## PUBLIC UTILITIES COMMISSION

March 28, 2017-9:07 a.m.
DAY 2
Concord, New Hampshire
MORNING SESSION
ONLY

RE: DE 16-576
ELECTRIC DISTRIBUTION UTILITIES:
Development of New Alternative Net
Metering Tariffs and/or Other
Regulatory Mechanisms and Tariffs for Customer-Generators.
(Hearing on the Merits)

PRESENT: Chairman Martin P. Honigberg, Presiding Commissioner Robert R. Scott
Commissioner Kathryn M. Bailey
Sandy Deno, Clerk

APPEARANCES: (No appearances taken - refer to the daily sign-in sheets for this date of the proceedings)

## CERTIFIED

ORGGINLLTRANSCRPT

Court Reporter: Susan J. Robidas, NHLCR No. 44
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P R O C E E D I N G S
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CHAIRMAN HONIGBERG: Good morning. We're back for Day 2. We have good attendance out there, and we have outstanding attendance over in the witness box. What, if anything, Mr. Wiesner, do we need to do this morning before beginning?

MR. WIESNER: I am not aware of anything. We did circulate a sign-in sheet in lieu of taking appearances, and it seems like everyone is here who should be here. And we know who's here, in any event.

The Utility/Consumer Coalition
panel has already take the stand, as you see. And I think we have general agreement in terms of order of questioning. My understanding is that it's proposed that the representatives of CLF and Acadia will go first in questioning this panel, followed by other members of the Energy Future Coalition.

CHAIRMAN HONIGBERG: Is there an order as to the rest of the questioning?

MR. WIESNER: I think we had
generally agreed previously that City of
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Lebanon would follow the opposing panel, followed by other non-aligned parties, with Staff bringing up the rear.

CHAIRMAN HONIGBERG: All right. Do you want to -- do the Utility/Consumer group -and you don't have to do it right this second, but maybe at the break you'll tell me what order you want to do questioning of this panel? Actually, I guess you're going to be going first after CLF and Acadia. We might not make it to the break at that point. So who's going to go first for the Utility/Consumer settlement group? Mr. Sheehan, you look like you're ready to grab the microphone.

MR. SHEEHAN: These are the
Utility/Consumer witnesses --
CHAIRMAN HONIGBERG: I got it
reversed, don't I. Sorry. So it's Utilities questioning this panel to start introducing.

MR. WIESNER: On direct, right.
CHAIRMAN HONIGBERG: Then CLF and Acadia, or then the --

MR. WIESNER: So, direct questioning, followed by CLF and Acadia, followed by other
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members of the Energy Future Coalition, City of Lebanon --

CHAIRMAN HONIGBERG: That's the group I want to know.

MR. WIESNER: -- then Staff.
CHAIRMAN HONIGBERG: That's what I want to know, if you have an order.

MR. HINCHMAN: Good morning, Mr .
Chairman. I think I will start on behalf of ReVision, which is a member of the Coalition, and then Attorney Griset and then Attorney Buxton, all covering different topics.

CHAIRMAN HONIGBERG: Oh, yeah.
You're right. You're covering different topics. I understood that. I'm sorry. Who's going to be going second?

MR. HINCHMAN: Attorney Griset.
CHAIRMAN HONIGBERG: What's your -spell the last name.

MR. GRISET: G-R-I-S-E-T.
CHAIRMAN HONIGBERG: That answers partially the question of who's here today and wasn't here yesterday, or who's going to be speaking.
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MR. SHEEHAN: We generally intend to follow the template that the other group went through yesterday. I'll introduce the witnesses, mark their testimonies, admit their testimonies, and after that process we will turn them loose to give the presentation, both supporting our settlement agreement and contrasting the others, and then they will be available for cross-examination.

CHAIRMAN HONIGBERG: How long do you think the period will be during which they are, as you put it, "turned loose"?

MR. SHEEHAN: We have an unofficial agreement that the other parties followed yesterday to be a total of 40 minutes. They divided it pretty evenly between support and critique. Our witnesses attended both of those. But in any event, we have made clear to these witnesses they have roughly six minutes a head to go through that process.

CHAIRMAN HONIGBERG: Perfect. Thank you.
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## DIRECT EXAMINATION

BY MR. SHEEHAN :
Q. I'll start with Ms. Tebbetts from Liberty. Would you please introduce yourself and who you represent this morning.
A. (Tebbetts) Yes. My name is Heather Tebbetts.

I work for Liberty Utility Service Corp. I work at our rate and regulatory group, and my role there is to support the regulatory and rates services for Granite State Electric.
Q. And Ms. Tebbetts, did you file testimony in this docket?
A. (Tebbetts) Yes, I did.
Q. And that has been marked as Exhibit 16. And did you also -- were you a signatory to the technical statement filed in support of the settlement agreement?
A. (Tebbetts) Yes, I was.
Q. And that has been marked as Exhibit 6; is that correct? I will tell you that is correct. And the settlement agreement itself is Exhibit 5. Ms. Tebbetts, do you have any changes or additions to your testimony?
A. (Tebbetts) I do not.
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Q. And if I were to ask you those questions today, would your answers be the same?
A. (Tebbetts) Yes.
Q. So do you adopt your testimony here this morning?
A. (Tebbetts) Yes.

MR. SHEEHAN: Mr. Commissioner, I move the admission of Exhibit 16, Ms. Tebbetts' testimony.

CHAIRMAN HONIGBERG: Without objection, we'll strike the I.D. on that testimony.
(Exhibit 16 admitted.)
MR. SHEEHAN: Following the order that they plan to speak, so next is Mr. Harrington.

BY MR. HARRINGTON:
Q. Could you please introduce yourself and for whom you are appearing this morning.
A. (Harrington) Yes. My name is Michael

Harrington. I'm appearing for the New England Ratepayers Association.
Q. And Mr. Harrington, did you file direct and -strike that.
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You did file both direct and rebuttal testimony in this matter; is that correct?
A. (Harrington) Yes.
Q. And your direct testimony has been marked as 27, and your rebuttal testimony has been marked as 62 , with the attachments being Exhibits 63 and 64. Are there any changes or corrections to that testimony or rebuttal testimony this morning?
A. (Harrington) No, there are not.
Q. If I were to ask you the questions contained in those testimonies, would your answers be the same this morning?
A. (Harrington) Yes, they would.
Q. Do you therefore adopt your testimony here this morning?
A. (Harrington) Yes, I do.

MR. SHEEHAN: Mr. Chairman, I move the admission of $27,62,63$ and 64.

CHAIRMAN HONIGBERG: Without objection, we'll strike the I.D. on those exhibits and they'll be admitted.
(Exhibit 27, 62, 63, 64 admitted.)
BY MR. SHEEHAN:
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Q. Next, Mr. Labrecque from Eversource. Please introduce yourself and for whom you are speaking today.
A. (Labrecque) Good morning. My name is Richard Labrecque. I'm the manager of distributed generation for Public Service of New Hampshire, doing business as Eversource Energy.
Q. And Mr. Labrecque, you were part of a group that filed both direct and rebuttal testimony this morning; is that correct?
A. (LaBrecque) Yes.
Q. Your direct testimony has been marked as Exhibit 14, and that was with a Mr. Johnson. Is Mr. Johnson here this morning?
A. (LaBrecque) No, he is not.

MR. SHEEHAN: Mr. Chairman, I
understand that Mr. Fossum has filed the affidavit on behalf of Mr. Johnson. That's already in the record.

BY MR. SHEEHAN:
Q. Mr. Labrecque, your direct testimony is 14 and your rebuttal testimony is Exhibit 43. Do you have any changes to either of those two testimonies?
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A. (LaBrecque) No, I do not.
Q. Do you have any other supplement that you wanted to raise here this morning as part of your testimony?
A. (LaBrecque) Yes. We were hoping to supplement Attachment B to our settlement proposal and technical statement with a chart that is for illustrative purposes only to help us as we go through the course of the day and explain various quantities that people may be interested in discussing.
Q. Mr. Fossum is circulating a copy of that chart. And this is the document that was mentioned yesterday during the other panel's presentation; is that correct?
A. (LaBrecque) Yes.

MR. SHEEHAN: Okay. Mr. Chairman
that does not have a number to it. We can either go to the next number or we could make it an attachment or Exhibit 6A, referencing the technical statement that is sort of part of the -- if it becomes more confusing, we can just go to the next number.

CHAIRMAN HONIGBERG: We're going to
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go to the next number, which will be 67 . MR. SHEEHAN: Thank you.
(Exhibit 67 marked for identification.)
BY MR. SHEEHAN :
Q. Mr. Labrecque, this is a chart you prepared; is that correct?
A. (Labrecque) Correct.
Q. And without going into a long description, it is -- the purpose of it is to do what?
A. (Labrecque) It's a depiction of a idealized, typical profile of a residential customer with a typical solar profile layered on top of it and a description of -- I've labeled four quadrants on the chart that can be used to describe, for example, what would be measured in the import or purchase channel of these bidirectional meters that we've been talking about versus what would be measured in the export or sale channel.
Q. And you intend to reference this in your presentation later this morning; is that correct?
A. (Labrecque) That's correct.

MR. SHEEHAN: Mr. Chairman, I move
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> the admission of Exhibit 67, I believe you said.

MR. HINCHMAN: Mr. Chairman, can I --
CHAIRMAN HONIGBERG: Mr. Hinchman.
MR. HINCHMAN: Objection. There's no data. We have no idea what these numbers are, where they come from, what they mean, what they're based on. Without the underlying data, we don't know how to even look at these numbers.

CHAIRMAN HONIGBERG: So until Mr. Labrecque testifies further about it, you'd object to having the I.D. struck?

MR. HINCHMAN: I suspect I know what the data is, but --

CHAIRMAN HONIGBERG: I suspect you do, too.

MR. HINCHMAN: But they haven't clarified. And this is a new chart --

CHAIRMAN HONIGBERG: It's the one you were looking at yesterday, as I understand it. And in fact, one of your witnesses was ready to testify about it yesterday.

MR. HINCHMAN: It is a -- I believe,
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but $I$ don't know, that it's a subset of the data. And so this is one month versus a 12-month average from the chart yesterday. So I'd like them to put in the data so that the data is also available.

CHAIRMAN HONIGBERG: Mr. Fossum and Mr. Sheehan, this is a page from another exhibit in this record; is it not?

MR. FOSSUM: Mr. Chairman, no, not exactly. It is slightly different. But as you pointed out, Mr . Labrecque's prepared to testify about it today, and he can speak to it later and the information that it's intended to show.

CHAIRMAN HONIGBERG: I'll tell you what, Mr. Hinchman. We won't strike the I.D. yet. You keep track of this, Mr. Sheehan. If after Mr. Labrecque or others have testified about it further you want to raise an objection, you'll do it at that time, okay. Your objection for now, $I$ guess, is granted. But they're not precluded from further testifying about it and moving it again.

MR. SHEEHAN: Thank you, Mr.
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Chairman.
BY MR. SHEEHAN :
Q. Next is Edward Davis. Please introduce yourself and for whom you are appearing this morning.
A. (Davis) Good morning. My name is Edward Davis.

I am the director of rates for Eversource Energy. And I'm here on behalf of the utilities and the Utility Coalition to provide support for the proposal that we put before the Commission.
Q. And Mr. Davis, you filed both direct testimony on your own, and you were part of a group of three that filed rebuttal testimony; is that correct?
A. (Davis) That's correct.
Q. The direct testimony, your direct testimony, is Exhibit 15, and the rebuttal testimony with Mr. Labrecque [sic] and Mr. Johnson is Exhibit 43. If I were to ask you the questions -- well, first, do you have any corrections or changes to either of those testimonies?
A. (Davis) Yes, I do have one minor correction to Exhibit 15, the direct testimony I submitted.
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And on lines in that direct prefiled --
CHAIRMAN HONIGBERG: Wait, wait. We have a lot of notebooks back here, like 15 inches worth.
(Pause in proceedings)
A. (Davis) Bates Stamp 38. So, on Line 17 of that testimony, the first date appearing on the line is 1996; it should be 1997. That's the correction.
Q. Mr. Davis, with that correction, if I were to ask you the same questions this morning that are contained in both the direct and rebuttal, would your answers be the same?
A. (Davis) Yes.
Q. Do you this morning adopt those two testimonies?
A. (Davis) I do.

MR. SHEEHAN: Mr. Chairman, I move the admission of Exhibit 15, which is Mr. Davis' -- I'm not sure I moved the admission of Mr. Labrecque's, which was 14. And I also move the admission of the joint testimony, which is 43. So, 14, 15 and 43 are the Eversource testimonies.
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CHAIRMAN HONIGBERG: All right.
Without objection, we'll strike the I.D. on those three exhibits, and they are full exhibits.
(Exhibits 14, 15, 43 admitted.)
BY MR. SHEEHAN :
Q. Next, Mr. Meissner, please introduce yourself.
A. (Meissner) My name is Thomas Meissner. I'm chief operating officer of Unitil Corporation and the senior vice-president of Unitil Energy Systems, Inc., where I oversee operations, planning and engineering functions. I am also here today to support the joint utility settlement that has been submitted.
Q. Mr. Meissner, you also filed direct and rebuttal testimony in this matter?
A. Yes, I did.
Q. The direct is Exhibit 8 and the rebuttal is Exhibit 40. Do you have any changes or corrections to those testimonies?
A. (Meissner) I do not.
Q. If I were to ask you those questions today, would your answers be the same?
A. Yes.
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MR. SHEEHAN: Mr. Chairman, I move the admission of Exhibits 8 and $40, \mathrm{Mr}$. Meissner's testimonies.

CHAIRMAN HONIGBERG: Without objection, we'll strike the I.D. on those two exhibits, and they are full exhibits.
(Exhibits 8, 40 admitted.)
MR. SHEEHAN: Also at this time, Mr . Chairman, Unitil also filed the testimony of Mr. Overcast, which is Exhibit 9. His attachments are 10 and 11. His supplemental direct is 12, and supplemental attachments are 13. And his rebuttal testimony is 39. As everyone knows, he is not present today. The mechanism that has been discussed and agreed to admit his testimony this morning is to file an affidavit. And Mr. Licata has the appropriate original and copies of that affidavit. And with that filing, we move the admission of Mr. Overcast's testimony, which is 9, 10, 11, 12, 13 and 39.

CHAIRMAN HONIGBERG: Without objection, I.D. is struck, and those are admitted.
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(Exhibits 9, 10, 11, 12, 13, 39 admitted.)

BY MR. SHEEHAN:
Q. Last, but certainly not least, Mr. Brown.
A. (Brown) My name is Ashley Brown, and I'm here testifying on behalf of Unitil.
Q. These microphones, you need to get really close as you speak.
A. (Brown) Yeah, my name is Ashley Brown, and I'm here testifying on behalf of Unitil.
Q. And Mr. Brown, you also filed rebuttal testimony in this matter; is that correct?
A. That is correct.
Q. And that has been marked as Exhibit 41, with attachments being Exhibit 42. Do you have any corrections to your testimony?
A. (Brown) I do not.
Q. And if I were to ask you questions in that testimony this morning, would your answers be the same?
A. (Brown) It would.
Q. And do you adopt your testimony here this morning?
A. (Brown) Correct.
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MR. SHEEHAN: Mr. Chairman, I move the admission of Exhibits 41 and 42.

CHAIRMAN HONIGBERG: Without objection, I.D. will be struck and those are full exhibits.
(Exhibit 41, 42 admitted.)
CHAIRMAN HONIGBERG: Mr. Sheehan, it may be just my notes keeping up. But when you were speaking with Mr. Harrington, did you deal with 63 and 64?

MR. SHEEHAN: I did mention them, yes.

CHAIRMAN HONIGBERG: Okay. Everybody else seemed to get it. I missed it.

MR. SHEEHAN: And I'm not sure I did it either, but I'll go back to Ms. Tebbetts.

BY MR. SHEEHAN :
Q. The settlement agreement, which is Exhibit 5, and the technical statement, is something that you prepared along with Mr. Labrecque and Mr. Debski of Unitil; correct?
A. (Tebbetts) Yes.
Q. And those documents -- the settlement agreement is what this group asked the Commission to
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approve, and the technical statement is the statement in support of the settlement agreement; is that correct?
A. (Tebbetts) Yes.

MR. SHEEHAN: I would move the admission of 5 and 6.

CHAIRMAN HONIGBERG: Without objection, we'll strick the I.D. on those two and they're full exhibits.
(Exhibit 5, 6 admitted.)
MR. SHEEHAN: Thank you.
Mr. Chairman, the plan is to have Ms. Tebbetts walk through the settlement agreement and explain its terms, to make sure the room understands our proposal. And then we will go through the witnesses in the order I introduced them, and they will each give a brief statement in support of and contrasting our settlement with the competing settlement. Thank you.

CHAIRMAN HONIGBERG: Have at it, Ms. Tebbetts.
A. (Tebbetts) Thank you. Good morning. The first piece that I'm going to talk about are the
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terms of the agreement.
Section 1 deals with the proposed start date for both large, over 100 kW projects, and small projects, which is equal to and under 100 kW, that reserve a place in the queue, consistent with the requirements in Docket DE 15-271. After June 30th, 2017, they'll be moved to the proposed tariff once the utilities are able to bill these changes that we've proposed in our settlement. Until that time, these customers will be billed under the net metering tariff that's in effect as of March 2nd, 2017.

Section 2 is Interconnection Application Fees. The proposed tariff will not change the application fee for large projects or small projects, and in the future, the utilities will file with the Commission for approval of a different application fee that is based on demonstrated costs.

Section 3 is the Customer Charge. The customer charge for each of the utilities won't change as a result of the approval or implementation of this tariff. In the future,
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the utilities may request Commission approval for supplemental customer charge applicable to net-metered customers based on demonstrated incremental customer-related costs for metering, billing and interconnection.

CHAIRMAN HONIGBERG: Ms. Tebbetts, slow down just a little bit.
A. (Tebbetts) Section 4 is Rate Design. This tariff will not require, and the parties do not recommend, any changes to the rate design of the utilities. The utilities will apply the prevailing rates, as they maybe amended from time to time.

Section 5 is the Lost Revenue Recovery. Once the tariff is approved, the utilities will be allowed to recover their lost revenues using the mechanism and calculations approved in Order No. 25,991, dated February 21, 2017. The parties agree that this mechanism is appropriate for the recovery of lost revenues. Parties also agree that they will support and not oppose any utility requests made before December 31st, 2020, to recover lost revenues consistent with that mechanism.
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Section 6, the Applicability of Various Charges. For both the large and small projects, net-metered customers will be billed all charges applicable to the relevant rate class for which the electricity is imported from the grid. For electricity exported, net-metered customers will not receive credit for distribution service or for any rate element deemed to be non-bypassable, such as stranded cost charge, system benefit charge, electricity consumption tax, storm recovery adjustment, and the non-transmission portion of Unitil's external delivery charge.

Section 7 is the Commodity Credit for Kilowatt Hours Exported to the Grid. For small and large projects, all net-metered customers taking default service will receive credit for exported electricity at the default service rate. Customers taking service from a third-party supplier will receive credit for those exports on the energy service portion of their bill as calculated by PUC 903.02(I), which is basically the avoided cost calculations annually calculated by the
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Commission. Consistent with the current existing tariffs, small and large group host projects, both the host customer and all members, must be default energy service customers of the interconnecting distribution utility. So this is not a change.

The parties recommend that the Commission investigate requiring competitive suppliers to notify their customers that becoming a net-metered customer will affect the terms under which they participate in net metering, such as the fact that they are going to be paid the avoided costs calculated rate rather than the energy service rate or any other rate.

For large projects, the net-metered customer must consume on site and behind the meter at least 20 percent of the actual or estimated generation from the large project on an annual basis to qualify for the tariff that we've proposed. They may take energy service from a competitive supplier, which will be responsible for any export terms and credits. That is also the case today.

Should the customer not consume at least
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20 percent of the large project generation on site, the large project will be required to register as a group host.

Section 8, Transition Credit for Kilowatt Hours Exported to the Grid. For small projects, net-metered customers will receive a credit equal to a hundred percent of the volumetric transmission charge of the customer's applicable rate class for electricity exported to the utility, and large projects will not receive such credit, as is the case under current net metering rules as well.

Section 9, Renewable Energy Certificates.
Customers will own their RECs, with no obligation by the utility to purchase them. Utilities will work with parties on solicitation for a third-party administrator or aggregator for customers who want to participate in the REC market, and utilities or their designee will be the independent monitor. The utilities agree to undertake customer education efforts relating to RECs and to assist in promoting REC participation.
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Section 10, Monetary Credit to Customers and Recovery of Costs. For all projects, any credits relating to the amount of exported electricity will be provided as a credit on a dollar-value basis rather than a per-kilowatt-hour basis on the net-metered customer's bill. These customers may, at their election, convert the bill credit balance to a cash payment upon exiting the net metering program for reasons such as moving or otherwise terminating service, or once a year, each April, they may be provided a bill credit where they can cash it out if the balance is greater than $\$ 100$. Large group hosts will continue to receive a monthly payment check rather than on-bill monetary credit each month as they do today.

The default service or avoided cost credit, if the customer is with a third-party supplier for exported energy, will be recovered through the reconciliation of the default service charge. The total of all kilowatt-hour exports that are credited at default service or avoided cost rates will be applied to reduce
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the utility's ISO-New England wholesale load obligation that is allocated to all suppliers, except for those projects registered with ISO-New England as settlement-only generators. The transmission credit will be recovered through the utility's annual transmission rate reconciliation proceedings. So the current structure of banking will no longer apply to these future -- to this future tariff -- or future customers who come online after the start date.

Section 11 is Grandfathering. Projects that come into the queue after June 30th, 2017, will be grandfathered until December 31st, 2040. For those customers who exit the net metering program prior to that time or elect to go to a new net metering tariff, they will be able to return to a net metering tariff that is available at the time that they decide to return.

Section 12 deals with Data Collection and Studies. So the settling parties agree to a locational value study similar to the Nexant study that was performed in New York and
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referenced in the December 21, 2016 rebuttal testimony of Eversource witnesses, and performed under the supervision of the Commission.

To further review the appropriate compensation for avoided transmission cost allocation, particularly for large projects, the parties have agreed to review by April 30th, 2018, that compensation.

The Commission -- the parties are requesting that the Commission open a proceeding to conduct a value of DER study based on real-time market prices and distribution system needs, in which, 1), they'll differ -- different DER resources at various levels of capacity value will be considered; 2), valuation will be based as closely as possible to real-time prices and near-term marginal costs, with no long-term projections or forecasts to be considered in this study; 3) actual costs to installers and customers for implementing DER resources in New Hampshire are considered; and 4) there are opportunities for public comment prior to the
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study being conducted.
Utilities will also be entitled to timely recovery of those reasonable costs related to the studies and associated data collection efforts.
Q. Ms. Tebbetts, we're running a little tight on time, so why don't you move to the last one, metering, and we'll pick up the pilot task force as questions go along.
A. (Tebbetts) So the last section is Metering. And customer-generators are going to be required to have bidirectional meters. And the customer has the opportunity to get that meter for free, if they so choose. The utility is willing to provide that customer with the production meter if they are willing to put it on the meter box. The utility will then request to recover costs associated the production meter when it files for its annual reconciliation. And by offering the production meter to the customer, it gives them the opportunity to participate in the REC program previously mentioned.
Q. Mr. Harrington.
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A. (Harrington) Thank you. Good morning. I just want to start by mentioning, as I think everybody knows, we're facing a bit of a crisis on the cost of electricity in New Hampshire. We've seen recently SIG Sauer ship 200 jobs to Arkansas. I received a letter a couple weeks ago -- I know, slow, slow, right -- from Wayland Engineering saying that they were planning a major expansion which might be done out of state. And the reasons for these were strictly linked to high electric costs in New Hampshire. And I think going forward on any of these, I'm sure the Commission holds that in high importance, that we need to be doing something about electric rates or we're going to continue to lose jobs like this.

This is a compromised agreement, which means just that. We don't necessarily agree with everything in here, but it is a compromise. And I think it addresses a lot of the issues that need to be done. The major thing here is that it's going to be paying default service rather than LMP -- though we feel LMP would be the more appropriate one.
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But again, it's a compromise, so we do that. And we need to not lose track of what we're dealing with here. Solar power is an intermittent, non-dispatchable, unpredictable and highly volatile source of electricity. There is no way that they have commitments such as a regular generator. They don't have an obligation to produce power in any particular time or face any negative consequences. In fact, they're basically at the whim of the weather. And, you know, the prediction has gotten somewhat better over the years. But, you know, a thunderstorm shows up an hour earlier than predicted and it starts raining heavily, the solar production goes way down. But it takes a good amount of time for the air-conditioning load to drop corresponding to that. So you have to bring on other resources. Normally this involves reserves that have to be there in case the solar cuts out unexpectedly. Again, there's no requirement that the solar produce at any given time.

And also, we have to remember this is a shift, a cost shifting from higher incomes to
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lower incomes. I mean, if you look at this -I made a few calls to solar producers, and they told me that you should have somewhere in the vicinity of $\$ 150-\mathrm{a}-\mathrm{month}$ bill at a minimum or higher in order to make the long-term cost-effectiveness of putting these in, even with all the various tax breaks. A lot of people have lower bills than that. A lot of people live in apartments, they live in mobile homes, they live in condos. They just live in a house that's not large enough to support solar panels, and their rates are going to be higher to support someone who has a very large house, maybe a hot tub and swimming pool and central air. Those are the people with the biggest electric bills that would get the most benefit from net metering.

And as far as one of the main points in here goes, we proposed that we treat the import and export of electricity as two different mechanisms, two different types of commodity, because they are completely different. And I'm not going to go into reading all the details of that, but I think that's a major point to
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recognize what's imported onto a net-metering customer is a different type of product than what they export. One has to be there $24 / 7$ for whatever they want all the time, and the other one can come and go basically as it pleases. There's no requirement, even if it's a bright, sunny afternoon. If someone's inverter breaks, there's nothing that requires a net-metering customer to go out and say, Well, I'll fix that today so I can start producing my electricity again as soon as possible. I'll fix it next week, or, hey, I might not get around to it for another month. But there is absolutely no requirements to do that.

The other thing on here is that we also gave credit to the transmission costs for -and I think this is major concession for the net metering. I think a good case can be made that there's very little transmission costs saved by solar net metering. And we've also seen a lot of statements and studies recently that the load, as we look to the future, is at best leveling off and maybe even going down slightly. And it's really hard to say you're
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going to save money on future transmission costs that aren't required because the load isn't going up. And as long as the load remains stable, there's no driving force to build a lot of new transition.

Additionally, in this settlement agreement we single out solar net metering and give it preferential treatment on transmission costs as compared to other resources -- and by that I mean energy efficiency. A lot of people in the room are familiar with the long battle that NESCOE and NECPUC had with ISO-New England on getting credit for energy efficiency. The region spends about a billion dollars a year of ratepayer money on energy efficiency. And they got that into the future planning of transmission, so that the cost of transmission went down substantially in the 10-year Vermont-New Hampshire plan. Was in the hundreds of millions of dollars of deferred or eliminated cost for transmission because of energy-efficiency programs. But we don't pay any direct payments to energy-efficiency resources for this. They don't get any
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specific credit. They get to take advantage of a lower electric bill like everybody else does, but there's no direct payments for them. And yet, in this case we're saying for net metering we want to give additional payments for transmission savings that may or may not be there. But that's one of the concessions we made as part of this agreement.
Q. Mr. Harrington, it's time to move on to Mr. Labrecque. If you have --
A. (Harrington) No. I just would like to bring up those things in general, that people should keep in mind here what we're doing here in this. And again, this was a settlement agreement that was a compromise. And it's certainly not what we would prefer, but it's probably the best we can get at this time. Thank you.
Q. Thank you. Mr. Labrecque.
A. (Labrecque) Thank you. Good morning, Commissioners. Good morning, everyone. If I can, I'm going to speak very briefly off this one-page supplement that we referred to a few minutes ago.
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To demonstrate the quantities that we're talking about in the two various proposals -MR. HINCHMAN: Is that in the record? CHAIRMAN HONIGBERG: What do you mean?

MR. HINCHMAN: You're talking about the chart; right?

CHAIRMAN HONIGBERG: It's been marked as Exhibit 67 for identification, and he's going to talk about it.

MR. HINCHMAN: So is he building a foundation for admission?

CHAIRMAN HONIGBERG: I don't know. Why don't we find out what he has to say about it.
A. (Labrecque) I've labeled four sections on this graph to try to help people understand the quantities involved. When you put a bidirectional meter on, you have the ability to measure the imported power -- in this case, Sections A1 and A3 -- separately from the exported power -- in this case, Section A4, when the solar is producing more than the customer is consuming. This is merely to point
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out that in the Utility/Consumer proposal, we're going to bill full retail rates for full requirements, retail load-following, PUC-rate-approved structure, and we're going to pay a different quantity for the exported power in Section A4. And in our proposal, it's a compromise. We're suggesting that we would use the default energy rate plus the volumetric transmission rate, despite the fact that this bears no resemblance to full retail, PUC-approved rate structures. It is intermittent, customer-owned, non-dispatchable resource. And that's all I wanted to say about that particular piece of paper.

Yesterday we heard -MS. BIRCHARD: Mr. Chairman, I'm sorry --
(Court Reporter inquiry) CHAIRMAN HONIGBERG: Ms. Birchard. MS. BIRCHARD: Melissa Birchard. Is this not being admitted for the shape of the chart or the data that underlies it? I don't have an understanding of what data underlies it, and that's my concern. If this is being
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admitted as a visual, you know, intended for us to look at and understand that the data is meaningful, if so, where does the data come from?
A. (Labrecque) I can describe the data, if that's what you'd like me to do.

CHAIRMAN HONIGBERG: Hang on just one second. Is there a ground rule about one attorney per side lodging objections, or is it going to be a free-for-all and any of the lawyers on that side is going to be allowed to speak to this? I thought I was hearing from Mr. Hinchman.

Ms. Birchard, what's the
arrangement here?
MS. BIRCHARD: The arrangement, to my understanding, was that there was some discussion as to Acadia being somewhat independent, so we have agreed to the --

CHAIRMAN HONIGBERG: Make sure it's on and you're close to it, please.

MS. BIRCHARD: So my understanding is that Acadia and CLF are acting in a combined manner.
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CHAIRMAN HONIGBERG: All right.
Thank you. It's not really appropriate for you to start asking this witness questions. If you want to object to what's going on, you address that to us and we'll deal with it.

MS. BIRCHARD: Certainly. And I was attempting to do so. I'm sorry I'm hiding behind someone.

CHAIRMAN HONIGBERG: And I wasn't even sure you were actually here for a while, then I realized you were hiding behind the row in front of you.

MS. BIRCHARD: I apologize.
CHAIRMAN HONIGBERG: So I take it you are objecting to further discussion about this unless there's some explanation of what the numbers are? What I heard Mr. Labrecque just talk about was the shape.

Really, in large measure, I'm talking to Mr. Sheehan mostly right now. This was being used as a chalk demonstration type of thing that he could have drawn up and said, well, these four sections of this curve are going to be treated in different ways under our
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approach.
MR. SHEEHAN: I believe that to be the case, and I believe Mr. Labrecque said, "I'm done with that piece of paper for now." And the questions that the CLF and others may have are cross-examination questions that should be reserved then. And at the end of the presentation today, $I$ will move the admission of that document again. And based on that cross-examination and what use Mr. Labrecque intended for that document, you can then make a ruling as to whether it's admissible or not. CHAIRMAN HONIGBERG: Well, I'd be concerned, if I were you, about the numbers that appear on here, because they may or may not mean anything. He didn't say anything about them. And if they choose not to ask anything about them, those -- I don't -- I mean, $I$ understand the rules evidence don't apply. We can take it in and take it for what it's worth. But it seems to be just a little bit of the kind of thing he could draw up on a white board to show a demonstration. I'm not sure what significance of the numbers are
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unless he testifies about them.
MR. SHEEHAN: And he has testified, well, to the extent that these presentations are testimony. If at the end of this proceeding there's still a question of what this document means, we have an opportunity for redirect, and we will make sure we get the sufficient foundation to get this document into evidence.

CHAIRMAN HONIGBERG: He said he's done with it, so I'm not sure there's really much for you all to do. It's not being moved at this time, and I think at this point it just feels like a chalk to me.

All right. Mr. Labrecque, you can continue.
A. (Labrecque) Thank you. Yesterday we heard repeatedly about the inability of solar providers to model the arrangement, the netting arrangement that the Utility Coalition has put forth. And it seems that only full retail monthly netting is a concept that they'd be able to sell. On the contrary, I think these are highly sophisticated technology companies
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that are fully capable of modeling. If they would spend a little time with each customer perhaps getting to understand the load profile of the customer, they could install load-monitoring equipment for a period of weeks or months in order to get a better handle on the type of load profile of the customer that they are marketing to. They can take that opportunity to build a stronger relationship with their customer, create a workable model of the extent to which the solar power will be consumed internally by that customer rather than exported. That would also give them the opportunity to discuss with the customer additional products and services, such as battery storage and load-control technologies that might be used to ensure that a higher proportion of the solar power was matched with internal consumption.

Lastly, $I$ just want to mention that in this docket there's been very little discussion about the concepts of reasonable opportunities to invest or fair compensation, which was part of the purpose statement of House Bill 1116.
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Yesterday there was some attempt to talk about PPA pricing models and how it is that solar companies put together their pricing structures, but the witnesses were successful in avoiding that discussion. I think this -it will be difficult for us to truly get a handle on what is the appropriate and fair level of compensation for distributed generation without an exploration of these topics. That's why the Utility/Consumer Coalition suggested value of DER study. We have suggested that these types of topics be addressed. Thank you.
Q. Mr. Davis.
A. (Davis) Good morning. I'm going to just build briefly off what my colleague said and have talked to so far.

In our proposal, you know, we provide a simple, transparent and easy-to-understand alternative to net metering. We are seeking to, recognizing it's a settlement, to move toward equitable cost recovery and rate structures. And our proposal provides a framework to make some corrections, but also,
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more importantly, where we can measure, charge and compensate for actual transactions that occur in real time every month. The transparency particularly afforded by separately measuring the imports and exports and addressing the current rate structures and the appropriate rate structures and cost recovery, as well as whatever the basis for compensation is, but transparent compensation where we do not promulgate net metering, but instead have very clear measurements of what the actual electric service being provided is in both directions. We don't necessarily presume so-called "value of solar pricing" is a foregone next step, but we have put forth pilots, research in other parts of our proposal to examine that. Meanwhile, having a framework in place that we can practically implement is, in our mind and reflected in our proposal, a reasonable and very well understood or easy-to-understand next step. We factored in many practical considerations, particularly on the metering and billing side. And how we can make this work is clearly one of the biggest
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questions that is not often answered or not addressed when looking at all the conceptual and other frameworks and policy directions that have come up in this docket and that we've all had to work with extensively as we try to see what a proper alternative might be, both in the short term and long term. We think our proposal addresses both the short term and provides a platform going forward for fair and equitable rates going forward.

Our focus is on the customer and their electric service needs and the use that each customer requires; it's as different as each customer. Ratemaking in a regulated environment for certain aspects of service are clearly part of the consideration. We also recognize we're in a mixed mode of both competitive and regulated pricing and electric transactions. We think our framework in both the delivery and supply aspects of service provides a very clear, and as I said earlier, transparent basis for setting proper rates, for providing better cost recovery than net metering would provide, and for addressing a
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number of issues that are reflected in our proposal. We address a number of other issues that are policy-related. And we think we have solutions, including cost shifting and renewable energy certificate production through our lost revenue mechanism and our proposal for having production meters. And working off of that, that integrates and fits well within the overall structure that we propose and is reflected in our proposal.
Q. Mr. Meissner.
A. (Meissner) Good morning. To ensure there's enough time for Mr. Brown, I'll be very brief. But I just wanted to talk briefly about a couple of the differences between the two settlement proposals and how they might be seen differently by the utilities, in terms of their impact on our operations, that being the netting period and also the credit for distribution for exports of our electricity.

In terms of netting, I think the Utility proposal, which is to install two-channel kilowatt-hour meters, has been characterized as "instantaneous netting," which I believe is a
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term we all prefer not to use. But there was a great deal of testimony that indicated it was very complicated. I think there was confusion between the meters that we would use and interval meters. I heard at one point 31 million data points. And just to be clear, the metering that we would be using is identical to the metering that would be used under the other proposal. It is simply a standard kilowatt-hour meter with two channels, one measuring import and one measuring outport -export. So at the end of the month, we would essentially have two pieces of information where we now have one. We would have imports and we would have exports instead of the net of the two.

In terms of the netting period, instantaneous netting was described as "bad policy," "bad pricing signals" that would encourage behaviors that would be detrimental to the distribution system. In fact, instantaneous netting is far preferable, from the standpoint of distribution planning, because we would prefer the customers
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right-size their generation equipment and then use as much of their own production as possible on site rather than exporting uncontrolled, intermittent and non-dispatchable generation onto the distribution system.

In contrast, the proposal from the Coalition would be monthly netting. And I believe there was some suggestion that it would send price signals encouraging conservation behaviors and shifting of consumption to off-peak hours. In fact, monthly netting sends no price signals. Customers are not incented to change their behaviors at all. Instead, it enables customers to continue to consume electricity at their own convenience, as they do now.

From a policy standpoint, though, I would make the argument that one clear policy implication is that monthly netting will act as a deterrent to on-site energy storage, as there is now no economic incentive for customers to install energy storage behind the meter and to manage their own consumption.

In terms of the distribution charge,
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there's been a lot of testimony suggesting that there's no data in the record to support the lack of credit for exported electricity, in terms of its value to the distribution system. I would argue differently. I think during the course of this proceeding we have provided extensive information, including multi-year planning studies, multi-year circuit analysis. We've provided low profile showing coincidence with solar output. We've provided all of our multi-year capital budgets and investment plans. And I think, taken together when viewing that information, it was clear that there was little or no short-term benefit to the distribution system from these DER resources. And even over the longer term there was very minimal opportunity for solar DER to offset future investments by the electric utilities. So I just wanted to make those points. With regard to the Coalition settlement proposal, I would argue that there's no data underlying the 50-percent and 75-percent credit that has been proposed after monthly netting.
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With that, I'll turn it over to Mr. Brown.
A. (Brown) Thank you. I wanted to do, really, two things and try to do it as quickly as possible. One is to go through what $I$ think are the very significant concessions that have been made by the utilities in offering the settlement proposal, and secondly, to talk about the positive aspects of what's being proposed. But let me put the concessions in context.

Many of these concessions are not simply concessions by the utilities, they are simply acquiescence to the shifting of costs from the people that cause them to be incurred -- in this case, the solar customers that are not solar customers who did not cause them to be incurred. And I'll go through those concessions specifically related to that and then go through the other concessions that are important.

No. 1, there is an agreement not to charge intermittent solar customers for the fixed costs of transmission and generation which they caused the system to incur, but for which they do not pay when they're generating energy with
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their solar panels, nor is there any -- and then there's also an agreement not to pass on demand charges that similarly are incurred, regardless of whether a customer has a solar panel or not. So that's a very significant economic concession. And it also largely forgives the fact that solar panels on rooftops are not only intermittent, they're a double-contingency intermittency. As Mr. Harrington said, they're dependent on the weather, but they're also dependent on the use of the customer premises. If the customer is using everything, it's not available to the system. So this is unlike wholesale renewable. This is a double-contingency intermittency.

Let me go through more rapidly some of the other concessions. Grandfathering existing units for more customers than are currently on the books, or than the statute actually provides, I should say, paying the default rate for export as opposed to LMP, that's a significant economic concession.

Mr. Harrington spoke to that, and I agree with him. There's no change in the customer charge
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for now, even though I think there are justifications for it. The agreement to do a value study subsequently after this proceeding, no change in rate design for solar customers, this has been a controversy for a lot of jurisdictions, but the utilities have agreed not to do that, at least for now. Customers get to keep the RECs. And that's interesting because, not only do the customers keep the -the customers who don't get to keep their RECs under this plan are those that lease their units, and those customers -- those RECs belong to the solar companies. In the case of the customers have their RECs and purchase the units, they get to keep the RECs. The incremental -- the change here is highly incremental. I mean, I've seen these cases in many other states where the changes are far more significant than they are here. These are very modest changes being proposed in this proposed settlement. It helps also -- the utilities have agreed to assist customers in managing their RECs, which is also important because it needs some degree of sophistication
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to participate meaningfully in that market. It overlooks the fact -- and this is not insignificant -- that solar preferences, distributed solar preferences, preferential pricing as opposed to other renewable energy resources, actually drives down the carbon price in the RGGI market, and by doing so decreases the cost of reducing carbon for everybody in New England, or from not just the New England region, but the entire RGGI region, including, of course, New Hampshire and the rest of New England.
(Court Reporter inquiry)
A. (Brown) The last two concessions that are important is that the bidirectional meters are being installed at no cost to the customer, and also that it overlooks the socially regressive effects that, or the remaining socially regressive effects that are only partially obviated by this proposed settlement. In many respects, what net metering has been is kind of a Robin Hood in reverse. This modifies it a bit, but not entirely. And there's an agreement not to entirely try to get rid of the
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socially regressive effect at this point. Apart from the concessions, there's six positive elements of what's being proposed that's important. One is the term we use or don't use, but the term in this case,
"instantaneous netting," is actually incremental, a modest but incremental movement towards the kind of time-sensitive pricing that the solar people claim they support. And this is, in fact, moving in that direction. It moves away from a flat, meaningless price to a price that has a little more meaning. Not as much meaning as LMP, but it does have more meaning. It's a real price signal, and it actually fits very well with intermittent resources because it actually matches not quite in real time but comes much closer to that in measuring the output of an intermittent resource.

It also adds an element that's called for in House Bill 1116 of transparency in pricing. Net metering is almost the opposite of transparency pricing. In fact, it is the opposite of transparency pricing.
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Also, and this is very significant, because what this actually -- this proposed settlement helps both the solar and non-solar customers because it's a step in the direction of allowing the declining costs, a greater share of the declining costs of solar panels to be passed on to customers. This is a critical point. Solar costs have declined dramatically in recent years. Net metering is a system by which those price signals, or those cost declines are hidden from customers, solar and non-solar, except to the limited extent that there's some competition among solar providers. But since the price is so arbitrarily high, the value of that competition is severely diminished. This is in fact a major move -- a significant move, although not as dramatic as one could argue could be made, in allowing the customers to see benefits of declining costs. That's important. In fact, it actually helps solar in the long run for that reason.

It also encourages more customers to be self-sufficient and effectively helps to shift load off peak. Most solar generate -- some of
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the solar testimony we've seen actually argues that, well, the effect of shifting of this proposal would be to cause customers to use their appliances more when their solar panels are generating. Well, in fact, their solar panels, for the most part in New England and in New Hampshire, are generating off peak. So they shift to when solar panels are producing. That's not an adverse thing. That's actually a good signal. So it's actually encouraging more customer self-sufficiency. And as was pointed out earlier, that also allows customers to use other things, like load management, like batteries and other kinds of storage to move in a more effective use of the solar panels much more efficiently.

It's also a step, only a modest step, but it is a step towards market pricing, which is what we have -- which I think is a desirable result.

And the last two items are it's an early start and a modest -- and I emphasize "modest start" on trying to get the prices right and send customers the right price signals.
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And I mentioned this, but I want to mention it again, and this is my final point. It is a powerful incentive to enhance the value of solar, the worth of solar to customers, by encouraging the use of batteries, load management and other things that not only supplement solar power, but enhance its worth to the customer. Thank you.

MR. SHEEHAN: Mr. Chairman, the witnesses are available for cross-examination. CHAIRMAN HONIGBERG: All right. Who's up first? Ms. Birchard.

MS. BIRCHARD: Thank you. I'm grateful for the opportunity to examine the witness first today, but I'm also cognizant of the fact that there are many people who also are waiting to speak with the witnesses and that there are many witnesses on the panel. So I am intending to be as quick as $I$ can, and my goal will be to, you know, specify to whom my questions are directed. If I fail to be specific, please go ahead and let me know and ask me to whom I'm intending to direct my question.
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## CROSS-EXAMINATION

BY MS. BIRCHARD:
Q. Thank you for taking the panel today and for taking my questions.

Mr. Labrecque, if I could start with you back in the corner. May we first turn to your direct prefiled testimony for a moment. I believe it's been marked Exhibit No. 14 at this point. And I'd just like to confirm a few details from that testimony. Do you have that there?
A. (Labrecque) I do.
Q. Okay. So at the bottom of Page 15, Line 12 of your testimony, you state that intermittent power resources are, and I'm quoting now, "are capable of providing wholesale energy and capacity, both of which are compensated by ISO-New England." Can you confirm that's correct, that that's what it says there?
A. (Labrecque) Yes.
Q. Thank you. And then moving on to the top of Page 16, you state that, "While most net-metered projects are very small scale (for example, an 8-kilowatt rooftop solar project),
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they provide wholesale products (energy and capacity) that are identical to those provided by large central station generation resources." Can you also confirm that's what you say in your testimony there?
A. (Labrecque) Could you just give me the page again? Did you say top of 16 ?
Q. Top of 16. Is your pagination the same there?
A. (Labrecque) Unfortunately, I've got probably the incorrect pagination. Should I be in the binder? Is that...
Q. It may have been repaginated by Eversource. CHAIRMAN HONIGBERG: In the version that we have, what Ms. Birchard just read started at the bottom of 15 and continued on to the top of 16.
A. (Labrecque) Ah, sorry. I got it.

BY MS. BIRCHARD:
Q. Okay. Great. Is that consistent with your version, Mr. Labrecque?
A. (Labrecque) Yeah, and that is consistent.
Q. Mr. Davis, ISO-New England is the Independent System Operator of the New England electricity grid; is that correct?
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A. (Davis) That's my understanding.
Q. Just getting the basics.

Are you generally aware that ISO-New England produces forecasts that concern the regional electric system, including load forecasts?
A. (Davis) I recall there's an annual forecast produced, $I$ believe in the second quarter of the year.
Q. Thank you. And these are typically referred to as "CELT" reports; is that right?
A. (Davis) Yes.
Q. Does that ring a bell?
A. Otherwise coined the "CELT" report, yes.
(Court Reporter inquiry)
MS. BIRCHARD: C-E-L-T, for Capacity
Energy Loads and Transmission.
We have some copies of a couple of these reports that I'd like to bring to your attention, if I may. The first one is not in the binder, but I believe there are copies available. So if I may hand those out now. It's the "Draft 2016 CELT ISO-New England

Annual Energy and Summer Peak Forecast,"
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produced by ISO-New England's Planning Advisory Committee.

CHAIRMAN HONIGBERG: Ms. Birchard, while this is happening, why don't you ask him something else while they're collecting the copies and handing them out, rather than us sitting here for three minutes while this happens.

MR. BIRCHARD: I apologize, but this is the subject of my cross-examination for Mr. Davis.

CHAIRMAN HONIGBERG: Let's go off the record for a minute.
(Discussion off the record.)
CHAIRMAN HONIGBERG: The next exhibit is 68 , and that's what has been distributed.

MR. WIESNER: Is that correct, Mr -chairman? The affidavit from Overcast --

CHAIRMAN HONIGBERG: No one's said anything about it. It was just, quote, unquote, filed. As far as -- I'm not sure. No one asked. So I'm assuming that it's just going to become part of the docket associated with that testimony. We can mark it or not.
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Do you think that's advisable?
MR. WIESNER: I think that would be my preference, at least -- I don't know if others agree -- that that be marked as an exhibit.

CHAIRMAN HONIGBERG: Mr. Sheehan.
MR. SHEEHAN: I have no objection to that.
(Exhibit 68 marked for identification.)
CHAIRMAN HONIGBERG: All right. So that answers that question that we were just musing about up here. So the affidavit that Mr. Sheehan presented for -- which witness, Mr. Sheehan?

MR. SHEEHAN: Mr. Overcast.
CHAIRMAN HONIGBERG: -- for Mr.
Overcast is going to be 68, just because we're not in order.

MR. FOSSUM: Mr. Chairman, before you continue --

CHAIRMAN HONIGBERG: Mr. Fossum, yes.
MR. FOSSUM: We had filed an
affidavit on Friday for Russell Johnson.
Should that -- it's in the Commission's docket
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book. It was filed. Since we're making them exhibits, should that become an exhibit as well?

CHAIRMAN HONIGBERG: It seems like that would be the consistent way to treat that. Again, I'm not entirely sure that it's necessary. But if that's the practice that we're going to follow for this proceeding, that's fine with me. So we're going to make Mr. Johnson's -- is that what you just said Mr. Fossum?

MR. FOSSUM: Yes.
CHAIRMAN HONIGBERG: Mr. Johnson's affidavit will be 69.
(Exhibit 69 marked for identification.)
(Exhibit 70 marked for identification.)
CHAIRMAN HONIGBERG: All right. Ms.
Birchard, having completely broken your flow...

MS. BIRCHARD: Can you hear me better now? Yes? Okay.

BY MS. BIRCHARD:
Q. Okay. So, Mr. Davis, do you now have the exhibit I'm talking about?
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A. (Davis) I have the Draft 2016 CELT ISO-New England Annual Energy and Summer Peak Forecast --
Q. Great.
A. (Davis) -- Exhibit No. 68.

CHAIRMAN HONIGBERG: I think it's actually 70.

MS. BIRCHARD: Exhibit 70. Thank you.

BY MS. BIRCHARD:
Q. Would you do me the favor of turning to Page 31.
A. (Davis) I am at Page 31.
Q. Thank you. Can you read the header at the top of that page?
A. (Davis) I can. "Draft 2016 CELT ISO-New England Annual Energy Forecast in Gigawatt Hours."
Q. Thank you. And this is a graph of the annual forecast energy needs of ISO-New England region in gigawatt hours for the years 2016 through 2025; is that correct? You can see the years at the bottom of the page.
A. (Davis) I'll take your word that that's what
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this is.
Q. Can you tell me from this page what the blue, yellow and red lines are meant to describe? They are indicated at the bottom of the page in blue -- excuse me -- blue, red and black lines. That's what we've got on this.
A. (Davis) The labels state that the blue line is -- or show that the blue line is gross; the red line says "Net BTM Solar PV," and the black line represents "Net BTM Solar PV and Passive DR."
Q. Thank you. To be clear, "gross" is gross. "Net BTM solar PV" refers to net behind the meter solar photovoltaic; is that correct?
A. (Davis) Well, I haven't had a chance to review this report and the definitional terms. For discussion, we can assume that "gross," my first initial reaction or interpretation is that would be gross production, that "BTM" is behind the meter. I'm not sure what "net" means in this context, but it's behind the meter something. And there's no units on the -- well, I assume these are all gigawatt hours. Are they gigawatt hours?
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Q. That's right, yeah. And "solar PV" means -(Court Reporter inquiry)
A. (Davis) And the black, initially I'm going to interpret that represents solar PV behind the meter net and passive demand response.
Q. That's right, yes. Would that be --
A. (Davis) Subject to being able to confirm what these mean, that's my initial interpretation of what these might represent.
Q. Subject to check. Thank you very much.

Looking at the graph, we see the blue line, which is gross, at the top; we see a red line below, which is, as you said, net behind the meter solar photovoltaic; and at the bottom we see the black line with net behind the meter solar photovoltaic and passive demand response. Is that your reading of this graph?
A. (Davis) That's what it appears to indicate.
Q. And from your reading of this graph, does it indicate that behind the meter solar photovoltaic reduces the load demand, the load needs for the region?
A. (Davis) I'm not sure I can draw that conclusion.
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Q. What additional information would you require? Perhaps we can glean it from the rest of the report.
A. (Davis) Well, I don't know what you're saying "reduction" is relative to in your question.
Q. Correct. So, the blue line is higher than the red line. If the blue line is gross and the red line is net behind the meter solar photovoltaic, then would that tend to indicate to you on reading this graph that net behind the meter -- solar photovoltaic indicates that when you subtract behind the meter photovoltaic from the gross, you have a reduced load?
A. (Davis) I would interpret this as aggregated annual kilowatt hours, or gigawatt hours in this case --
Q. Right, gigawatt hour.
A. -- which on an energy basis this appears to indicate that the red line is a reduction of what the load otherwise would be, but for solar production behind the meter.
Q. Thank you. Thank you.

Moving on, I would like to introduce another exhibit, which is in the exhibit binder
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that the Energy Future Coalition has provided and that is marked as Energy Future Coalition Exhibit No. 179.

CHAIRMAN HONIGBERG: Off the record.
(Discussion off the record)
CHAIRMAN HONIGBERG: So we're marking this next document as Exhibit 71.
(Exhibit 71 marked for identification.) MS. BIRCHARD: Thank you.

BY MS. BIRCHARD:
Q. Mr. Davis, do you have Exhibit 71 before you?
A. (Davis) I apologize. Trying to get organized on the document handed out. Is this entire exhibit what you referred to as Exhibit 71?
Q. There is one exhibit within that marked "179."
A. (Davis) I have 179 within the book.
Q. Excellent. Okay.

CHAIRMAN HONIGBERG: Off the record.
(Discussion off the record)
CHAIRMAN HONIGBERG: Now we're back on the record.

MS. BIRCHARD: Thank you.
BY MS. BIRCHARD :
Q. Mr. Davis, turning to the first page of this
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report, I'll go ahead and read the front. And you can correct me if I'm wrong. "Draft 2017 CELT ISO-New England Annual Energy and Summer Peak Forecast," prepared by ISO-New England and published on March 22nd, 2017. Is that what the front page reads?
A. (Davis) Yes.
Q. Thank you.

Would you please turn to Page 9 of the report. Mr. Davis, would you mind taking a moment to read over this page.
A. (Davis) Page 9?
Q. Correct. At the top it should read "2016 Summer Seasonal Peak - Friday, August 12, 2016. Observed Load vs. 2016 CELT Forecast." (Witness reviews document.)
A. (Davis) Okay. I read it.
Q. Thank you.
A. (Davis) You're welcome.
Q. This references the peak day, peak load day for ISO-New England in summer 2016; is that correct?
A. (Davis) Yes, that's what it says.
Q. And "Observed Load versus 2016 CELT Forecast"
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refers to the actual observed load that occurred on that peak day in 2016, as opposed to the forecast that was made prior to that date; is that correct?
A. (Davis) I'll take it on its face that that's the case, particularly given this is a draft report.
Q. Thank you. Under the second bullet, after the first comma, it reads, "The observed system peak load on August 12 th was about 1,100 megawatts lower than the 2016 CELT 50/50 summer load forecast predominantly due to three factors." Have I got that right, Mr. Davis?
A. (Davis) That's what it says.
Q. And underneath that bullet there are three numbered items, each of which is one of the factors that predominantly explained why ISO-New England's 2016 system peak load was, in fact, unexpectedly low -- is that correct -from your reading of the page?
A. (Davis) That's your interpretation. I would say that's probably consistent.
Q. That's consistent with your interpretation as well?
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A. (Davis) Well, again, $I$ haven't had a chance to study this. But my interpretation of what's stated in this second major bullet, that seems to be reasonable.
Q. So the second bullet says, "Despite the [relatively] severe weather, the observed system peak on August 12th was about 1,100" -CHAIRMAN HONIGBERG: I think you already read that into the record.

BY MS. BIRCHARD:
Q. And then it lists three items.

CHAIRMAN HONIGBERG: And you're not going to read those into the record, are you? MS. BIRCHARD: No, but I am going to ask Mr. Davis to read No. 3 into the record, if he wouldn't mind.
A. (Davis) I can do that. No. 3 states --

CHAIRMAN HONIGBERG: Hang on. Mr.
Epler. Why don't you speak into the microphone so everybody can hear here you.

MR. EPLER: Yes, I mentioned yesterday that one of the Unitil's witnesses has a time constraint. And so the point I make, though, is a general one. If we're
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already putting this exhibit in the record, I don't think we need to have witnesses read what's already in the record. So I would suggest that we could speed things up. And this is generally. I'm not trying to pick out this particular counsel. We might be able to speed things up. If we're introducing exhibits, we don't necessarily have to have them read. We can just refer to the page and state "on such-and-such a page."

MS. BIRCHARD: I appreciate that. I would say that I'm almost done with this line of questioning. And our instructions prior to the hearing were to reference any exhibits in hearing if we intend to have them admitted.

CHAIRMAN HONIGBERG: I don't disagree with that, Ms. Birchard. I think you have to use your judgment as to the best usage of your time. And if you believe that it's best to read and then have the witness read, that's entirely up to you. Whether you need to do that, you might want to confer with others as to whether they also agree with you that that's the best use of your time.
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A. (Davis) I am at Page 32.
Q. Okay. At the top of the page it says "Draft 12th CELT ISO-New England Energy Forecast." And this is parallel to the Draft 2016 report that we already looked at. It shows a blue line for gross, a yellow line for net behind the meter photovoltaic, and a red line for net behind the meter photovoltaic and passive demand response; is that correct?
A. (Davis) Very similar.
Q. So this would appear to be the same forecast for the subsequent year; is that correct?
A. (Davis) I apologize. Could you please repeat the question?
Q. This would appear to be the same type of forecast for subsequent years. So, here at the bottom says "2017 through 2026," whereas the Draft 2016 report said "2016 through 2025"; correct?
A. (Davis) They do appear to be the same type.
Q. And the yellow line indicates that behind the meter photovoltaic reduces load in ISO-New England; is that correct?
A. (Davis) consistent with what we described in
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the 2016 draft chart, yes.
Q. Thank you, Mr. Davis.

Mr. Labrecque, if I may turn again to you and also, again, to your direct testimony. So hopefully you still have that before you.

On my Page 24 it states, and I quote, "There is an uncertain contribution of distributed generation to peak reduction." Does that appear in your copy as well?
A. (Labrecque) What line are you at? I see it. Around Line 5 and 6. "Hence, there is an uncertain contribution of such DG generation to peak reduction."
Q. Thank you. In order to reduce the peak loads on the distribution equipment, distributed solar facilities would need to generate some energy at that time; is that accurate?
A. (Labrecque) Say that again, please?
Q. In order to reduce the peak loads on the distribution equipment, distributed solar facilities would need to generate some energy at those times; is that accurate?
A. (Labrecque) Yes.
Q. And if the solar PV doesn't generate at the
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times that equipment peaks, then it won't help relieve loads on equipment; is that accurate?
A. (Labrecque) Yes.
Q. Returning to your testimony at Page 24, you state that "There is an uncertain contribution of distributed generation to peak reduction." And for support of this conclusion, you state, and I'm also reading from Page 24 now, beginning quote: "During the summer, peak loads generally occur in the 5 to 8 p.m. time period. Circuits with higher concentrations of commercial load peak earlier, and circuits serving primarily residential customers peak later. Solar generation begins to wane prior to this peak, creating a mismatch between their generation and system needs." Did I read that correctly?
A. (Labrecque) You did.
Q. Okay. And for context, when you refer to "system" in this passage, you're talking specifically about Eversource's distribution system in New Hampshire; correct?
A. (Labrecque) Yes.
Q. Mr. Labrecque, today is the seventh day of
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spring. The sun is going to set somewhat after 7 p.m. And by July 4th, when we're setting off fireworks, it will be setting another hour and a half later. But to be clear, when you say "solar generation begins to wane," what you're saying is that there isn't as much generation at 5, 6 or 7 p.m. as there is from a solar facility at, say, noon, not that solar PVs cease to produce before 7 p.m.; is that correct?
A. (Labrecque) Today, it's doing very little, given the cloud cover. But, yeah, if you're just looking at the 24 hours of the day, yeah, it begins to wane prior to our peak. And depending upon the cloud cover, it's going to be at some reduced level relative to the peak production level of the system. And hour by hour, month by month, you know, that fraction of the full nameplate capacity is volatile.
Q. Mr. Labrecque, you stated in your testimony that peak loads generally occur in the 5 to 8 p.m. time period as you read earlier.

Mr. Chernick, in his reply testimony on behalf of CLF, determined that the data
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Eversource provided in response to a data request shows that the majority of Eversource's summer substation peak falls in the hours of noon to 5 , with no summer substation peaks apparent in the hour ending at 8 p.m. Are you aware of that? Did you read Mr. Chernick's testimony analyzing your assertion and the data underlying it?
A. (Labrecque) I don't recall reading that particular statement.
Q. Okay. Did you dispute or seek to correct Mr . Chernick's characterization of the data that you provided regarding your substation peaks?
A. (Labrecque) I don't recall whether we did or whether we didn't.
Q. Thank you, Mr. Labrecque.

Ms. Tebbetts, I have just a few questions that I'd like to direct to you, if you'll bear with me for a moment.

I believe your prefiled testimony has been admitted already as Exhibit No. 16; is that correct?
A. (Tebbetts) Yes.
Q. Great. Would you mind turning to Page 6, Lines
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2 through 9. And there you state that, "The Company has found that customer-sited distributed generation facilities can provide a long-term benefit to the equipment on the distribution system"; is that correct?
A. (Tebbetts) Yes.
Q. Saving time, move down a little bit, it says, "The offset to load lessens the burden on the distribution system equipment, which in theory should extend the life of that equipment"; is that correct?
A. (Tebbetts) Yes.
Q. And at Page 7, Line 14, your testimony states that a long-term analysis -- and I'm quoting --"Long-term analysis could show whether the presence of distributed generation reduces the usage of distribution equipment, and therefore prolongs its life, resulting in a benefit to all customers." Is that correct?
A. (Tebbetts) Yes.
Q. Ms. Tebbetts, as signatory to the Utility settlement agreement, Consumer Advocate Don Kreis submitted a statement to this docket shortly after the filing of the Utility
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settlement proposal. That statement has been included on a premarked exhibit list as I.D. No. 7. Are you aware of that letter that Mr. Kries submitted to the docket?
A. (Tebbetts) I am aware that Mr. Kries submitted something else after this was filed, but I don't have it in front of me.
Q. Hopefully you will in a moment.

CHAIRMAN HONIGBERG: Off the record.
(Discussion off the record).
CHAIRMAN HONIGBERG: Go back on the record.

BY MS. BIRCHARD :
Q. Do you have it before you now, Ms. Tebbetts?
A. (Tebbetts) Yes.
Q. Thank you. Do you recognize it as the statement that was submitted to the docket by the Consumer Advocate in support of the settlement that he signed with your organization?
A. (Tebbetts) I don't see a cover letter, but I do see the last page Mr . Kries signed.

CHAIRMAN HONIGBERG: No one's going to disagree with this, Ms. Birchard. It is
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what it is. Ask her what you want to ask her.
MS. BIRCHARD: I'd just like to move that it be admitted at this time.

CHAIRMAN HONIGBERG: Without objection, we'll strike the I.D. on Exhibit 7.
(Exhibit 7 admitted.)
Q. Turn to Page 2 of that letter, Ms. Tebbetts, the last full paragraph reads, "Deployment of distributed generation" --

CHAIRMAN HONIGBERG: Slow down. There's no way the stenographer can keep up with that.
Q. "Deployment of distributed generation in New Hampshire is in a relatively nascent state, and the effects of distributed generation are difficult to assess at this time, given the lack of advanced metering technology and the resulting derth of data." Do you see that, Ms. Tebbetts?
A. (Tebbetts) Yes.
Q. Thanks. Do you agree with Mr. Kries, that there is a lack of advanced metering technology in the state?
A. (Tebbetts) I'm not sure what you're defining as
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"advanced metering technology." I don't know
what Mr. Kries has defined as "advanced
metering technology" either, so I can't comment
on what Mr. Kries was insinuating with regards
to his statement here.
Q. Okay. Thank you. Do you agree with the statement that, if there were more advanced metering technology, we would have more data?
A. (Tebbetts) I honestly don't know.
Q. Ms. Tebbetts, would you agree with the statement that transmission costs in New England and in New Hampshire are pretty high?
A. (Tebbetts) I couldn't answer that because I don't know what you're comparing "high" to.
Q. Do they make a significant -- do they represent a significant portion of the customer's bill, in your experience?
A. (Tebbetts) Again, I don't know what "significant" is. I know Liberty's rates, and I don't -- I'm not familiar with the other utilities' rates, so I don't know.
Q. Okay. That's fair. Can you offer your opinion as to your own bills?
A. (Tebbetts) Our transmission rate makes up a
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very small portion of the customer bill for our residential customers.
Q. Would you agree that distributed energy resources can help to avoid some of the transmission costs that New Hampshire ratepayers pay, for example, just as energy efficiency can reduce some of those costs?
A. (Tebbetts) I for certain don't know if they can be reduced. And that's one of the reasons why we proposed a pilot to review and take a look at the charges, and maybe there's an opportunity there. But I just -- I don't know if that is certain. I just don't know.
Q. Are you referring to energy efficiency, distributed resources, or both?
A. (Tebbetts) I'm referring to both.
Q. So you don't believe that energy efficiency can help lower a customer's transmission costs?
A. (Tebbetts) No, didn't say I don't believe that. I said I don't know.
Q. Have the utilities not included certain avoided costs in their energy-efficiency work of late?
A. (Tebbetts) I am not familiar with the
energy-efficiency work that has been filed as
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of late.
Q. Okay. Is there anyone on the panel who is familiar with the utilities' energy-efficiency work of late?
[No verbal response]
MS. BIRCHARD: Mr. Davis?
A. (Davis) Not of late.
Q. I'm sorry?
A. (Davis) Not of late, if $I$ interpret "of late," being, say, within the last six months.
Q. Correct. Yes. Well, thank you very much. That answers my questions.

CHAIRMAN HONIGBERG: All right. I think it's appropriate to take a break. It's quarter to eleven right now. We'll be back at eleven. So, off the record.
(Brief recess was taken at 10:43 a.m.,
and the hearing resumed at 11:05 a.m.)
CHAIRMAN HONIGBERG: Back on the
record. Who's up next? Is it Acadia, or was that -- Ms. Birchard took care of that?

MS. BIRCHARD: Yes.
CHAIRMAN HONIGBERG: Is it Mr. Below?
No? Who's up? Mr. Hinchman?

MR. HINCHMAN: Thank you, Mr.
Chairman. The first exhibit I'm going to seek admission on we just passed out. So we'll maybe start by offering the final report for the grid mod working group to the Commission that was submitted by the working group on March 17th.

CHAIRMAN HONIGBERG: So we're going to mark that as 72.
(Exhibit 72 marked for identification.)
MR. HINCHMAN: I'm going to talk about it in a minute.

CHAIRMAN HONIGBERG: It's marked.
MR. HINCHMAN: Everybody has a copy. We have a few extra up here if anybody needs them.

## CROSS-EXAMINATION

BY MR. HINCHMAN:
Q. So, for the Utility members of the panel, if you could refer to Exhibit 6 at Page 10. Just a clarification with regard to your settlement proposal. The proposal requires bidirectional meters for all net-metered DG; correct?
A. (Tebbetts) It requires by directional meters
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for any customers coming online or placed in the queue after June 30th, consistent with Docket DE 15-271.
Q. Okay. And the settlement's not clear. Are you proposing that any obligation to record and make available to customers their instantaneous usage data, or their instantaneous export data from the two channels in the metering?
A. (Tebbetts) I don't understand your question.
Q. Will you -- will the meter -- does the settlement proposal contemplate that the utilities will record interval data on an instantaneous basis for both of the two channels, the purchased channel and the sale channel, and make that data available to customers?
A. (Tebbetts) The customer will have the bidirectional imports and exports recorded each month because that's part of what we'll bill them or credit them.
Q. Okay. So you will be giving them the output of those meters on a monthly interval.
A. (Tebbetts) The output of the bidirectional meters.
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]
Q. Sorry. I don't know if "output" is the right word. The metering result that you give them each month will be just the monthly interval, the accumulated usage over the month and the accumulated exported solar production over the month, no shorter interval. You won't give them daily, hourly, 5-minute, 15-minute, nanosecond.
A. (Tebbetts) We will not be providing them anything less than what they would be provided under normal billing practices, which is monthly information, unless otherwise requested by customer. And our tariffs allow for that today.
Q. So, just to be clear, the default is monthly interval data.
A. (Tebbetts) I don't understand because you're adding "interval data" in there, and that's -I don't know. I don't understand.
Q. You're reporting the data collected from the two channel meters to the customer, and the aggregate information of the data you give the customer is the entire usage for a month, no shorter interval.
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]
A. (Tebbetts) Yes, that's correct.
Q. And the same for exports. It's the aggregate for that billing cycle, which we're calling a month, no shorter interval.
A. (Tebbetts) Yes, that's correct. That's the default of what we will provide customers.
Q. Thank you. Turning to the grid mod report, if you'd please turn to Exhibit -- to Appendix B. And Ms. Tebbetts, we'll start with you, I guess, since we're still talking -- I think it's Page 39, Table B.12a. Is it correct that -- first, the foundation.

As part of the grid mod docket, they collected the current technological capacity of the meters in use by the three utilities on this panel; correct?
A. (Tebbetts) Yes. The utilities submitted a bunch of data as part of the grid modernization docket.
Q. And part of that data included, in your case, the current number of total meters, 43,333, which is shown on Table B.12a on Page 39 of the report. The Bates says 40 of 45 at the top of the page.
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A. (Tebbetts) Oh, okay. I apologize. 12a is actually shown on 39 , but the table is on 40 . Okay. We're -- yeah. Yes, that's correct, 43, 333.
Q. And if you turn to Page 41 of the report, which is Bates Page 42, and you look at Table B. 17 --
A. (Tebbetts) I'm there.
Q. So, of the 43,333 meters, we see a breakdown in the first column of how many meters are set up for drive-by meter reading, time of use registry, reading of interval data and daily reading at the company's office, and then on-demand/real-time meter reading.

So, is it fair to interpret this report saying 358 of the 43,000 meters are capable of reading interval data?
A. (Tebbetts) Yes.
Q. And 1,178 are capable, I have time-of-use register. Is that like a date stamp?
A. (Tebbetts) It's not a date stamp. The meters are programmed for our time-of-use rate. So they're static. They're not -- the periods do not change for which we provide on peak or off peak.
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]
Q. Okay. And the drive-by meter reading means -can you explain to the -- what that means?
A. (Tebbetts) So, Liberty has AMR meters, and we don't have to walk up to the meter to read it. We're able to grab a signal from a vehicle that has the capabilities to read it via driving by.
Q. Okay. And for 8 of those -- or sorry -- for 358 of those when you drive by, you could pick up some interval data.
A. (Tebbetts) No, that's not correct. $C$ is the reading of interval data, which is not included in the drive-by meter reading. These are large customers, G1, our industrial customers, and G2, larger commercial customers that have specific interval meters associated with how we bill them for kilowatt VARs and kilowatt hours.
Q. So is it fair to say, then, that the non-industrial customers, the current metering they have is not capable of reading interval data?
A. (Tebbetts) That is correct.
Q. Thank you.

So, for Eversource, I'm not sure which member of the panel wants to address it, but
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]
the same exercise. If you look at, I think it's Table B.12c, it shows you have just over 570,000 meters --
A. (Davis) Yes.
Q. -- total. And then if you'd look at Table B. 17 ?
A. (Davis) I have that.
Q. You have 1 meter capable of reading interval data? I was going to ask if that was Cliff Below's meter, but I'm not sure he lives in your territory.
A. (Davis) There is one residential meter with that capability at the time these statistics were produced.

If you look across the row, there are 234 C\&I remotely-read meters that can be picked up via AMR, or remotely. And there are 112
residential and 1,815 C\&I manually-read interval meters.
Q. So, by and large, all of our meters currently do not report interval data of less than the billing cycle?
A. (Davis) If you're looking at the sum total of all meters --
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]
Q. I'm looking at the column "AMR \& Remotely Read Meters" for reading of interval data for residential; so there's one. But there's 487,716 residential meters that are read remotely that don't collect interval data; is that correct? Am I reading that correctly?
A. (Davis) That's my understanding, that the 487,716 residential meters are AMR drive-by meters as Ms. Tebbetts explained, similar capability. And those are strictly registers which capture total monthly kilowatt hours.
Q. Thank you.
A. (Davis) They are capable of being programmed to capture bidirectional flow, as well as demand values.
Q. Thank you.

And for Unitil, Table B.12b, 77,000 meters; correct?
A. (Meisner) That's correct.
Q. Now, you have all AMI meters. Could you short-circuit the questioning process and tell us the interval capability for the AMI meters?
A. (Meissner) Most existing AMI meters do not have interval metering capability. The only ones
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]
that have that capability are the 2170 listed on Line $C$.
Q. Thank you.

It says "currently expanding," meaning you have the capability to add -- do you have the ability to add that capacity to the AMR meters?
A. (Meissner) As part of the normal migration path of our system, the vendor obviously makes improvements to their technology each ear year and over time. So we are currently upgrading to a new standard that they call PLX, which has interval metering capabilities. However, when we upgrade our substation facilities to that new technology platform, that does not mean we're going to change all the meters on our system. So the system will be capable of interval reading, but we would not get that capability unless we changed the meter.
Q. Thank you.

If the Panel could turn to Page 20 of the report, which is Bates Page 21, and if you could look at the second paragraph, which is the first full paragraph on that page. If each of the utilities could take a second to read
that paragraph.
A. (Meissner) Can you please just identify the heading of what we're supposed to read --
Q. Oh, sure. My apologies. The paragraph starting with, "The larger C\&I customers of utilities..." And it's really the second sentence there. "Current utility metering for resi and smaller C\&I customers typically doesn't record or report interval data, except for monthly meter readings." As we've just established the particulars for each of the three utilities with regard to that capacity.

And then the paragraph goes on to make the point that upgrading your meters requires metering equipment, requires communication systems, and it requires a methodology for data collection, archiving and management of the data; is that correct?
A. (Labrecque) Yeah. Is that correct that that's what it says?
Q. Is that correct that that's what it says? Yes.
A. (Labrecque) Yes.
Q. I paraphrased.

Would you also agree that those are --
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]
functionally, that's what's required to install what we might call "advanced metering initiative," AMI, capable of detailed interval data collection and archiving?
A. (Labrecque) Well, our current meters that are deployed are capable of billing the tariff design that that customer is under. There's not additional, more granular data contained within those meters. But the customers are more than willing and able, if they're interested, to install their own monitoring equipment in order to get more granular data --
Q. Right. But I'm asking --

CHAIRMAN HONIGBERG: Mr. Hinchman, you need to wait until he's done. If you think that he's gone far afield and you need to stop him, look for help.

MR. HINCHMAN: Thank you.
BY MR. HINCHMAN:
Q. Okay. So, for the record, customers can do what they want. But in terms of what the utility is doing in order to record interval data that is a shorter period than one month, it would require these steps referenced in this
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]
paragraph: Changes to the equipment, a system to get that data from the customer's meter to the utility, and then a system to process, manage and archive that data; is that correct?
A. (Labrecque) Yes.
Q. Could you turn to Page 22 of the report. And let me just take a break for a second to back up and say this is a consensus report of the Working Group. But the Working Group -- it's my understanding that the Working Group didn't reach consensus on all issues. And where that was the case, the report will report out the non-consensus -- the non-consensus positions of each party.

CHAIRMAN HONIGBERG: Is that a question for the Panel?

MR. HINCHMAN: I just want to
establish that the Panel agrees that that's the methodology in this report.
A. (Tebbetts) Yes.

BY MR. HINCHMAN :
Q. And so in the discussion of metering technology, there's one of those situations where we have non-consensus. And so we have

## [TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]

two conclusions, one by the non-utilities position and one by the utilities.

So the non-utilities starts, I believe on Page 22, Item 6, if I have it right. I might have the wrong page. Hang on one second. Item 4. So those are the non-utility parties. And the non-utility parties' preference is an opt-in with hourly interval data and, ideally, 5-minute interval data, with customer access to the data? Do you agree that's the Utility position in the report?
A.
(Davis) I'm sorry. Could you re-reference exactly where you're looking? The page numbers, depending on which page you're on, are different. And you mentioned 6 and then 4 --
Q. You're right, you're right. I see three different page numbers on this page. So I'm going to use the Bates page number. It's Page 23 of 45. At the bottom of the page it's Item 4. And the next page, which is the Utility, OCA and Pat Martin position, is also Item 4. So there's two contrasting positions with regard to discussion of metering technology on those two pages.

## [TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]

And is it fair to summarize the non-utility position, the first one, as recommending the ability of customers to opt-in to an interval meter, including bidirectional meters for DG customers, capable of logging, compiling and storing kilowatt-hour interval data down to a granularity of at least hourly intervals, and ideally 5-minute intervals? Ms. Tebbetts, is that fair?
A. (Tebbetts) Could you tell me where you see the word "bidirectional" in that paragraph? Maybe I'm just missing it.
Q. So it's on the second line of No. 4, after the comma, "including bidirectional meters." The end of that --
A. (Tebbetts) Okay. So, actually, that's not -the utilities did not agree to that. That is the City of Lebanon, Revolution Energy, Acadia, RESA --
Q. Correct. I'm framing this as the "non-utility position."
A. (Tebbetts) Okay. I apologize. I didn't hear that in the question.
Q. So, to reframe the question, is it fair to say
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]
the non-utility position is for a opt-in meter capable of logging, compiling and storing kilowatt interval data down to a granularity of at least hourly, and ideally 5-minute intervals, and customer able to access the data?
A. (Tebbetts) That's what this says.
Q. Is it fair to say that the utility position next page is as Mr. Labrecque just said; customers can buy whatever they want, but for utilities, the utilities should not be obligated to produce 5-minute interval data out of a concern that it's cost prohibitive and that there should be cost/benefit analysis done before that's required?
A. (Tebbetts) That's correct. And as a participant in this docket, the grid modernization docket, the utilities felt that 15-minute interval data could be very well what is needed to provide to customers and that the back office costs associated with 5-minute intervals may be cost-prohibitive when looking at [having all customers pay for something that maybe only a fraction of customers will be
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]
using.
Q. All right. And you would also note that the ISO-New England settlement method is going to go to 5-minute interval data for generation and billing, not for resi, but at the level above the distribution system?
A. (Tebbetts) Yes.
Q. Thank you.

With regard to Exhibit 5, which is the settlement proposal, the utilities offer an opt-in for a DG production meter. So, to be clear, that would be a second meter that would be metering only the production of the net -qualified net metering facility?
A. (Davis) That's correct.
Q. And would that meter be equipped with interval data; and if so, what interval will that data be collected, archived, maintained by the utility, and will that data be made available to customers?
A. (Davis) We contemplate a standard monthly kilowatt-hour meter. Typically it would be similar to the meters for residential customers, characterized as "AMR" and available
for data capture by a drive-by metering van. And that would be the most cost-effective meter. And I think also universally cost-effective and applicable and compatible with each of the utilities' systems for data collection and data processing.
Q. So is it fair to say you're going to -- you're going to bill for usage on a monthly interval and you're going to record usage on a monthly interval and you're going to record production and/or exports, depending upon if the customer's opted in for a production meter on a monthly interval, and that you have no plans to make interval data of a shorter duration than a month available -- to either record it or make that available to customers; is that fair? Have I summarized your position?
A. (Davis) For the opt-in proposal, to the extent the revenue meter is measuring and is used for billing as you described, the production meter would also match that period. And we would have plans in that case for a kilowatt-hour, a monthly kilowatt-hour-based production meter. To the extent the customer has a meter that
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]
captures more granular data, for example, interval meters, we would still contemplate an opt-in production meters that measures total -or registers total monthly kilowatt hours.
Q. And is it correct that RSA 362-A:9, III, which defines net metering and the terms of net metering, which is quoted in, I believe, Mr . Labrecque's and in Mr. Meissner's testimonies, are referring to normal net metering practices, which is defined as a single meter that shows the customer's net energy usage by measuring both the inflow and the outflow of electricity internally, so that the current practice for net metering and the current meter requirement under statute is exactly what you have installed and what you're currently using?
A. (Labrecque) Yes.
Q. And you want to change the net metering practice in the statute to go to essentially instantaneous instead of netting on that monthly billing interval. You would change it to essentially an instantaneous recording. Rather than measuring both the inflow and outflow of electricity internally in the meter,
you would like to go bidirectional meters that record those separately and no longer use a monthly net billing cycle.
A.
(Davis) This may be a point of confusion, and maybe I can help clarify. And I'll speak for Eversource specifically, and maybe we can expand it to all three utilities.

But we currently measure, explicitly measure the separate kilowatt hours over the month for imports and exports at the customer delivery point. So that's a so-called "revenue meter." We do the netting after the fact in a software algorithm that nets the two. My understanding is that that's not necessarily the case with the other utilities currently, where the netting of those import and export kilowatt hours occurs within the meter. But our proposal would put all three utilities on the same platform as I described for Eversource, in which we would separately measure the export kilowatt hours over the month, separately measure the import kilowatt hours over the month, and those would support the Utility and Consumer Coalition proposal.
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]
Q. Agreed.
A. (Davis) I just wanted to make sure --
Q. Let me clarify my question. The question is: The statute says that the interval that you net those two channels of production -- currently the interval is monthly. And in order to adopt your proposal and the portion of our proposal referring to non-bypassable charges, the Commission would have to exercise its authority under HB 1116 to modify the section of 362-A:9, III, definition of net metering terms and practices.
A. (Davis) I would ask that we seek legal counsel on the interpretation of that statute and the necessary procedures and processes to make the changes contemplated in our proposal.
Q. Okay. Fair enough.

MR. HINCHMAN: Mr. Bean is going to pass out an exhibit. And Mr. Chairman, on the recess, I got together with counsel for Eversource, and we worked out a solution to the objections over the graphs from yesterday and the graphs from this morning. So the proposal is that the graph in Exhibit B of exhibit --
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]
sorry -- Exhibit 5, Attachment B, and the graph that Mr. Labrecque used this morning are drawn from the same data, but they're not the same graph. And the issue yesterday was that the underlying data of that graph is not in the record. And we first saw that graph when the settlement proposal was submitted by the utilities. We had a very brief discovery period. We asked for the work papers that created the graph. They gave it to us. It's an Excel spreadsheet. If you print it out, it's 600 pages, and if I print 40 copies of that, it's 2400 pages.

CHAIRMAN HONIGBERG: That would be a really bad idea.

MR. HINCHMAN: So we have agreed that -- and you have in front of you the summary page and the -- which is EFC186, Utility Q25, Page 1. And the back page is the summary of the data. So, just to explain that, on the summary page, the box to the bottom right-hand side appears in Exhibit 5, Attachment B. And the box is --

CHAIRMAN HONIGBERG: I think it's
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]

Exhibit 6, but I know the one you're talking about.

MR. HINCHMAN: My apologies. I stand corrected. Exhibit 6. That box is in the settlement statement. And that box draws data from the 600 pages. But the summary of that data is rolled up into Page 2 of the exhibit that we've just passed out. And I think I'm authorized to state that Eversource would not object if we simply admitted for the record the summary of the data rather -- and all the parties have the Excel sheet, including the Staff. And rather than print out all 2400 pages --

CHAIRMAN HONIGBERG: Okay. So the upshot of that is that the two-sided piece of paper you just handed us is going to become Exhibit 73. And there's no objection to it being a full exhibit; is that correct? 73 is the right number, isn't it? Okay.
(Exhibit 73 admitted.)
CHAIRMAN HONIGBERG: And as a consequence then, is there now no longer an objection making Exhibit 67 a full exhibit?

MR. HINCHMAN: For my part --
CHAIRMAN HONIGBERG: I think you objected and Ms. Birchard objected.

MR. HINCHMAN: I'll withdraw my objection to this graph.

MS. BIRCHARD: Sounds like a solution has been agreed to, so $I$ will also withdraw my objection.

CHAIRMAN HONIGBERG: So we'll withdraw the objection to 67 , and that will be a full exhibit. Have we sorted that out?

MR. HINCHMAN: And I'm going to -yes.
(Exhibit 67 admitted.)
CHAIRMAN HONIGBERG: You have some questions now you want to ask about this exhibit?

MR. HINCHMAN: I have questions I want to ask about the graph.

CHAIRMAN HONIGBERG: Excellent.
MR. HINCHMAN: And just for the edification of the Commission, Page 11 of 13 in Exhibit 6, Attachment B, is a graph showing an average of all 12 months of the data period.砳
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]

And Exhibit 67 is showing the average of just the month of July, of the data that we're referring to.

BY MR. HINCHMAN :
Q. Is that correct, Mr. Labrecque?
A. (Labrecque) That is correct.
Q. So, in Exhibit 6, Attachment B, you describe that graph as a "representative calculation of the credits under the existing and proposed net metering tariffs." And on Page 9 you describe the chart as a "typical residential load profile and typical PV profile"; correct?
A. (Labrecque) Correct.
Q. So the red line -- let's use -- for ease of discussion, let's use Exhibit 67. So, Mr.

Labrecque, the red line in Exhibit 67, is that hourly load or instantaneous load?
A. (Labrecque) I apologize. I don't have a color one with me. Is it the more flat line --
Q. Yes.
A. (Labrecque) -- is the red line?
Q. The red line is the more flat line and that in the key is marked as "usage."
A. (Labrecque) Yes, that is an average daily
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]
profile of a Eversource residential customer based on 2015 load research interval metering, I believe the sample is north of a hundred sites.
Q. And that data is hourly; is that correct?
A. (Labrecque) That is hourly data.
Q. Yes. And the peak line, which in the key is marked "PV" and it's green on the colored version, is that hourly or instantaneous solar generation?
A. (Labrecque) Hourly.
Q. Hourly. Thank you.

And in your box you have -- you've done some math for each of the quadrants labeled "A1, A2, A3 and A4." And in doing that math to determine the usage behind the meter, you subtracted the hourly average demand in that hour, minus the hourly average production in that hour; is that correct?
A. (Labrecque) That is correct.
Q. So it's correct to say that this graph represents hourly netting and not instantaneous netting?
A. (Labrecque) It represents hourly average
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quantities.
Q. Does your settlement propose hourly netting or instantaneous netting?
A. (Labrecque) Our proposal is that all the power that is recorded in the purchase channel of the meter -- in this case, represented in Sections A1 and A3 -- be charged the normal retail rate for the customer, and that excess depicted here, Section A4, all of the excess, all of the exported kilowatt hours, will be paid at the settlement proposed rate.
Q. So that's recorded on essentially an instantaneous basis; correct?
A. (Labrecque) In the meter it would be, yes.
Q. Yes. So the reference to "instantaneous netting" refers to the fact that you're recording exports on an instantaneous basis and not the net of exports minus imports on an hourly or monthly basis; is that correct?
A. (Labrecque) Correct. The meters record instantaneous quantities.
Q. So, in this graph and Attachment B to Exhibit 6, you come up with some conclusions with regard to how much behind-the-meter usage
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]
there would be from a, quote, typical solar project.
A. (Labrecque) $I$ wouldn't refer to it as a conclusion, other than an illustrative case subject to fluctuations. Every customer is different, of course, and all of the quantities on there will be different. So I wouldn't call it a conclusion, but it's an illustration of the proposal.
Q. And to come up with that illustrative graph, you use a methodology that is different than the methodology you actually used to bill customers; is that correct?
A. (Labrecque) The methodology isn't different. We're still using the same quantities.
Q. All right. So in the methodology, you take an hour, say the 3:00 hour of generation, minus the 3:00 hour of -- sorry. You take the 3:00 hour of load minus the 3:00 hour of generation.
A. (Labrecque) No. There's no netting within the meter. The meter channels are measuring the total aggregate power quantities in the import direction and export direction. So it's not recording the net internal to the meter.
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]
Q. Understood. The question $I$ was asking, though -- and if you would turn to Page 2 of Exhibit 73.
A. (Labrecque) Can you help me find that one?
Q. The one we just passed out?
A. (Labrecque) Still in my hand. I have it.
Q. So there's four banks of data on this page. And the second bank is titled "Average of Rate kW." So if I'm interpreting this correctly, this is hourly consumption. So, 1 kW for one hour would be a kilowatt hour. So these are kilowatt hours?
A. (Labrecque) Yes.
Q. And that's from your 120 typical customer database, correct, from 2015?
A. (Labrecque) Yes.
Q. And the third bank is a scale of the PV data that you got from NHSEA. And it's scaled so that the annual generation is equal to the annual load in the second bank; correct?
A. (Labrecque) That's correct.
Q. And the fourth bank -- and we're using the 3:00 hour. So if you look at the column labeled "15," the hour 15 -- and let's do it with the
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]
hour starting 3:00, not the hour ending 3:00. So that column labeled as the 15 th hour would be 3:00; correct?
A. (Labrecque) It would be an accumulation of the data between 2 and 3.
Q. Well, I'm just asking for the column.
A. (Labrecque) Ask that again, please.
Q. So if you just look at the 15, the hour labeled "15," that column represents the 3:00 hour correct?
A. (Labrecque) The hour ending at 3:00. Correct.
Q. Okay. And the formula is you're subtracting the second bank of data, the load data from -you're taking that and you're subtracting from it the PV data.
A. (Labrecque) Correct.
Q. So the data that you're outputting is on an hourly recording interval; correct? So the methodology you've used to generate this table uses hourly netting.
A. (Labrecque) It nets hourly quantities.
Q. Thank you. But your proposal would not net hourly quantities; correct?
A. (Labrecque) Our proposal would use aggregate
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]
quantities accumulated in two separate channels over the month and treat them differently, according to our proposal.
Q. Okay. Let's try it with a "Yes" or "No."

Would your proposal net hourly quantities?
A. (Labrecque) No.
Q. Thank you.

So we discussed this yesterday. Within a given hour, isn't it possible that you could have cloud cover for the first half of the hour, with zero solar generation, and the cloud goes away and you have full solar generation second hour. So your solar generation could be split $30 / 30$-- 30 minutes, 30 minutes - over an hour. And your load could be coincident with the generation or also be split 30/30, and it could be non-coincident with the generation. And under those different scenarios, you might have a net of zero or a net of a hundred percent, correct, or something in between?
A. (Labrecque) I would agree with you that within the hour things can happen, so that, you know, the solar can fluctuate wildly during an hour and a customer's load, while it usually follows

## [TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]

a somewhat more well-behaved pattern, there are different types of equipment that cycle on and off within an hour. So, yeah, those things will be going on within the hour. And that is, you know -- among other things, it's reflective of the value that being connected to the utility system provides to a solar customer, the ability to handle those types of fluctuations, and under typical today's net metering act as essentially a free battery for those customers.
Q. So, for purposes of a customer considering a solar investment, as we discussed yesterday, knowing their instantaneous generation history -- sorry -- their instantaneous load history --
(Cell phone ringing.)
MR. HINCHMAN: You want to collect that $\$ 5$ now?

CHAIRMAN HONIGBERG: Off the record. (Discussion off the record)

CHAIRMAN HONIGBERG: We're back on the record.

BY MR. HINCHMAN :
Q. Let me just short-circuit. Keeping in mind the line of questioning from yesterday in which the suggestion was made, I think by Mr. Epler, that you don't really need to know your instantaneous usage data history, you could simply assume a worst case of zero coincidence between generation and load, and so 100 percent of your generation is exported, that would be one way to manage it. And also keeping in mind you're not planning on recording any interval data on either generation or load and not planning on making that data available to the customer. So, from the customer's perspective, they don't have the data they need to evaluate a solar proposal, or if they build a solar proposal, to take action to optimize the operation of that generation in relation to their usage without that data; is that correct?
A. (Labrecque) No, that's not correct. There's -the customer, in evaluating whether or not they want to go solar, there a lot of different factors that go into play. Some of them have considerable uncertainty. Even on a monthly or
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yearly basis, their consumption over the span of a solar investment could be wildly volatile. They could even move out of the home in five years. So there's a lot of uncertainties. Also, when customers are the evaluating the economics of a potential investment, they might be considering what utility rate they might be avoiding. So, over 25 years there's a considerable degree of uncertainty in any kind of economic modeling of the value of their investment because, you know, you can't just say utility rates are going to escalate the Consumer Price Index for the next 25 years. So, I agree with the general premise that there will be some fuzziness to any estimation of the exact amount of solar production, which is also volatile month to month, day to day. But the exact quantity that will be consumed internally in the property, you can only get to a working estimate, similar to the other quantities $I$ just mentioned. But I think in developing a relationship with the customer, in reviewing their data -- and they can collect subhourly data for as long as they would like
in order to get comfortable with their investment decision -- they can do that. This is a big investment decision. It should not be made without a full and complete understanding of what they're about to do.

So I would agree with you to a limited extent. This would put solar companies that spend very little time educating their customers on the way this is going to affect their bill. I would suggest they will be at a slight disadvantage, but it's not insurmountable. You could develop a working estimate of the quantity you're getting to.
Q. So you do agree that understanding how much of your load will be offset instantaneous by generation is an important factor in a customer's consideration of whether or not to invest in a solar project, one of others?
A. (Labrecque) It is one --
Q. Just a "Yes" or "No," please.
A. (Labrecque) Yes, I agree.
Q. And you are suggesting that it's the customer's burden to collect and acquire that data, and that the utility, even though it's going to go

## [TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]

to recommending a rate tariff that imposes this instantaneous structure on the customer, it's the customer's burden to collect that data, not the utility's burden.
A. (Labrecque) It's primarily the customer and the solar company's burden to analyze this investment.
Q. Okay. Thank you.

Could you turn to the grid mod report.
What number is that, 73? Exhibit 72? And if you would turn to Bates Page 14 of 45, you'll see a discussion on rate design principles, and that's followed by a discussion of rate design recommendations. And if you would turn to the section on Bates Page 15 of 45 regarding demand charges, and if you'd take a moment to read the "small C\&I customers" paragraph under Demand Charges. And reading that second sentence into the record, "Utilities should apply demand charges for small C\&I customers only if metering and information is available as an option to customers in a timely manner so that they can take action to reduce and manage their costs."
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]

So the question, Mr. Labrecque, is: Would you say that the same principle of rate design should apply here in this case, that the use of an instantaneous netting rate tariff should only be applied if there is metering information available to customers in a timely manner to unable them to take action and reduce and manage their costs?
A. (Labrecque) I think we just had a discussion about that. And are you asking me to comment on whether that information should be coming from the utility?
Q. I'm asking you to comment if the same rate design principle should apply to instant netting tariff the way you've recommended that it apply to demand charge tariffs.
A. (Labrecque) I was not involved in the grid mod, so $I$ can't really reflect on exactly what principles are embodied in the few sentences you just pointed out.
A. (Brown) I'm not sure if I can interject in this, but if I could respond to that. You're comparing apples and oranges here, because what happens in the context of a solar -- when we
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refer to the grid mod study and the recommendations vis-a-vis demand charges has to do with the utilities -- the actual charges imposed by the utility. And then the question is: Who caused those costs to be -- how do those costs get incurred, and who benefits from it? And that's entirely --

MR. HINCHMAN: Mr. Chairman, could I ask to halt the witness? This is not -- he's freelancing. This is not even germane to the -- he's talking about cost causation, not about information available to customers to act on --

CHAIRMAN HONIGBERG: I think Mr.
Hinchman probably is correct, that the question addressed to Mr. Labrecque, Mr. Labrecque answered to an extent saying that he wasn't familiar with the analysis that went into demand charges, so he couldn't be sure if it was the same. Based on the beginning of your statement, Mr. Brown, I'm not sure how what you're saying is responsive to the question.

WITNESS BROWN: It's responsive
because the two applications to that issue are
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quite different --
CHAIRMAN HONIGBERG: And I think Mr.
Labrecque probably would agree with you. And I think the others on the panel probably would agree with you. Maybe even Mr. Hinchman would agree with you.

Mr. Hinchman, you have another question?

BY MR. HINCHMAN :
Q. Well, since you've chimed in, Mr. Brown, you're the one who said that solar doesn't generate during peak periods; correct?
A. (Brown) I didn't make a flat statement. I said it's generally off peak.
Q. And we just heard that in the CELT report that the peak hour for generation in ISO-New England territory in 2016 was the 3:00 hour. If you look at the graph that we've been talking about, would you say that at hour 15 solar is generating at almost its peak, that there's a high coincidence of solar peak with the 2016 ISO-New England system peak? "Yes" or "No," please?
A. (Brown) I don't think that's "Yes" or "No"
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answer.
Q. Thank you. Another line of questioning, if $I$ may.

So, under the statute, it's my understanding that the utilities -- I don't know. This could be a statute, could be a rule. You guys know this better than I do. But you report the available room under the 100-megawatt cap through an online reporting methodology which customers can look up and find out what the current availability under the cap is; correct? Ms. Tebbetts?
A. (Tebbetts) I don't understand your question. Can you --
Q. That Liberty Utilities has a web page that quantifies the total cap for net-metered projects applied to Liberty Utilities for both small and large projects -- small being under 100 kW and large being over 100 kW .
A. (Tebbetts) Yes.
Q. Subject to check, your cap is 8.74 megawatts, and your web page for March 17 th said you had available about 3.39 megawatts.
A. (Tebbetts) Subject to check, if that's what it
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]
says.
Q. And that would be about 40 percent of your cap remains open?
A. (Tebbetts) Subject to check, that calculation is correct.
Q. So, Mr. Labrecque, for Eversource, same question. Your cap is just over 31 megawatts for -- excuse me -- for small projects.
A. (Labrecque) Small projects in the extra 50-megawatt program, yeah, it's somewhat a little higher than 30. I'm sorry. I don't know the exact number.
Q. Okay. And subject to check, as of February 6th, which is the last web page I could find that you had posted, the availability was about 15.8 megawatts.
A. (Iabrecque) $I$ did update it a few days ago. I don't know if it's posted on web page yet. But subject to check, the number sounds about right.
Q. Thank you. So, roughly 50 percent of your cap remains open in the supplemental 50-megawatt for small projects.
A. (Labrecque) Correct.
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]
Q. And Mr. Meissner, for Unitil, same question. Your cap is roughly 12.7 kW -- sorry -megawatts for small projects?
A. (Meissner) I'll accept that, subject to check.
Q. And your availability, as reported on February 16th, 2017, was 6.7 megawatts?
A. (Meissner) Again, subject to check.
Q. So that's just over 50 percent of your cap remains open.
(Meissner) Yes.
Q. Okay. And the settlement proposal from the utility parties says that -- I guess I'll refer to the statement, which would be Exhibit 6, at Page 2, which is Section C1. It states that the utilities will require time to modify their billing and data management systems to be able to accurately bill customers taking service under the new tariff. And the question would be for -- let's start with Ms. Tebbetts.

Do you currently have a billing system and other data needs capable of billing under this proposed tariff?
A. (Tebbetts) We have a billing system that needs to be modified under either proposal, actually.
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]
Q. Thank you. In either order, Liberty or Unitil and Eversource?
A. (Labrecque) Our answer is identical to that of the Liberty witness.
A. (Meissner) And ours would be the same.
Q. And that would happen at some point after so you know what to design; correct?
A. (Tebbetts) Yes.
A. (Labrecque) Yes.
A. (Meissner) Yes.
Q. Okay. So the start date proposed in your proposal is June 30th; correct? And that's also, if you would, the qualifying date to be grandfathered under the existing tariff; correct?
A. (Tebbetts) Yes.
Q. And so that is, based on your proposal, you must be in the queue and under the cap in order to qualify for grandfathering under the existing tariff -- in the queue by June 30th and under the cap in order to qualify for grandfathering.
A. (Tebbetts) No, that's not correct.
Q. Correct me then.
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]
A. (Tebbetts) So the customer -- we don't have to be under the cap because, as I believe we have -- give me a moment, please.
(Witness reviews document.)
A. (Tebbetts) So, in part of our settlement we talk about that, if they reserve a place in the queue after June 30th, 2017, consistent with the requirements in $D E$ 15-271, or before that date if they're above the 100-megawatt cap, then they will be placed in there. So, once this approval -- my understanding is once -let's assume our proposal was accepted and the Commissioner issued and order. Then any customer being placed in the queue would fall under this new tariff, regardless of the cap.
Q. So, prior to June 30th -- so let's say the order says the tariff is effective June 30th, as you've requested. So, in order to be grandfathered under the existing tariff, you have to be placed in the queue prior to June 30th and you have to be under the cap; correct?
A. (Tebbetts) That's correct.
Q. And as we've established, you're not at your
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]
cap.
A. (Tebbetts) That's correct.
Q. And if I apply on July -- or August 1st -sometime in July, but you haven't redone your billing system, how are you going to bill me? Under the old tariff or the new tariff? (Witness reviews document.)
A. (Tebbetts) So, in our settlement we described that these customers will be billed under the net metering tariff effective March 22, 2017, until such time as we're able to bill them under the new tariff.
Q. Once you're able to bill under the new tariff, are they grandfathered, or are they automatically switched over to the new tariff?
A. (Tebbetts) They would be moved over to the new tariff as part of our settlement, which we noted.
Q. So, even though you have room under the cap and you don't have a billing system in place capable of managing the new tariff, you want the grandfathering date to be accelerated to June 30th; correct?
A. (Tebbetts) That's what we've proposed in our
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]
settlement based on what was also available for information under House Bill 1116.
Q. When you make a major -- when you make a change to a rate tariff, isn't it one of the principles of public utility rates and generally accepted practice that siting -- you know, issues like rate stability, avoiding unexpected changes, customer confusion, that there needs to be a period of notice in order for your customers to prepare for the rate change?
A. (Tebbetts) Yes, and all our customers will be notified if they -- let's assume for the purpose of this discussion that our proposal is accepted. When a customer sends us their interconnection application, we'll let them know -- we'll discuss with them that they will be billed under the current tariff in place. And once we're able to bill them, they will be billed under the new tariff. And we will provide the information to the customer so that they understand that will be a change based on the date that they've installed their system, and then when we subsequently are able to bill
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them under this tariff.
Q. So did you hear the testimony yesterday regarding the sales cycle for solar up to six months, with the first two to three months of that being the sales process, and the second half of that being the permitting and construction process?
A. (Tebbetts) Yes.
Q. So if the notice comes out -- a decision comes out from the Commission per the current schedule on June 1st, you will have customers that are in the middle of a solar sales cycle who suddenly have 30 days to be grandfathered under the existing tariff that they've had no notice of because nobody knows what the new tariff is going to be; correct?
A. (Tebbetts) I don't know what "no notice" is. This docket was noticed for the past 10 months, so anyone has the opportunity to find information about that.
Q. Sure. Is that how you normally handle notice for rate tariffs, that there's a 30-day segue from a final decision to the implementation of the new tariff?
So if the notice comes out -- a decision comes
out from the Commission per the current
schedule on June 1st, you will have customers
that are in the middle of a solar sales cycle
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information about that.
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A. (Tebbetts) When our customers -- actually, I'll be very honest. Since this docket has started, we have discussed with our customers that there will be changes coming up with the net metering structure. We don't know what those changes are going to be. We've been very clear with the customers who send us questions, and we --
Q. Does your customer --
(Court Reporter inquiry)
CHAIRMAN HONIGBERG: Mr. Hinchman, one moment. She was still answering that question.
A. (Tebbetts) So we have talked to our customers through e-mails and telephone calls to explain this to them and to let them know that, if they are looking to interconnect at some point, that there may be changes. We don't know what those changes are. But there may be changes, and they should talk to their solar developer about what it is they're installing and get more information, as best they can, and then we can provide them what we can for information about what's going on in the docket. We have been very open with our customers that changes in

## [TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]

this docket are going to change what is happening with their solar installation if they don't install prior to an order coming out in this docket, or an effective date that the Commission imposes.
Q. Thank you. Does anybody know right now what the new tariff is going to be?
A. (Tebbetts) No.
Q. Thank you.

MR. HINCHMAN: Mr. Chairman, I have one last separate topic line of questioning, so this is a good time of break if we need one.

CHAIRMAN HONIGBERG: I don't think so. I think you're going to go because we've only been back for a little over an hour, and I think we can go a little longer before we break for lunch.

MR. HINCHMAN: Okay. No problem.
BY MR. HINCHMAN:
Q. So I think most of these questions will be addressed to Mr. Meissner. They have to do with more of an engineering basis, so it probably suits your background.

So when you provide distribution service,

## [TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]

you have to meet certain criteria regarding the parameters, the quality of that service for each customer that takes service. And I'm thinking of things like voltage and frequency levels, also thermal ratings for all your equipment you have to stay within certain tolerances; correct?
A. (Meissner) In terms of the service we provide to customers, it's limited more to voltage and frequencies, certainly. I think some of the other characteristics you mentioned would be ones that we would employ in the design of our own system.
Q. Sure. So, some of it is the circuit or the substation. Some of the parameters apply to equipment located at the substation or the circuit, the distribution circuit, which is the line. But something like voltage levels, the tolerance of voltage would apply at the customer's service.
A. (Meissner) Correct. We design our system to meet those parameters for the customer.
Q. And for a given voltage level at the customer's service, the tolerance is plus or minus
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]

5 percent? Do I have that correct?
A. (Meissner) There's an IEEE standard on that. We employ our own internal standards to ensure that we don't drop below those levels. But generally for a residential customer, it's going to be between 114 and 125 volts on a 120-volt service.
Q. What are some of the reasons why voltage for a particular customer at a particular location on a distribution circuit might exceed those tolerances? I'll give you some examples.

A motor starting up, high load levels at peak, or maybe the distance of that customer from either the substation or source of reactive power, would those be some examples?
A. (Meissner) Yes. Voltage decreases along a circuit, and it is affected by the operation of loads on the circuit.
Q. Right. So in your planning practices, or if you discover an actual exceedance of the tolerance in practice, the utility must identify a solution and then make sure the solution is installed; correct?
A. (Meissner) Yes.
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]

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| :---: | :---: | :---: |
| 1 | Q. | And what types of solutions for this example, |
| 2 |  | which is a voltage out of tolerance at |
| 3 |  | somewhere along the distribution circuit |
| 4 |  | affecting customer service, what type of |
| 5 |  | solutions do you typically have in your toolbox |
| 6 |  | to address that? |
| 7 | A. | (Meissner) Solutions might commonly be voltage |
| 8 |  | regulators or capacitors in the type of |
| 9 |  | situation you mentioned. |
| 10 | Q. | So you could add a capacitor on a pole or at |
| 11 |  | the substation? |
| 12 | A. | (Meissner) That's correct. |
| 13 | Q. | And could you also feed that customer from a |
| 14 |  | different -- if you had an alternate circuit |
| 15 |  | maybe with switches, you could feed part of |
| 16 |  | that line from a different location addressing |
| 17 |  | the voltage problem? |
| 18 | A. | (Meissner) It's possible. |
| 19 | $Q$. | And if you didn't have a switching device, |
| 20 |  | you'd have to add one, if that was the solution |
| 21 |  | chosen? |
| 22 | A. | (Meissner) Conceivably, yes. |
| 23 | Q. | So, who buys that equipment and pays for it to |
| 24 |  | be installed? |

[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]
A. (Meissner) The utility generally buys all the equipment on the distribution system. And again, it's not typically done for benefit of one customer. It's done for benefit of all the customers installed on that system.
Q. And how does the utility get reimbursed for that expense?
A. (Meissner) Through recovery and rates.
Q. So that equipment would be added to the distribution rate base?
A. (Meissner) That's correct.
Q. And then those rates are charged to customers?
A. (Meissner) Yes.
Q. So the rate base has an effect on the rates customers pay.
A. (Meissner) Correct.
Q. Are there alternate ways that we haven't discussed to meet this voltage requirement situation we've been talking about?
A. (Meissner) It's an open-ended question. I would say I'm sure there are. I just cited a couple of examples. Generally in planning, the engineers try to determine the least-cost way to meet that requirement.
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]
Q. So if the power-quality problem was caused by running -- a customer who is running inefficient motors, could the customer contribute to the solution by replacing those with more efficient motors, or perhaps installing a soft-start controls that would reduce the voltage surge?
A. (Meissner) I think we're talking about a number of different concepts. I mean, motor starting is distinct from the other things we're talking about. That's usually evaluated at the time the motor is installed. And if soft-starting is required, it would have been specified in advance by the engineers.

For most operation, if there's load out on the system that's contributing to a drop in voltage, the planning engineers don't necessarily know what that load is on any given day, but we do have an energy-efficiency group that works with customers on energy-efficiency measures.
Q. So, could energy efficiency be a solution to a discrete voltage problem on a location?
A. (Meissner) A reduction in load will result in a
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]
change in voltage.
Q. Are you aware that increasingly PV installations include smart inverters?
A. (Meissner) Yes.
Q. And are you aware that smart inverters are capable of measuring voltage coming into the inverter from either the array or from the distribution circuit?
A. (Meissner) Not an expert on smart inverters, but I'll accept they're capable of doing that.
Q. Yeah. And some of those smart inverters can also act the same way as a capacitor and be, through dispatch, be directed to add reactive power to the circuit?
A. (Meissner) I think the operative phrase there is "through dispatch." There may be installations of solar on our system that have smart inverters. Those are not dispatchable. There's no control system where they have utility data or that the utilities have access to those inverters to dispatch them. So, in terms of the smartness of the inverter, I would say it's fairly limited in what they could do currently.
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Q. Well, they have the capability, but the capability is not currently usable to the utility; is that correct?
A. (Meissner) That's correct.
Q. So you have potential customer actions to solve this discrete voltage problem that we've been talking about. Anything from reducing load to adding efficiency, to actually adding reactive power or some other sort of voltage regulation.
A. (Meissner) It's possible if it was cost-effective to do so.
Q. So if a third party, not the utility, but the customer, took actions -- say we have a customer that has a lot of motors, and they invest in efficiency. The customer with a large PV array, they offer to sell reactive power to the utility on dispatch to meet the reliability requirement. Checkcheck.

So the customer makes the investment, and the utility is simply rewarding that customer for that service through some fee structure that's negotiated. Then the utility would not have to invest in a switch gear or capacitor or other equipment to solve the problem.
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]
A. (Meissner) My concern with the scenario you're outlining is that might be true if the sun was shining. But as soon as the cloud passes over the PV on that circuit, we lose all the reactive power on that circuit.
Q. Okay. I can accept that. The customer has a battery attached in between the array and the inverter, so the battery has sufficient storage to provide reactive capacity on dispatch whenever it's needed.
A. (Meissner) If the customer was able to dispatch reactive power at the same level of reliability as the utility equipment, and if we were able to dispatch it, then, yes, there would be value to that.
Q. And if that were the case, then that customer equipment would not be added to the rate base; right?
A. (Meissner) Correct.
Q. And so that customer equipment would not be added to distribution charges.
A. (Meissner) Well, there would be compensation that would be, I assume.
Q. That's right. But it wouldn't be the full
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]

20 -- 40-year cost of the equipment necessarily. It might be a different arrangement?
A. (Meissner) It might be a different arrangement.
Q. Thank you. Could the same sort of thing happen for other criteria? For example, thermal requirements for equipment in a substation or on a circuit where the thermal exceedance really only occurs during peak load conditions, say in the 10 days of the summer?
A. (Meissner) Well, I would say that we don't actually have thermal exceedance on our system because we design our system to ensure we don't.
Q. Right. And so thermal exceedances are a function of your line capacity and peak load and ambient weather conditions.
A. (Meissner) That's how we rate our lines.
Q. So if you have a line with, for example, peak-load growth, where you're starting to approach your 90/10, or whatever your planning criteria are within the 10 -year planning horizon, so you, in your planning process, forecast a need to upgrade that part of your
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]
distribution system to resolve a forecasted thermal violation.
A. (Meissner) That is correct.
Q. Okay. So, one way to solve that problem, just like the voltage problem we discussed, would be by allowing third parties to perhaps remove load at peak through a variety of distributed energy resources, be it solar or storage or efficiency or demand response. Could be dynamic pricing. Could be load shifting. Could be load shedding. Any number of distributed energy resource type of strategies, which I'm defining as "customer-side strategies" could provide the necessary load relief to meet the thermal requirement.
A. (Meissner) In theory, that is true. In reality, it's limited by some very real constraints, one of them being that the load-driven portion of our investment budget is small in comparison to our investment program. I think there's a presumption that a lot of our spending is for the reasons you're saying. And I think as we showed in discovery, it's not. The other thing I'll point out is,

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typically these constraints are very localized on our system. They don't tend to involve a large portion of our system. And they typically arise on short notice at the time of budgeting in the fall, for example, knowing that we have to meet a new load for a new customer or a new housing development, and we may have to implement that solution between the time of budgeting and June of the following year for the next summer's peak.
Q. So are you aware of, as was discussed yesterday, some of the pilot projects where this exact thermal, for example, scenario has been addressed successfully by third parties through the use -- there's a pilot project in Maine, in Boothbay, where this exact scenario you're talking about was addressed successfully through use of non-wires and non-transmission solutions. Are you of that pilot project?
A. (Meissner) I heard of that pilot program. I'm aware that that could be a solution in the right set of circumstances. I'm just not sure that we have any of those circumstances on our system.
Q. Fair enough. The locational issues are a significant issue in dispute in the docket.

MR. HINCHMAN: Mr. Chairman, I'd like to offer the final report for the Boothbay Smart Grid pilot project.

CHAIRMAN HONIGBERG: That's 74. That will be marked.
(Exhibit 74 marked for identification.)
CHAIRMAN HONIGBERG: Off the record.
(Discussion off the record.)
CHAIRMAN HONIGBERG: Yeah, we're back on the record.

MR. HINCHMAN: Thank you. No further questions.

CHAIRMAN HONIGBERG: You want to ask him anything about 74?

MR. HINCHMAN: I just did ahead of time, which was, "Is this an example?" and he said, "Yes, it is an example."

CHAIRMAN HONIGBERG: Do you want to ask him if he recognizes this as the report that resulted from that study with which he had some familiarity?

MR. HINCHMAN: Sure. Wasn't sure how
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formal we were supposed to be.
CHAIRMAN HONIGBERG: Well, I kind of want to know if this is what you all are talking about. And I don't know if anybody's going to object. I kind of think not. But I see Mr . Epler ready to object. Mr. Epler, do you have an objection before or after Mr. Hinchman asks his next question? And if you can speak into the microphone, it will help.

MR. EPLER: I have an objection before, and my objection is we've been at this docket for some time. We've had enumerable technical sessions and opportunities for discovery and so on. This report's dated January 19, 2016. It happens to be my birthday. And I'm not complaining about the quality of the report or what may be in here. But to introduce it now, at this late date, for purposes of trying to show that something can be done I find troubling. This is something that we could have discussed at many different sessions. So $I$ object to trying to enter this at this late date.

MR. HINCHMAN: Mr. Chairman.
CHAIRMAN HONIGBERG: Mr. Hinchman.
MR. HINCHMAN: I have to make an enormous apology. There is a printing error. The final report was filed March 17 th , St. Patrick's Day, 2017. This is the prior year's report. So, with --

CHAIRMAN HONIGBERG: So you -- okay. All right. So we have the wrong report in front of us.

MR. HINCHMAN: We have the wrong report. During the summer of 2016, another round of testing was done, which is covered in the final report for the year 2016 that was released on March 17th of 2017. This prior report is referenced in the testimony of several witnesses and has been part of the discussion all along. The final report was not available until last week. I will get this corrected and bring you the corrected final report.

MS. BIRCHARD: If I may? I believe the report was included in the binder that was distributed as EFC Exhibit 182. It's not a
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colored version, but it seems to be dated March 17th 2017.

CMSR. BAILEY: Which number, please?
CHAIRMAN HONIGBERG: 182. I was in the same place you were, Ms. Birchard. Look in the binder. And so, just so I'm clear, the binder that I have, and I think everybody else has, was given to everybody in advance as a group of documents that the solar group might want to use as exhibits. And having found No. 182, thanks to Ms. Birchard, we see a document that on its face is dated March 17th, 2017 -- not Mr. Epler's birthday. Is that the document you meant to use?

MR. HINCHMAN: Yes. I stand corrected. Thank you.

CHAIRMAN HONIGBERG: Mr. Epler.
MR. EPLER: The fact that it's not my birth date doesn't change my objection because other reports obviously were available. And even if something comes in at a late date, the witnesses haven't had a chance to examine it. We haven't had a chance to ask discovery on it. So, putting it in now, $I$ mean, there's a
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boatload of information out there on many different subject areas. The fact that it may have been a reference in someone's testimony is meaningless. I attended, I believe, all the technical sessions, and I don't believe there was a discussion of the Boothbay Sub-Region Smart Grid Reliability Pilot Program. So, again, my objection still stands.

CHAIRMAN HONIGBERG: All right. Now,
Mr. Hinchman, now that we have the right document in front of us, what is your response to what Mr. Epler just said?

MR. HINCHMAN: I think he's arguing surprise and that we should have given him the prior year's study of the Boothbay pilot project. That information was cited in the reports. Cites were given in discovery. It was discussed yesterday by the panelists as an example of the type of distributed energy resource solution that can result in reductions to the distribution rate base and that can make the grid more efficient. This is a pilot testing exacting that hypothesis. I would argue that it is offered for the purposes of
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demonstrating for the record that, particularly with regard to the locational, proposed locational pilots in the settlement proposals, that these types of projects have been tried and they do work.

CHAIRMAN HONIGBERG: Okay, okay. I think you're making an argument about its value to us.

Do you want to ask these witnesses about their familiarity with it? They may or may not know anything about it. And I understand that this document -- I understand what this document is. I understand it's an update of something that has been discussed during the course of the docket you represented to me. But I don't really know what these people know about it. And it might be valuable for you to ask a few questions like that, which I think you were planning on doing after I prodded you to do that. So it might make sense for you to go ahead along those lines. And we'll see how that shakes out before we have -- I mean, we don't have anything else to do at this point, so why don't
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we do that.
BY MR. HINCHMAN :
So, Mr. Meissner, if you could turn to the executive summary, which is Bates Page 6 of 111 in the report, if looking at the very first paragraph --

MR. FOSSUM: Mr. Chairman --
CHAIRMAN HONIGBERG: Who's speaking?
MR. FOSSUM: Me, Matthew. I have a question about this document before we go through it.

Looking at the cover, it says "2016 Final Report," but looking over the next page, it's showing a whole series of cutoff deletions in the margin. I have a real question about, you know, is this someone's working draft? Is this truly a final report? What is this document?

CHAIRMAN HONIGBERG: You make a good point. It says on its cover, "Final Draft For Review." That's how it's labeled on the cover. Mr. Hinchman?

MR. HINCHMAN: So, this is the final draft filed with the Maine Public Utilities
[TEBBETTS|BROWN|DAVIS|HARRINGTON|LEBRECQUE|MEISSMER]

Commission in Docket 2011-00138 -- add two zeros -- documenting the results of the 2016 summer season --

CHAIRMAN HONIGBERG: How do you know that? How do I know that?

MR. HINCHMAN: I know that because I am a partner in Grid Solar and I filed the report myself and I helped write the report.

CHAIRMAN HONIGBERG: So it sounds
like maybe you should be testifying about this and maybe you should be up there.

MR. HINCHMAN: I'm also general
Counsel for Grid Solar, the smart grid energy services operator that conducted the study.

CHAIRMAN HONIGBERG: Is anyone on the panel familiar with the process that took place in Maine that produced this report?

WITNESS MEISSNER: (Meissner) I am not.

CHAIRMAN HONIGBERG: The record will reflect they're all shaking their heads. The only person who knows about this is you. So I'm not sure what you would ask this panel to talk about.

MR. HINCHMAN: My intent was simply, having discussed the possibility of non-wires solutions to offer a lower cost method to meet the utilities' requirements for maintaining the distribution plant, to offer the pilot as an example of where this proposition has been actually tested with a detailed pilot project.

CHAIRMAN HONIGBERG: And my memory is you asked Mr. Meissner a question about it already, and he had heard of it.

MR. HINCHMAN: Yes.
CHAIRMAN HONIGBERG: And that's about it; right?

MR. HINCHMAN: Yes. I don't expect that he has read the report because it was just filed.

CHAIRMAN HONIGBERG: Yeah, this -- I am sympathetic to the objections regarding the introduction of this report. This report, if it was relevant to your presentation, and it was -- the project was discussed yesterday by your witnesses. This document should have been offered then by people who knew something about it. Instead, you're the only one -- you're
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testifying here about the bona fide of this report and what it is or isn't. These witnesses know nothing about it.

MR. HINCHMAN: If it pleases the
Chair, I'll withdraw the report. It is filed in the record of the adjacent jurisdiction and probably subject a record notice.

CHAIRMAN HONIGBERG: And if need us to take -- if you are asking us to take administrative notice of a filing in another court, I'm sure there's a way to do that under our rules. This is not it.

So at this point I accept your withdrawal of what was incorrectly marked because it was the wrong document as Exhibit 74 and ask if you have any other topics you want to cover with this panel?

MR. HINCHMAN: I'm done. Thank you.
CHAIRMAN HONIGBERG: Okay. Thank
you, Mr. Hinchman. Mr. Below, can I help you?
MR. BELOW: Yes. With regard to
Exhibit 72 , the grid mod report, $I$ just wanted to note for the record that I don't believe this is actually the final report. I think
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it's a near-final draft. It says "submitted March 17." That's in yellow highlighting. The actual final report $I$ think was submitted on March 20th. For instance, the final report that I have says "New Hampshire Republic Utilities Commission" rather than "Public Service [sic] Commission." And the highlighting that was on the pages referenced is not in the final report, and there's a little different mix of where the parties align.

CHAIRMAN HONIGBERG: No one has moved its admission. If there is a filing at the New Hampshire Public Utilities Commission, which is something Commissioner Bailey and I are probably going to be the last two to find out about, then there is a way for us to take administrative notice of filings in our own docket. That would be an easy process. It would probably make sense for the parties to figure out what the correct document is to be in the record here. You've given me information $I$ did not know, Mr. Below. I appreciate that. You know the ways of this
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Commission probably as well as anyone in this room, along with Mr. Harrington. So it makes sense for the parties to work that out. And I appreciate you're raising that.

It's twenty minutes to one right now. I know there's some other people who will be questioning this panel. But it makes sense for us to break at this point. Off the record.
(Discussion off the record)
CHAIRMAN HONIGBERG: So, back on the record. We are breaking now, and we will look to come back at twenty minutes to two.
(Lunch recess taken at 12:38 p.m. and concludes the Day 2 Morning Session. The hearing continues under separate cover in the transcript noted as "Day 2 Afternoon Session ONLY.")

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