEREMY HAYNES, SWORN**

11 **KIMBERLY HOOD, SWORN**

12 **DAN GOODWIN, SWORN**

13 **DIRECT EXAMINATION**

14 BY MR. SIMPSON:

15 Q Mr. Justin Eidfeller, can you please state your
16 name, title, role and responsibilities at Unitil
17 for the record?

18 A (Eidfeller) Yes. My name is Justin Eidfeller.
19 I'm the Vice President of Information Technology
20 at Unitil Corp. -- Unitil Service Corp., sorry.
21 Unitil Service Corp. provides centralized utility
22 management services to Unitil Corporation's
23 subsidiary companies, including Unitil Energy
24 Systems, Incorporated, and Northern Utilities,

[WITNESSES: Eidfeller|Haynes|Hood|Goodwin]

1 Incorporated. As Vice President of Information
2 Technology, I am responsible for Unitil's
3 information technology infrastructure, software
4 development, cyber security, and software system
5 support.

6 Q Have you have testified before this Commission?

7 A (Eidfeller) Yes, I have. I presented in various
8 technical session, and testified before
9 Commissions in New Hampshire, Maine, and
10 Massachusetts.

11 Q Did you file testimony in this docket on August
12 17th, 2020, and on October 23rd, 2020, marked as
13 "Exhibits 4" and "13" respectively?

14 A (Eidfeller) Yes, I did.

15 Q Was this testimony prepared by you or at your
16 direction?

17 A (Eidfeller) Yes, it was.

18 Q Do you have any corrections to make to that
19 testimony at this time?

20 A (Eidfeller) No, I do not.

21 Q And do you adopt this testimony as it was
22 written?

23 A (Eidfeller) Yes, I do.

24 Q Thank you. Mr. Jeremy Haynes, can you please

[WITNESSES: Eisfeller|Haynes|Hood|Goodwin]

1 state your name, title, role and responsibilities
2 at Unutil for the record?

3 A (Haynes) Good morning. My name is Jeremy Haynes.
4 I am the Director of Information Technology for
5 Application Developments at Unutil. I am
6 responsible for Unutil's software development
7 practices, application databases, and systems
8 integration.

9 Q Have you ever testified before this Commission?

10 A (Haynes) No, I have not.

11 Q Did you file testimony in this docket on August
12 17th, 2020, and on October 23rd, 2020, marked as
13 "Exhibits 4" and "13" respectively?

14 A (Haynes) Yes, I did.

15 Q Was this testimony prepared by you or at your
16 direction?

17 A (Haynes) Yes, it was.

18 Q Do you have any corrections to make to that
19 testimony at this time?

20 A (Haynes) I do not.

21 Q And do you adopt this testimony as it was
22 written?

23 A (Haynes) Yes, I do.

24 Q Ms. Kimberly Hood, can you please state your

[WITNESSES: Eidfeller|Haynes|Hood|Goodwin]

1 name, title, role and responsibilities at Unitil
2 for the record?

3 A (Hood) Yes. Good morning. My name is Kimberly
4 Hood. I'm the Manager of Cyber Security and
5 Compliance for Unitil. I'm responsible for
6 protection of Unitil's data and computing
7 systems, including industrial control systems.
8 In addition, I'm responsible for both internal
9 and external audits and assessments.

10 Q Have you ever testified before this Commission?

11 A (Hood) No, sir.

12 Q Did you file testimony in this docket on August
13 17th, 2020, and on October 23rd, 2020, marked as
14 "Exhibits 4" and "13" respectively?

15 A (Hood) Yes, I did.

16 Q Was this testimony prepared by you or at your
17 direction?

18 A (Hood) Yes, it was.

19 Q Do you have any corrections to make to that
20 testimony at this time?

21 A (Hood) Not at this time.

22 Q Do you adopt this testimony as it was written?

23 A (Hood) Yes, I do.

24 Q And, Mr. Dan Goodwin, can you please state your

[WITNESSES: Eisefeller|Haynes|Hood|Goodwin]

1 name, title, role and responsibilities at Unutil
2 for the record?

3 A (Goodwin) Yes. My name is Dan Goodwin. I am a
4 Senior Energy Analyst II in the Energy Contracts
5 Department at Unutil Service Corporation. In my
6 role, I oversee activity and functions related to
7 competitive supplier services, including data
8 transfer by EDI.

9 Q Have you ever testified before this Commission?

10 A (Goodwin) No.

11 Q Did you file testimony in this docket on October
12 23rd, 2020, marked as "Exhibit 13"?

13 A (Goodwin) Yes, I did.

14 Q Was this testimony prepared by you or at your
15 direction?

16 A (Goodwin) Yes.

17 Q Do you have any corrections to make to that
18 testimony at this time?

19 A (Goodwin) I do not.

20 Q Do you adopt this testimony as it was written?

21 A (Goodwin) Yes, I do.

22 MR. SIMPSON: Thank you. That is all
23 for the Unutil witnesses.

24 CHAIRWOMAN MARTIN: Okay. Thank you.

[WITNESSES: Eidfeller|Haynes|Hood|Goodwin]

1 Commissioner Bailey, do you have your general
2 questions for these folks?

3 COMMISSIONER BAILEY: Yes. Thank you.
4 And also, Mr. Simpson, is there going to be a
5 Unitil witness on the Settlement panel or do I
6 need to ask my questions about that now?

7 MR. SIMPSON: Justin Eidfeller will be
8 on the Settlement panel.

9 COMMISSIONER BAILEY: Okay. And,
10 Mr. Eidfeller, can you answer questions about the
11 costs that I asked Ms. Tebbetts?

12 WITNESS EISFELLER: Generally, yes.

13 COMMISSIONER BAILEY: Okay. Great.

14 BY COMMISSIONER BAILEY:

15 Q All right. So, does any of the Unitil witnesses
16 want to give me any benefits of the platform?

17 A (Eidfeller) I can start, and maybe others can add
18 to that discussion.

19 But the platform is expected to be an
20 enabler, primarily, enabler third party services
21 focused on saving customers money in their energy
22 used, and promoting distributed energy resources.

23 Longer term, though, as more
24 information is added to the platform, I expect

[WITNESSES: Eidfeller|Haynes|Hood|Goodwin]

1 that the utilities will see some operational
2 benefit from the additional data that can be
3 shared through the platform. The data being
4 shared now, or proposed to be shared initially,
5 is data that we already manage, that we have
6 in-hand, and that is already used by our systems.
7 But, longer term, I expect that the utilities
8 will receive some operational value from the
9 platform.

10 Related to customers, I do think the
11 platform will allow more easily data sharing with
12 third parties. You know, it's an automated data
13 sharing approach. And it does allow customers to
14 fairly easily share their data with third
15 parties. But I do expect that that will have
16 some benefits for our customers immediately in
17 data sharing.

18 You know, we do expect to utilize the
19 data longer term for operational value.

20 Q How will you use it for operational value?

21 A (Eidfeller) I would expect that additional data
22 will be shared by the platform over time,
23 potentially including behind-the-meter data. So,
24 customer's appliances or equipment, those types

[WITNESSES: Eisfeller|Haynes|Hood|Goodwin]

1 of things, are likely candidates for future data
2 sharing. And I would expect that the platform
3 will enable that sharing.

4 Q Sharing with whom?

5 A (Eisfeller) With the parties that are approved to
6 be shared with. So, customers would have to
7 approve the sharing of their information, with
8 either utilities or a third party, for that
9 matter.

10 Q So, for example, if somebody wanted to aggregate
11 some behind-the-meter DER and sell it into the
12 capacity market, is that the kind of thing you're
13 talking about?

14 A (Eisfeller) Yes. There is the potential for that
15 over time. You know, the distributed energy
16 resources might include those examples that you
17 gave. They could include many others as well.

18 Q And then, could that information maybe be used to
19 put together a non-wires alternative?

20 A (Eisfeller) That depends on whether the platform
21 is utilized for -- well, yes. So, a non-wires
22 alternative could incorporate a customer's --
23 customer's information or their site. Right now,
24 we do not envision the -- initially at least, the

[WITNESSES: Eidfeller|Haynes|Hood|Goodwin]

1 platform sharing system data or system
2 operational data, or system planning data, for
3 that matter. That might be something that's
4 considered over time. But the initial offering
5 does not include that.

6 So, the information initially would be
7 primarily used to solicit or evaluate
8 opportunities for customers, and customers'
9 distributed energy resource opportunities.

10 Q So, that's the other question that I had. So,
11 you said that you think it "may help expand
12 distributed energy resources". Can you tell me
13 how it would do that?

14 A (Eidfeller) Sure. Primarily, through just
15 information sharing, usage information sharing
16 with third parties. The utilities already have
17 that information. And, you know, we could use,
18 with customer's permission, use their information
19 for demand management programs and such. But
20 third parties don't have easy access to that
21 information. Easier access is likely to promote
22 the development and proliferation of distributed
23 energy resources.

24 COMMISSIONER BAILEY: Thank you. Madam

[WITNESSES: Eisfeller|Haynes|Hood|Goodwin]

1 Chair, do you notice that we may have lost
2 Mr. Simpson?

3 WITNESS EISFELLER: That seems to be a
4 common occurrence.

5 CHAIRWOMAN MARTIN: Mr. Simpson, can
6 you hear us?

7 MR. SIMPSON: I can hear you. Can you
8 hear me?

9 CHAIRWOMAN MARTIN: We can. We've lost
10 your video on and off. If you're comfortable
11 proceeding without us being able to see you for
12 the moment, we will.

13 MR. SIMPSON: I'm comfortable
14 proceeding. It should be momentary.

15 CHAIRWOMAN MARTIN: Okay. Thank you.

16 MR. SIMPSON: Thank you.

17 BY COMMISSIONER BAILEY:

18 Q Mr. Haynes, did you have something you wanted to
19 add?

20 A (Haynes) Maybe just one quick thing, to piggyback
21 off of Justin's comments.

22 I think that an ancillary benefit of
23 the platform is also that it will likely enable
24 some technological innovation in the market, you

[WITNESSES: Eidfeller|Haynes|Hood|Goodwin]

1 know, which I think could open up a whole new
2 opportunity for third party software
3 applications, you know, novel technological
4 solutions in the market, in a way that, you know,
5 we just wouldn't be able to support today with
6 our existing processes.

7 Q Thank you. And a number of you on this panel are
8 cyber security or IT people. So, can you tell me
9 if you have any concerns with how this is
10 envisioned and cyber security?

11 A (Eidfeller) I'll defer that to Kim. And it might
12 be helpful, too, Kim, to discuss some of the
13 other cyber security efforts to ensure the
14 security of the platform as data transmitted.

15 A (Hood) Yes. We've put a great deal of time and
16 discussion with all of the parties over the cyber
17 security concerns of data sharing and privacy
18 concerns of the customers. And we put together
19 what I believe is a pretty comprehensive plan. I
20 feel comfortable about our opportunity to put in
21 cyber protections around the third parties that
22 are being -- the data is being shared with. We
23 have proposed to use a tiered system of cyber
24 security controls and compliance, so that they

[WITNESSES: Eidfeller|Haynes|Hood|Goodwin]

1 will be vetted. To make sure that, when we share
2 data with a third party, that that third party is
3 going to handle that data appropriately and we
4 can feel comfortable around that.

5 Q I saw that. Thank you. Is there any concern,
6 not about the -- how the users will use the
7 information that they get from the system, but
8 with the interface between your systems and
9 outside systems? Is there any concern that you
10 have on the security of your own systems, not the
11 data, the system?

12 A (Hood) Well, there's always concerns when you
13 have data being sent out into the environment,
14 and you have a portable for someone to come in
15 and take data. But we have layers of security,
16 many different systems that would have to be
17 bypassed in order to compromise that data. And,
18 so, I feel secure in the maturity of Unitil's
19 cyber systems to protect that data.

20 Q Okay. Thank you. Do you have something else,
21 Mr. Haynes?

22 A (Haynes) Just one more quick thing on what Kim
23 was mentioning. And we'll talk some more, I
24 suppose, about the architecture and the

[WITNESSES: Eidfeller|Haynes|Hood|Goodwin]

1 application programming interfaces, this API
2 approach that we're proposing. But that also
3 does offer us a layer of protection, because
4 we're not exposing our back-end systems directly
5 to these third parties. We have this API layer
6 that sits in front and handles token-based
7 authorization, and it really helps control access
8 to the back-end utility data. So, that's another
9 advantage of that API, or application programming
10 interface, approach that we propose.

11 COMMISSIONER BAILEY: Thank you.

12 BY CHAIRWOMAN MARTIN:

13 Q Before we let Mr. Haynes go, can you walk through
14 the API and just give us a description for the
15 record?

16 A (Haynes) Sure. Yes. And maybe it will be
17 helpful just to walk through the three layers of
18 the proposed platform.

19 You know, so, sort of starting with the
20 utility back-end systems, you know, as you
21 mentioned, Madam Commissioner, you know, each of
22 the utilities has their own sort of unique
23 challenges there with respect to how we store
24 data, and the maturity of our back-end systems.

[WITNESSES: Eisfeller|Haynes|Hood|Goodwin]

1 I think Unitil is probably in a slightly -- maybe
2 a slightly better place than the other utilities,
3 in that we've just recently completed an upgrade
4 of our customer information system. So, we have
5 a fairly modern customer information system. We
6 have a meter data management system, which is
7 like a data warehouse for all of our metering
8 data. So, that data is already sort of well
9 organized.

10 And we also have an AMI, or Advanced
11 Meter Infrastructure architecture in place, which
12 allows for two-way data communication. So,
13 Unitil is in relatively good shape with respect
14 to the back-end data.

15 What we've done is we've introduced
16 what we're calling a "logical data model", that
17 allows us to -- for the three utilities to sort
18 of speak the same language with respect to what
19 our back-end data looks like. That way we are
20 all calling meters "meters", and we're always in
21 the same units of measurement. So, you know,
22 that's sort of a layer of abstraction that sits
23 on top of all of that utility data.

24 And in front of that is the utility API

[WITNESSES: Eidfeller|Haynes|Hood|Goodwin]

1 that you mentioned. So, the utility API is
2 really a way for another computer to connect to
3 our system and retrieve data programmatically, or
4 that's what an API allows for. It's the
5 machine-to-machine connectivity capability.

6 So, each of the utilities will have
7 their own utility API built to the same standard,
8 all backed by the same logical data model, right?
9 So, the data will essentially be standardized to
10 the same model. And then, the "API of APIs", as
11 we've referred to it, which is part of the
12 platform hub, acts as sort of a gateway to those
13 three utility APIs, right? So, that's the sort
14 of one-stop shop or catalog of queries that users
15 of the platform can access, right? So, you know,
16 I'm a registered user for the platform, I hit
17 this platform hub. I have a list of queries that
18 I could access programmatically. And those
19 queries are just being sent back to the
20 individual utility APIs. And then, that data is
21 being collected and sort of aggregated by, you
22 know, this platform hub, and delivered to the
23 consumer who asked for it in this standard Green
24 Button data format, Green Button xml format.

{DE 19-197} [Morning Session ONLY] {05-05-21}

[WITNESSES: Eidfeller|Haynes|Hood|Goodwin]

1 So, I'll pause there for a second.

2 That's probably a lot. But see if we have any
3 questions there.

4 Q So, is there a wall, so to speak, between the
5 utility API and the utility back-end system?

6 A (Haynes) There is. So, there's a firewall there.
7 And I'll let our security expert speak more to,
8 you know, exactly what all that entails. But,
9 yes. Those APIs sort of sit outside of Unitil's
10 corporate network. And between those APIs and
11 the corporate network is a firewall. And it's a
12 one-way data flow. Right? We are just pushing
13 data out to the platform. We are not taking any
14 data into our utility APIs. So, it's really like
15 a "read only" database, from our perspective,
16 from the utility perspective.

17 A (Eidfeller) And I would add to that, too, and say
18 that access to the data does not give you access
19 to our systems. So, we're just providing,
20 serving up this data, and in no way would the
21 users have access to any of our back-end systems.
22 So, that abstraction layer that Jeremy mentioned
23 exists, it's inherent in the design of the
24 platform and the APIs. So, that protects our

[WITNESSES: Eidfeller|Haynes|Hood|Goodwin]

1 systems as well.

2 CHAIRWOMAN MARTIN: Okay. Thank you.

3 I think that's important to understand.

4 Commissioner Bailey, do you have any
5 other questions for the witnesses who are not on
6 the panel?

7 COMMISSIONER BAILEY: No. Thank you.

8 CHAIRWOMAN MARTIN: Thank you. Then,
9 all of you -- if we could move Ms. Hood,
10 Mr. Goodwin, and Mr. Haynes down, Ms. Carmody,
11 but keep Mr. Eidfeller here for the panel.

12 Who will be introducing the next
13 witnesses?

14 MS. CARMODY: I'm sorry. Who is this?
15 I got one of the gentlemen out, and I don't
16 recall who the other person was.

17 CHAIRWOMAN MARTIN: Oh. Mr. Haynes and
18 Mr. Goodwin.

19 MS. CARMODY: Okay. Thank you.

20 WITNESS HOOD: You can also move me
21 down, Kimberly Hood.

22 WITNESS HINES: And you can remove
23 myself, Paul Hines.

24 MR. SIMPSON: Well, we will be swearing

[WITNESS: Hines]

1 in Mr. Hines, this is Carleton Simpson, if we
2 move on to swearing in the other witnesses.

3 CHAIRWOMAN MARTIN: And that's my next
4 question. Who is introducing the next witnesses?
5 And if you could let us know who those are, for
6 Ms. Carmody's sake.

7 MR. SIMPSON: I will be introducing
8 Mr. Hines. And I know that the Consumer Advocate
9 will be introducing some of the other witnesses.
10 And I believe Mr. Sheehan will be introducing at
11 least one of the witnesses. Some witnesses are
12 not represented by counsel, so we offered to
13 split them up.

14 CHAIRWOMAN MARTIN: I appreciate that
15 very much. Then, Mr. Simpson, why don't you go
16 ahead with Mr. Hines, while we have him here.

17 MR. SIMPSON: Very good. Thank you,
18 Chairwoman.

19 **PAUL HINES, SWORN**

20 **DIRECT EXAMINATION**

21 BY MR. SIMPSON:

22 Q Dr. Paul Hines, can you please state your name,
23 title, role and responsibilities at Packetized
24 Energy for the record?

[WITNESS: Hines]

1 A (Hines) My name is Paul Hines. I am co-founder
2 and CEO of Packetized Energy, a distributed
3 energy start-up company that works with utilities
4 and works as an aggregator. I am also the L.
5 Richard Fisher Professor of Electrical
6 Engineering at the University of Vermont.

7 Q Have you ever testified before this Commission?

8 A (Hines) No, I have not.

9 Q Did you file testimony in this docket on
10 August 12, 2020, marked as "Exhibit 2"?

11 A (Hines) Yes.

12 Q Was this testimony drafted by you or at your
13 direction?

14 A (Hines) Yes.

15 Q Do you adopt this testimony as it was written?

16 A (Hines) Yes.

17 MR. SIMPSON: Thank you.

18 WITNESS HINES: Thank you.

19 CHAIRWOMAN MARTIN: Commissioner
20 Bailey, would you like to ask this witness your
21 general question?

22 COMMISSIONER BAILEY: Yes. I'm waiting
23 with bated breath.

24 BY COMMISSIONER BAILEY:

[WITNESS: Hines]

1 Q Dr. Hines, can you tell me what you think the
2 benefits of a platform like this are?

3 A (Hines) I think there are enormous benefits. I
4 think that, if you look across, you know, all
5 industries right now, everything is moving
6 towards a data-driven approach, and data -- you
7 know, enormous numbers of uses emerge when data
8 is available. And, so, I think that this could
9 have a really transformational effect for
10 consumers and utilities in the State of New
11 Hampshire.

12 I'll just give a couple of good
13 examples that I'm working on right now at
14 Packetized through our work that emerged from
15 university research. So, one of the things we
16 found is that consumers really struggled when
17 dynamic rates emerged, trying to understand "how
18 do I move load away from those peak periods to
19 off-peak periods?" And, so, Packetized will be
20 soon launching a mobile app that enables
21 consumers to use data platforms like this to see
22 their time series data, and then will help them
23 to install those smart devices that allow them to
24 shift load away from peak periods toward off-peak

[WITNESS: Hines]

1 periods, and also participate in other types of
2 either utility-run programs or aggregator-run
3 programs that produce value from that type of
4 load shifting.

5 And, so, you know, that can include
6 battery programs or programs that curtail solar,
7 if needed, when there's too much of that. So,
8 there's a lot of different ways that that can get
9 used. But, really, key to all of that is making
10 the data available, so you can make good
11 decisions about how that works. So, I think
12 that's one really good use case.

13 And I think another one, as
14 Mr. Eisfeller mentioned, as more data becomes
15 available on the platform, I can see a real role
16 for enabling parties to participate in the
17 planning process and helping to understand how
18 distributed energy resources can provide
19 non-wires alternatives, as you mentioned, to T&D
20 construction. Helping to figure out "how can we
21 build load in the right places?" "How can we
22 build, you know, the right type -- make the right
23 types of infrastructure investments?"

24 Having data available can really enable

[WITNESS: Hines]

1 different parties participating in that decision
2 process, which could really lead to a number of
3 innovations.

4 Q Thank you. And just to be sure our terminology
5 is the same, you said "dynamic rates". Is that
6 the same as "time-of-use rates"?

7 A (Hines) Yes, I see dynamic rates as sort of
8 beyond time-of-use rates. So, time-of-use is
9 kind of the simplest form of a dynamic rate,
10 where you just have a peak and an off-peak
11 period. Whereas, you know, there are lots of
12 other ways that you can enable flexibility from
13 resources. And, so, sometimes that involves a
14 contract, where the customer signs a contract,
15 where they get benefits by having automated load
16 shifting, and they may not be aware of the rates
17 exactly, but there's -- that financial
18 transaction is happening in some way. It could
19 also be a real-time price, where they're actually
20 exposed to the five-minute market prices that the
21 wholesale market sees. So, lots of different
22 ways that that can move looking forward.

23 COMMISSIONER BAILEY: Thank you.

24 WITNESS HINES: Yes. Thanks.

[WITNESS: Murray]

1 CHAIRWOMAN MARTIN: Thank you,
2 Mr. Hines. Mr. Kreis, will you introduce the
3 next witnesses please?

4 MR. KREIS: Yes. I think I'd like to
5 start with Mr. Murray, if that would be okay.

6 CHAIRWOMAN MARTIN: And do we have
7 Mr. Murray on the screen?

8 MR. KREIS: I can't see him. So, I'm
9 just -- oh, yes. There he is. Okay. Good
10 morning, Mr. Murray.

11 **MICHAEL MURRAY, SWORN**

12 **DIRECT EXAMINATION**

13 BY MR. KREIS:

14 Q Would you be kind enough to identify yourself for
15 the record by your name and your position in
16 relation to this proceeding?

17 A (Murray) I am Michael Murray, co-founder and
18 President of Mission:data Coalition. We're a
19 non-profit organization. And I lead our advocacy
20 efforts in states across the U.S. relating to
21 data portability.

22 Q And turning your attention to what has been
23 marked for identification as "Exhibits Number 7"
24 and "11". Are those documents that you prepared

[WITNESS: Murray]

1 and filed with the Commission as your prefiled
2 direct testimony in this proceeding?

3 A (Murray) Yes, they are.

4 Q Do you have any corrections to either of those
5 exhibits?

6 A (Murray) No, I do not.

7 Q And, if I asked you each of the questions that
8 you asked yourself in those two documents live on
9 the stand today, would your answers to those
10 questions be the same?

11 A (Murray) Yes, they would.

12 Q And, so, therefore, do you adopt that written
13 testimony as an accurate reflection of your views
14 and recommendations, at least going into the
15 process of negotiating this Settlement Agreement
16 that is pending before the Commission today?

17 A (Murray) Yes, I do.

18 Q And I guess, if I might just ask one additional
19 question, to tee up what I know Commissioner
20 Bailey wants to hear from you, your direct
21 testimony addresses, to some degree, the issues
22 that she's been raising, which is essentially
23 "what are the benefits of a data platform like
24 this?" Asking you to think specifically about

[WITNESS: Murray]

1 the data platform that the Settlement Agreement
2 describes, could you talk a little bit about what
3 you perceive those potential benefits to be?

4 A (Murray) Yes. One of the Achilles' heels for
5 distributed energy resources today is access to
6 customers' usage and billing data. Mission:data
7 has about 30 member companies that we work with.
8 And these are distributed energy resources,
9 ranging from rooftop solar installers for
10 residential homes, to commercial/industrial
11 demand response and energy management systems,
12 and everything in between. And the common
13 challenge that they have all have is working with
14 all of the different technical and procedural
15 idiosyncrasies of all of the nation's 3,500
16 electric utilities, retail electric utilities.

17 And, so, one of the key benefits of
18 this platform that's described in the Settlement
19 Agreement is one standardization. So, the same
20 system for accessing customer data in five states
21 now, covering 36 million meters nationwide, this
22 is via the Green Button Connect My Data standard,
23 that will be adopted in New Hampshire. And, so,
24 that means that DER products and -- excuse me --

[WITNESS: Murray]

1 distributed energy resource products and services
2 from other states, such as California, Illinois,
3 Texas, New York, etcetera, could operate in New
4 Hampshire. And that DER products and services
5 developed in New Hampshire could also be
6 exported, if you will, to those other states that
7 follow the standard.

8 So, in my testimony, I describe several
9 benefits. There are other jurisdictions that
10 completed very detailed analyses showing energy
11 savings that were possible on the order of one
12 percent to ten percent, for both residential and
13 commercial customers. That was cited in my
14 direct testimony, Exhibit Number 7.

15 And there are also economic
16 efficiencies for DER providers that will use the
17 platform. And that's very likely to result in
18 reduced costs to New Hampshire consumers for
19 those services. And one example that I cited in
20 my testimony was a Canadian analysis of the cost
21 to small commercial customers of acquiring their
22 energy usage data to get an EnergyStar
23 benchmarking score and complete some very basic
24 energy efficiency operations, was on the order of

[WITNESS: Murray]

1 198 Canadian dollars per year of cost to gather
2 and assemble that information. That's about 160
3 U.S. dollars per year.

4 So, there are many both energy
5 efficiency and operational efficiency benefits
6 for consumers that want to more economically
7 manage their consumption.

8 MR. KREIS: Thank you, Mr. Murray.
9 That's all I have for this witness at this time.

10 CHAIRWOMAN MARTIN: Commissioner
11 Bailey, do you want to ask your question or did
12 that answer it for you? Mr. Murray is on the
13 general panel. So, he will stay with us for more
14 questions.

15 COMMISSIONER BAILEY: No. I think that
16 he answered the question for that. Thank you
17 very much, Mr. Murray.

18 CHAIRWOMAN MARTIN: Okay. Mr. Kreis,
19 go ahead.

20 MR. KREIS: Okay. Now I think it's
21 time to turn to Mr. Goldman of Clean Energy New
22 Hampshire.

23 WITNESS GOLDMAN: Good morning.

24 MR. KREIS: Good morning, Mr. Goldman.

[WITNESS: Goldman]

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ETHAN GOLDMAN, SWORN

DIRECT EXAMINATION

BY MR. KREIS:

Q Would you please identify yourself for the record by name and position and your role in this particular proceeding?

A (Goldman) Yes. My name is Ethan Goldman. I'm the founder of Resilient Edge, LLC. And I'm acting as a consultant to Clean Energy NH in this docket.

Q And turning your attention to what has been marked for identification as "Exhibit Number 5", is that document prefiled direct testimony that you have previously written and filed in this docket?

A (Goldman) Yes, it is.

Q And do you have any corrections to make to Exhibit 5?

A (Goldman) No, I do not.

Q And, if I asked you every single one of the questions that I guess you asked yourself in Exhibit 5 on the stand live today, would your answers to those questions be the same?

A (Goldman) Yes. They would.

[WITNESS: Goldman]

1 Q And do you therefore adopt that written testimony
2 in Exhibit 5 as an accurate reflection of your
3 views and recommendations going into the process
4 at least of negotiating the Settlement Agreement?

5 A (Goldman) Yes, I do.

6 Q And, so, therefore, I'd like to ask you the same
7 question that I asked of Mr. Murray. Your
8 prefiled testimony, Exhibit 5, talks in some
9 detail about the benefits of the data platform
10 that at least was contemplated in your testimony.
11 Asking you to think in particular about the
12 version of the platform or the approach to the
13 platform that is described in the Settlement
14 Agreement, could you address for the Commission's
15 benefit what you see the benefits of that
16 platform to be?

17 A (Goldman) Yes. Certainly. So, I work with
18 utility programs and service providers all around
19 the country. And one of the major drivers for
20 innovation in the states is the rapid adoption of
21 low-cost renewables on the grid, and additional
22 behind-the-meter electrical end-uses, like heat
23 pumps and electric vehicles that are changing
24 demands, and the opportunity, as well as the

[WITNESS: Goldman]

1 risk, is how to coordinate demand-side services
2 and loads with supply-side investments.

3 And, so, the opportunities there are
4 largely data-driven, because historically a lot
5 of demand-side resources have been valued based
6 on general averages. And those are not actually
7 terribly helpful when we're trying to use
8 demand-side resources as a grid resource.

9 And, so, there have been innovations in
10 recent years, I serve as the Chair of the
11 CalTRACK Working Group, which has developed a
12 standard open source measurement technology for
13 using utility energy use data to measure the
14 impact of demand-side resources, in order to
15 facilitate market-based solutions, such as
16 pay-for-performance, where demand-side resources
17 can be valued along with supply-side resources as
18 a least-cost way of managing the grid as it
19 evolves.

20 And the challenge in implementing
21 solutions, those which I've seen as a software
22 vendor in a past job, working for utilities and
23 the service providers, is integrating with data
24 from utilities. And this the status quo is

[WITNESS: Goldman]

1 often, you know, a variety of different data
2 formats and different processes for
3 authenticating and authorizing data access from
4 the utilities. And, so, it creates a lot of
5 additional work and costs, and slows down the
6 process of implementing those services.

7 And, so, what we have proposed here in
8 this Settlement would be a much easier way for
9 service providers to integrate and offer those
10 types of services to customers, and enable those
11 type of market-based solutions for New Hampshire.

12 Q That was all extremely lucid. The only part of
13 it that I think I think people might need to
14 understand a little better is, you mentioned the
15 "CalTRACK Working Group". What is that exactly?

16 A (Goldman) Yes. Thank you. So, it's a working
17 group of experts around the country who have to
18 deal with problems like this on a regular basis.
19 And it develops a standard mechanism for doing
20 what is known in the energy efficiency space as a
21 "whole building retrofit-based measurement of
22 energy impact". So, it creates a model of
23 expected energy use based on a weather regression
24 analysis of past energy use, from which we can

[WITNESS: Goldman]

1 measure either hourly or monthly impacts of any
2 type of demand-side intervention, whether it's
3 energy efficiency or demand response or hybrid
4 approaches.

5 MR. KREIS: Thank you. That's all I
6 have by way of introducing this particular
7 witness.

8 WITNESS GOLDMAN: Thank you.

9 CHAIRWOMAN MARTIN: Okay. Commissioner
10 Bailey, do you want to ask this witness the same
11 question or was that answer good? He is also on
12 the panel. So, he will stay with us.

13 COMMISSIONER BAILEY: No. That's fine,
14 if he's also on the panel. I have another
15 question for him about governance. But I guess I
16 can wait for the panel for that question.

17 CHAIRWOMAN MARTIN: Mr. Kreis, are you
18 introducing other witnesses?

19 MR. KREIS: Mr. Golding.

20 CHAIRWOMAN MARTIN: Go ahead.

21 MR. KREIS: And, so, I see him, too.
22 Good morning, Mr. Golding.

23 **SAMUEL GOLDING, SWORN**

24 **DIRECT EXAMINATION**

[WITNESS: Golding]

1 BY MR. KREIS:

2 Q Would you be kind enough to identify yourself for
3 the record by your name, your position, and role
4 in this proceeding?

5 A (Golding) Samuel Golding, President of Community
6 Choice Partners, Inc. I am a party to the
7 proceeding, and filed with the Local Government
8 Coalition.

9 Q Are you -- well, turning your attention to what
10 has been marked for identification as "Exhibit 9"
11 and "Exhibit 14", would you confirm that you are
12 the co-author of Exhibit 9 and the author of
13 Exhibit 14?

14 A (Golding) I am, although I believe Exhibit 14
15 includes attachments to Professor Farid's
16 testimony.

17 Q And -- okay. I'm not sure I understand that
18 answer. Exhibit 14, as I understand it, is
19 rebuttal testimony that you filed in this
20 proceeding, with attachments. And my question to
21 you is, are you the author of that rebuttal
22 testimony?

23 A (Golding) I am.

24 Q Okay. And do you have any corrections to either

[WITNESS: Golding]

1 Exhibit 9 or Exhibit 14 to offer at this time?

2 A (Golding) I do not.

3 Q And, so, if I were to ask you each of the
4 questions to which you responded in Exhibits 9
5 and 14 today on the stand, your answers to those
6 questions would be same, yes?

7 A (Golding) Yes.

8 Q And, so, do you therefore adopt that written
9 testimony as an accurate reflection of your views
10 and recommendations, at least going into the
11 process of negotiating the Settlement Agreement?

12 A (Golding) I do.

13 Q And, as with Mr. Murray and Mr. Goldman, I think
14 it's fair to say that your prefiled testimony
15 does contain a fair amount of discussion about
16 what the benefits of a statewide utility customer
17 data platform as contemplated in the statute
18 would be. And, so, asking you to think
19 specifically about the platform that's described
20 in the Settlement Agreement, could you comment
21 for the benefit of the Commission on what you
22 perceive to be the benefits of building that
23 platform?

24 A (Golding) Yes. So, I recommended in my testimony

[WITNESS: Golding]

1 that the Commission consider a statewide data
2 platform as the backbone of the market framework
3 called for under the electric utility
4 restructuring. And the reason is that adapting
5 to the accelerated pace of fundamental change
6 playing out in technologies, market dynamics, and
7 consumer preferences necessitates a continuous
8 process of market innovation.

9 Achieving that objective, from a
10 practical perspective, first and foremost,
11 depends on ensuring timely access to the data
12 needed by market participants to engage in
13 innovative activities, particularly on the retail
14 customer side. We need to ensure that market
15 participants are able to help customers adopt
16 innovative technologies and use those
17 technologies intelligently, in response to price
18 signals and grid conditions, peak conditions, to
19 save money and carbon, both for themselves and
20 for the system and ratepayers as a whole, given
21 the market design.

22 Those activities require specific,
23 standardize, and reliable access to data for
24 market participants. So, from a

[WITNESS: Golding]

1 functional/operational perspective, we need a
2 modern data platform that is standardized on a
3 statewide basis.

4 But we also need a governance
5 framework. And I focus primarily on this in my
6 testimony. The governance framework needs to
7 ensure that the platform evolves over time as we
8 continue to upgrade meters, communications, and
9 data management infrastructure across every level
10 of the electric power system. And, given the
11 level of complexity that we're talking about,
12 that decision-making body in the governance
13 framework needs to bring a diversity of
14 stakeholders to the table. Distribution
15 utilities, distributed energy companies,
16 community power aggregators, regulators,
17 municipalities, academics, customers, and
18 leverage their collective knowledge to guide how
19 the platform evolves over time.

20 And the Settlement in front of the
21 Commission today creates this framework for New
22 Hampshire. It will launch with a minimum viable
23 product approach, primarily based on the Green
24 Button standard, and create a governance

[WITNESS: Golding]

1 committee that collaboratively oversees and
2 evolves what the program does for market
3 participants and customers into the future.

4 So, from my perspective, the real
5 benefit of this initiative will be to implement
6 the framework New Hampshire needs, given the
7 rapid evolution of technologies, market dynamics,
8 and consumer preferences playing out, to sustain
9 a rational, economic ordering of the electric
10 power system going forward.

11 MR. KREIS: Thank you, Mr. Golding.
12 That's all the questions I have for this witness,
13 by way of introducing and qualifying him. I
14 would say to Chairwoman Martin and Commissioner
15 Bailey that Mr. Golding is not, as I understand
16 it, part of the Settlement panel. So, I guess,
17 if you have other questions for him, you might
18 consider asking him right now.

19 CHAIRWOMAN MARTIN: Commissioner
20 Bailey.

21 COMMISSIONER BAILEY: Thank you.

22 BY COMMISSIONER BAILEY:

23 Q Mr. Golding, do you think that the Settlement
24 Agreement that sets up the Council for Governance

[WITNESS: Golding]

1 is sufficient?

2 A (Golding) Well, the phrase "Democracy is the
3 worst form of governing, apart from all the rest"
4 springs to mind. But, yes, I do. I do.

5 COMMISSIONER BAILEY: Okay. Thank you.

6 BY CHAIRWOMAN MARTIN:

7 Q Do you have -- so, the Settlement Agreement
8 speaks about the establishment of bylaws by the
9 Council, which, obviously, has not been done at
10 this point. Does it concern you that those are
11 not part of this and known at this time, as far
12 as the establishment of governance?

13 A (Golding) It is an area of concern that I have.
14 But the diversity of the stakeholders
15 represented, and the transparency of that, I
16 believe, will lend to the process of hammering
17 out of the precise rules of the -- by which this
18 is governed. I am hopeful that that will result
19 in a well-structured set of protocols for the
20 Governance Committee.

21 And I believe that was, given the time
22 constraints and all of the matters that had to be
23 addressed, and also given the collaborative
24 nature of the discussion that evolves in the

[WITNESS: Golding]

1 Settlement between all of the parties that will
2 constitute the Governance Committee, I'm
3 optimistic that the Settlement should be approved
4 as it is, and that the bylaws will be structured
5 in a way that is appropriate.

6 Q Do you know, and I can ask this of the full panel
7 as well, whether there -- that there is a plan to
8 submit the bylaws to the Commission once they're
9 established?

10 A (Golding) Let's see. I don't believe -- I do not
11 believe that that's specified. Although,
12 Commission Staff are on the Committee. But I'm
13 just looking at the spot where the bylaws are to
14 refresh my memory, and I don't see that it needs
15 to be submitted.

16 MR. KREIS: Yes. I would just direct
17 everybody's attention to Pages 11 and 12 of
18 Exhibit 1, in both the confidential and
19 non-confidential versions, in case people want to
20 know where the provisions about the bylaws are.

21 And I guess, at the risk of testifying,
22 I think I can confirm what Mr. Golding just said.
23 That there is not a specific provision in the
24 Settlement Agreement that says "the bylaws will

[WITNESS: Golding]

1 be submitted to the Commission for their review
2 or approval."

3 CHAIRWOMAN MARTIN: Okay. That was my
4 understanding from reading it, but I wanted to
5 confirm.

6 WITNESS GOLDING: I will say, if
7 members of the Council can't adopt bylaws by
8 consensus, then any member has the ability to
9 request that the Commission resolve the dispute.
10 So, that acts as a check and an avenue to elevate
11 it to the Commission, if necessary.

12 CHAIRWOMAN MARTIN: Okay. Thank you,
13 Mr. Golding.

14 Commissioner Bailey, any other
15 questions for this witness, before we allow him
16 to be demoted, I guess, so to speak?

17 COMMISSIONER BAILEY: No thank you.
18 Thank you very much.

19 CHAIRWOMAN MARTIN: Okay. Thank you,
20 Mr. Golding.

21 WITNESS GOLDING: Thank you.

22 MR. KREIS: Okay. Those are all the
23 witnesses that I volunteered to introduce on
24 behalf of other parties.

[WITNESSES: Below|Salas|McGhee]

1 CHAIRWOMAN MARTIN: Okay. Thank you,
2 Mr. Kreis.

3 And, Mr. Sheehan, are you introducing
4 witnesses?

5 MR. SHEEHAN: I am. And I think the
6 last to be introduced are the three I'm about to
7 do so, and the Staff witness.

8 So, I will -- I've been asked to
9 introduce the testimony of the Government
10 Coalition, which consist of Mr. Below, Ms. Salas,
11 and Representative McGhee, along with Dr. Farid,
12 who's already spoken.

13 **CLIFTON BELOW, SWORN**

14 **APRIL SALAS, SWORN**

15 **KAT MCGHEE, SWORN**

16 **DIRECT EXAMINATION**

17 BY MR. SHEEHAN:

18 Q So, for those three, I'll start with Mr. Below.
19 Could you please introduce yourself and describe
20 your role with your party and with this process?

21 A (Below) Good morning. I'm Clifton Below. I am
22 the City Councilor and Assistant Mayor of the
23 City of Lebanon. I have been representing the
24 City as both advocate and expert witness in this

[WITNESSES: Below|Salas|McGhee]

1 matter. And also part of the Local Government
2 Coalition, which was a consolidated intervenor,
3 that also included Mr. Golding, who just
4 testified.

5 Q And, Mr. Below, did you participate in the
6 testimony, the revised testimony that's been
7 marked as "Exhibit 9" and the rebuttal testimony
8 that's been marked as "Exhibit 15"?

9 A (Below) Yes, I did.

10 Q And do you have any changes to those testimonies
11 for which parts of it which you were responsible?

12 A (Below) No, I do not.

13 Q Thank you. Ms. Salas, could you please introduce
14 yourself, your role in this proceeding?

15 A (Salas) Yes. Good morning. I'm April Salas.
16 I'm the Sustainability Director for the Town of
17 Hanover. And I am representing the Town of
18 Hanover's efforts in this proceeding on behalf of
19 the Local Government Coalition. My role within
20 the Town is to manage our progress towards 100
21 percent renewable energy, which we adopted at a
22 town meeting in May of 2017.

23 Q And did you also participate in the testimony
24 that's been marked as "Exhibits 9" and "15" with

[WITNESSES: Below|Salas|McGhee]

1 the other folks of the Local Government
2 Coalition?

3 A (Salas) Yes, I did.

4 Q Have you of ever testified before the Commission
5 before?

6 A (Salas) Only in technical sessions.

7 Q Do you any changes to any portions of the
8 testimony for which you were responsible?

9 A (Salas) No, I do not.

10 Q Representative McGhee, please introduce yourself.

11 A (McGhee) Yes. My name is Representative Kat
12 McGhee. And I'm an Eversource customer. And I'm
13 also a member of the Local Government Coalition.

14 Q Representative McGhee, did you participate in
15 drafting and approving the testimony that's been
16 marked as "Exhibit 9" and the rebuttal testimony,
17 "Exhibit 15"?

18 A (McGhee) Yes, I did.

19 Q And do you have any changes you'd like to make to
20 that testimony?

21 A (McGhee) No, I don't.

22 Q And have you ever testified previously before the
23 Commission?

24 A (McGhee) No, I have not.

[WITNESSES: Below|Salas|McGhee]

1 Q Thank you. Mr. Below, today do you adopt your
2 written testimony as your sworn testimony in this
3 proceeding?

4 A (Below) I do.

5 Q And the same with Ms. Salas?

6 A (Salas) I do.

7 Q And Representative McGhee?

8 A (McGhee) I do.

9 MR. SHEEHAN: Thank you.

10 CHAIRWOMAN MARTIN: Commissioner
11 Bailey, would you like to ask your question of
12 these witnesses?

13 COMMISSIONER BAILEY: Yes, please.

14 BY COMMISSIONER BAILEY:

15 Q Starting with Mr. Below, can you tell me what you
16 believe the benefits of such a platform are?

17 A (Below) Yes. Thank you. I think, first and
18 foremost, it's a foundational technology for grid
19 modernization. This form of a standardized,
20 secure data sharing is really the digital
21 foundation for the kinds of evolution that the
22 grid needs to undergo to remain technically and
23 economically efficient or to optimize those
24 efficiencies with the growing integration of

[WITNESSES: Below|Salas|McGhee]

1 variable renewables, as well as the benefits of
2 distributed energy resources.

3 And, you know, others have spoken to
4 that standardization. I would just add that the
5 Green Button standard, you know, is consistent
6 with the common information model that is the
7 overarching digital framework or standardized
8 data framework for the electric grid.

9 And, you know, even though the
10 Settlement doesn't encompass many of the use
11 cases that have been identified, it is designed
12 to be extensible. And it is adopting a mature, I
13 think, from a layperson's point of view,
14 essentially, state-of-the-art technology of the
15 API of APIs. As previously mentioned, that's the
16 architecture that allows secure one-way export of
17 data without -- without any write ability to
18 affect the underlying database.

19 And from a representative of a
20 community that's working to develop a municipal
21 electric aggregation, a community power
22 aggregation, one of the things we're looking at
23 is how the EDI shares information, versus how
24 this API of API might.

[WITNESSES: Below|Salas|McGhee]

1 And one of the issues is, you know,
2 Liberty Utilities is moving in the direction of
3 this SAP enterprise product, which I'm sure is
4 designed to have this kind of API functionality
5 from the getgo, and has been described to me as
6 very easily programmable to sort of do whatever
7 you want. So, for instance, that, combined with
8 their plans to deploy AMI, which is interval
9 metering, you can stream interval data from
10 meters in real-time or near real-time through an
11 API, in a way that the EDI, which is a 25 or 30
12 year-old technology, for how meter data is now
13 shared with suppliers, you know, you can't really
14 do it.

15 You know, by comparison with the EDI,
16 just, you know, as a layperson, it's quite clear
17 to me that the API product is much more secure.
18 You can have two or even three factor
19 authentication, you know, to be able to pull the
20 data. And this platform is being designed to
21 have, you know, a very high level of cyber
22 security. You know, a great deal of time was
23 spent by the Parties, really, with the utilities
24 being very adamant that cyber security had to be,

[WITNESSES: Below|Salas|McGhee]

1 you know, at top of mind throughout the entire
2 discussion.

3 Beyond that, though, you know, just to
4 speak about a couple of the use cases. Right
5 now, to participate in most of the energy
6 efficiency programs funded through the System
7 Benefits Charge, you need to start with a good,
8 professional baseline energy audit. And, if it's
9 a commercial building with multiple tenants, you
10 need data -- you need the total use data for all
11 types of energy use, and you need it for the
12 whole building. And, right now, that's difficult
13 to obtain, because it's a manual, cumbersome
14 process. This platform begins to make that much
15 easier, by allowing a digital permission basis to
16 aggregate and compile that data, so you can start
17 your energy audit to be able to evaluate what
18 you're going to do.

19 You know, something I did as a
20 commissioner was serve -- I chaired the
21 Evaluation, Measurement & Verification Council of
22 the NEEP, the Northeast Energy Efficiency
23 Partnership, and learned the importance of, you
24 know, data for evaluating programs and

[WITNESSES: Below|Salas|McGhee]

1 cost-effectiveness of measures. And, as we begin
2 to get this more granular interval data, we need
3 a modern platform that can share that.

4 And, if you're -- if many of the
5 businesses, for instance, that have commitments,
6 and want to have more sustainable energy and more
7 control costs, for that matter, you have multiple
8 business locations. If you're a retailer, you're
9 all across the state, or a food service, you're
10 in different territories. You need to be able to
11 get that data in a standardized format, that's
12 easy to keep streaming, so you can monitor it
13 in -- as time goes on.

14 You know, I got permission from all of
15 my tenants to share their data on a continuing
16 basis, but I have to, like, refresh the manual
17 request in order to do that. And this sets up a
18 way to do that on an automated basis.

19 I think one of the other important
20 features of this is the development of a
21 Governance Council, that really builds on a
22 really valuable New Hampshire tradition, which is
23 a nonpartisan, collaborative approach by
24 interested stakeholders to come up with solutions

[WITNESSES: Below|Salas|McGhee]

1 to complex policy challenges.

2 I have had the fortune to be part of
3 such collaborations in the legislative process.
4 And I think the Governance Council, working by
5 consensus, as has been reached in this
6 Settlement, is a very strong indicator of public
7 interest, because consensus is not easy to reach.

8 So, you know, I just think it's -- that
9 there's tremendous value, and this an opportunity
10 for New Hampshire to lead in an important
11 innovation that we need. Thank you.

12 Q Thank you. Ms. Salas, do you have anything to
13 add? Can you tell me how you plan to use it as a
14 municipality?

15 A (Salas) Yes. Absolutely. And thank you so much
16 for allowing us to speak.

17 I mean, in plain language, data is at
18 the heart of all that we are doing. As a
19 community that has more than one utility serving
20 its customers, you've heard in previous
21 statements the inconsistencies between utilities.
22 And, so, there is a customer experience challenge
23 that makes it quite difficult as a small
24 municipality, with a small staff and a small

[WITNESSES: Below|Salas|McGhee]

1 budget, to be able to not only pull information
2 to baseline our usage in order for us to even
3 begin to think about how to exercise consumer
4 choice and promote those ideals that our town
5 residents have entrusted in us to carry forth.
6 But it's actually -- it's nearly impossible to
7 replicate.

8 So, even if you're able to do what we
9 did, which is get through the first data pull,
10 and it took us, you know, nearly six months to do
11 so, and then -- and sort of scrub the data and
12 put it into a format that's usable or digestible
13 by a layperson, so that we can make decisions
14 based on that and avail choice to our residents,
15 the ability to go back the next year or the
16 following year or to sort of, you know, be at the
17 behest of any change, major change in that
18 information, makes it extremely difficult,
19 costly, and timely for a small municipality,
20 whose core function is not, you know, downloading
21 energy data, and trying to make the best possible
22 choices available to our residents.

23 So, this is a really important docket
24 for us, because of the reasons already mentioned

[WITNESSES: Below|Salas|McGhee]

1 that I won't repeat. But, primarily, the time
2 efficiency, the cost savings to us in order
3 support customer choice. And, then, as we look
4 to aggregate our municipalwide usage, having the
5 availability of data in a structured way, that we
6 know is secure, that each and every resident has
7 been enabled to be shared, allows us to then do
8 what we are trying to do best, which is implement
9 the wishes of our Town residents that was adopted
10 in a town meeting in 2017.

11 So, it more efficiently enables us to
12 exercise consumer choice. And that's why we're
13 very supportive of this docket.

14 Q Thank you. Representative McGhee, would you
15 share with me what you think the benefits of the
16 system are?

17 A (McGhee) Yes. Thank you. It's interesting, when
18 Assistant Mayor Below spoke, he took the word
19 that I was going to use, which was
20 "foundational". And I think that, for me, the
21 words that have come up already in testimony only
22 show how the good faith efforts of this
23 particular stakeholder group have brought us to a
24 place where we have an overall understanding of

[WITNESSES: Below|Salas|McGhee]

1 the benefits. I think that Mr. Eisfeller
2 mentioned it as an "enabling technology", which
3 is one way to put it. A "backbone" was mentioned
4 by Mr. Golding, a backbone. Because it is a
5 foundational concept that the state is taking
6 this. Rather than having it be imposed on us
7 from the outside, we are taking, as you've heard,
8 there's a vast amount of knowledge among the
9 stakeholder group, and we have spent months in
10 conversations and in technical sessions
11 discussing all of the myriad issues involved.

12 And I think what I see is that the
13 State of New Hampshire has an opportunity for, I
14 would say, a modest investment to make an upgrade
15 to our systems such that they are available to us
16 in order to manage the innovations that we have
17 only imagined since deregulation. So, whether
18 it's grid modernization or planning or
19 optimization or energy efficiency. Clearly, I've
20 been around these people a lot because all of
21 this stuff just rolls off the tongue.

22 But I think it's difficult sometimes to
23 envision where you can go before you -- you know,
24 it's hard to run before you can walk. And I

[WITNESSES: Below|Salas|McGhee]

1 would say that, whatever metaphor you want to
2 place on it, this is us saying "here's how we
3 want to gear up and start walking in the
4 direction of our sort of next generation energy
5 journey."

6 And, so, it's foundational, to bring it
7 back to the word I was going to use, before Cliff
8 stole it.

9 COMMISSIONER BAILEY: Thank you very
10 much. It's hard to go last. And I thank all the
11 witnesses. I really appreciate you indulging
12 that question. I've learned a lot. Thank you
13 very much.

14 BY CHAIRWOMAN MARTIN:

15 Q Representative McGhee, before we let you go, as
16 a -- you're here today as a ratepayer. And I
17 think it might be helpful to hear what, in
18 layman's terms, what is the platform? And, if
19 I'm a ratepayer in New Hampshire, why do I care
20 if we have it?

21 A (McGhee) Well, I think that probably the average
22 ratepayer is not yet aware of or concerned with,
23 other than just the rates that they see on their
24 bills, they may not be aware about the advantages

[WITNESSES: Below|Salas|McGhee]

1 of being able to manage their energy usage. I
2 think that that's becoming more available to
3 people.

4 And, in my town, I know I interact
5 regularly with the Energy Committee, and they are
6 responsible for lowering the emissions footprint
7 of the town. And they come to me on several
8 occasions to express the same thing we just heard
9 from April Salas, which is that it's very
10 difficult to pull together those numbers for
11 local government so that they can see the
12 benefits of their investments, and understand how
13 to manage peak and other things that we have, you
14 know, we have solar panels on our school, for
15 example. And they were concerned after they made
16 that investment that, because schools operate
17 during peak hours during the day, you know, they
18 wanted to figure out how to create greater
19 efficiencies. And I think we don't have a
20 solution for them today.

21 But I think that, as someone else on
22 the docket had mentioned, you can't manage what
23 you can't measure. And, so, from the layman
24 person's perspective, I know we've, my husband

[WITNESSES: Below|Salas|McGhee]

1 and I, personally, in our house, have been doing
2 everything we can to lower our carbon footprint
3 as well. But we don't have a way to view our
4 energy usage that is easy, so it's not something
5 that we do. So, we, you know, we have a
6 perspective, as consumers and as ratepayers, that
7 we will be, you know, benefiting the whole if we
8 contribute to lowering our individual footprint.

9 But I think that the efficiencies that
10 you can get, once you actually have a tool that
11 allows you to be able to really understand the
12 information that surrounds your energy usage, I
13 think the potential for that is the piece that's
14 hard to quantify at this point, because we don't
15 have any such tool.

16 CHAIRWOMAN MARTIN: Okay. Thank you
17 for that.

18 WITNESS MCGHEE: Sure.

19 CHAIRWOMAN MARTIN: I don't have any
20 other questions for this group. Commissioner
21 Bailey, are you all set with them? Can we move
22 them down?

23 COMMISSIONER BAILEY: I am. Thank you
24 very much.

[WITNESS: Eckberg]

1 CHAIRWOMAN MARTIN: Okay. Thank you
2 all.

3 Let's go off the record just for a
4 minute.

5 *[Brief off-the-record discussion*
6 *ensued.]*

7 CHAIRWOMAN MARTIN: All right. Let's
8 go back on the record. And Mr. Buckley.

9 MR. BUCKLEY: Thank you, Madam Chair.

10 **STEPHEN ECKBERG, SWORN**

11 **DIRECT EXAMINATION**

12 BY MR. BUCKLEY:

13 Q Now, Mr. Eckberg, could you please state your
14 name and position with the Commission?

15 A (Eckberg) Yes. Hi. My name is Stephen Eckberg.
16 And I'm employed as a Utility Analyst with the
17 Electric Division of the New Hampshire Public
18 Utilities Commission.

19 Q And could you please describe your involvement in
20 the instant proceeding to date?

21 A (Eckberg) Certainly. I've been the Staff Lead
22 Analyst on this proceeding, reviewing the
23 Petition, developing and serving discovery,
24 developing testimony, rebuttal testimony, and

[WITNESS: Eckberg]

1 participating in technical sessions, and
2 participating in the settlement conferences.

3 Q And the testimony you prepared, is that the
4 document initially filed with the Commission in
5 the instant docket on August 17th, 2020, and
6 which has been premarked as "Exhibit 6"?

7 A (Eckberg) Yes, it is.

8 Q And do you have any corrections or updates you
9 would like to make to that testimony at this
10 time?

11 A (Eckberg) No, I have no corrections or updates.
12 However, I will note that, since the filing of
13 that testimony, which was originally submitted as
14 "joint testimony", my co-author, Mr. Jason Morse,
15 has left employment of the Commission. And, so,
16 the testimony that I'm adopting today is, I
17 guess, solo testimony, rather than joint
18 testimony.

19 And while I have the floor, I would
20 like to, on the record, I would like to extend my
21 thanks to Mr. Morse, *in absentia*, for his
22 substantial efforts that he put into this docket
23 in developing our joint testimony originally.
24 Reading hundreds of pages of testimony from

[WITNESS: Eckberg]

1 others, and researching the many technical and
2 policy issues relevant to this proceeding.

3 Q Thank you, Mr. Eckberg. And did you also prepare
4 rebuttal testimony, initially filed with the
5 Commission in the instant docket on October 23rd,
6 2020, and which has been premarked as
7 "Exhibit 12"?

8 A (Eckberg) Yes, I did.

9 Q And do you have any corrections or updates that
10 you would like to make to that rebuttal testimony
11 at this time?

12 A (Eckberg) No corrections or updates. Except
13 with, again, that notation that Mr. Morse is no
14 longer with the Commission, so that rebuttal
15 testimony is just solo testimony of mine now,
16 rather than a joint testimony.

17 Q And, to the best of your knowledge and belief,
18 were the answers presented in your testimony and
19 rebuttal testimony accurate at the time those
20 documents were filed?

21 A (Eckberg) Yes, they were.

22 Q And do you adopt those testimony in this
23 proceeding today as representative of your
24 position at the time of its filing?

[WITNESS: Eckberg]

1 A (Eckberg) Yes, I do.

2 Q And, so, Mr. Eckberg, assuming you have heard the
3 questions that have gone before you regarding the
4 benefits of the platform, could you please
5 describe for me, and I'm paraphrasing now, what
6 the benefits that the platform could potentially
7 provide to ratepayers might be?

8 A (Eckberg) Sure. I guess I would focus my
9 comments initially on the "Findings" section of
10 SB 284 from the 2019 Legislative Session. That
11 bill is actually attached to my testimony marked
12 as "Exhibit 6". That is Attachment SRE-JM-3.
13 And, in the "Findings" section of the bill, which
14 is the genesis of this docket, it says "Access to
15 granular energy data is a foundational element",
16 I note that word again, "a foundational element
17 for moving New Hampshire's electric and natural
18 gas systems to a more efficient paradigm in which
19 empowering consumers is a critical element. By
20 enabling the aggregation and anonymization of
21 community-level energy data and requiring a
22 consent-driven process for access to or sharing
23 of customer-level energy data, the state can open
24 the door to innovative business applications that

[WITNESS: Eckberg]

1 will save customers money, allow them to make
2 better and more creative use of the electricity
3 grid as well as other utility services, and
4 facilitate municipal and county aggregation
5 programs authorized by RSA 53-E. Such a program
6 of robust data is also likely to be useful in
7 local planning, conducting market research,
8 fostering increased awareness of energy
9 consumption patterns, and the adoption of more
10 efficient and sustainable energy use."

11 I would also add, in addition to that,
12 those comments from the "Findings" section of the
13 bill, that I believe that the data platform will
14 make it easier to participate in energy
15 efficiency programs, by allowing customers to
16 more -- utility customers to more easily share
17 their energy data with third party service and
18 program providers. And it being able to share
19 data could also reduce -- provide the opportunity
20 to have individual customers reduce their demand,
21 thus saving them energy, as well as reduced
22 system demand.

23 Of course, it goes, I think it's
24 important to note that whether these benefits

[WITNESS: Eckberg]

1 materialize, and the extent to which they
2 materialize, as envisioned by the statute and by
3 parties who have spoken today in the proceeding
4 thus far, those remain to be seen.

5 So, thank you.

6 MR. BUCKLEY: Thank you, Mr. Eckberg.
7 Madam Chair, that is all Staff has as far as
8 foundational questions for the Staff witness. We
9 have some bit more that we will expand upon in
10 direct, when we actually impanel the full panel.

11 CHAIRWOMAN MARTIN: Okay. Thank you,
12 Mr. Buckley. That was going to be my next
13 question. Whether there was going to be
14 additional direct for the Settling Parties panel?
15 And it sounds like there will be.

16 MR. BUCKLEY: Yes. I believe that is
17 the plan. I would also note that there are
18 exhibits within the premarked exhibit list that
19 belong to Greentel Group, as well as UtilityAPI,
20 I believe. And those intervenors are not here
21 participating in this proceeding, will not adopt
22 their testimony before the Chair today. And
23 Staff would submit that the Commission allow
24 those exhibits in as documentary evidence, and

[WITNESS: Eckberg]

1 just give them whatever weight the Commission
2 deems appropriate. Assumably, it will be a
3 lesser degree of weight than those exhibits and
4 testimonies which have been adopted here at
5 hearing today.

6 CHAIRWOMAN MARTIN: That's Exhibits 8,
7 10, and 16?

8 MR. BUCKLEY: Yes, I believe so.

9 CHAIRWOMAN MARTIN: I had noted that.
10 Is there any objection to proceeding in that
11 fashion related to those three exhibits?

12 *[No verbal response.]*

13 CHAIRWOMAN MARTIN: Don't see any
14 objections.

15 Okay. So, at this point in time, I
16 think -- oh, Commissioner Bailey?

17 COMMISSIONER BAILEY: Can I ask Mr.
18 Eckberg a question?

19 CHAIRWOMAN MARTIN: Of course, he is on
20 the panel, too. So, he'll be back.

21 COMMISSIONER BAILEY: Oh. Okay. All
22 right. No, that -- well, that was my first
23 question, "is he going to be on the panel?" If
24 he's on the panel, then I can wait.

[WITNESS: Eckberg]

1 Okay. Thank you.

2 CHAIRWOMAN MARTIN: So, my thought was,
3 at this point, why don't we take the lunch break,
4 and then return at 1:00 p.m. And we will start
5 the direct of the full panel and then the
6 Commissioners' questions.

7 Any objection to that?

8 [No verbal response.]

9 CHAIRWOMAN MARTIN: All right. Then,
10 we'll break now, and return at 1:00 p.m.

11 ***(The lunch recess was taken at 12:10***
12 ***p.m. and concludes the Morning Session***
13 ***portion of the hearing. The hearing is***
14 ***to resume at 1:00 p.m., and will be***
15 ***provided under a separate transcript***
16 ***identified as "Afternoon Session***
17 ***ONLY".)***

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