1	STATE OF NEW HAMPSHIRE				
2	PUBLIC UTILITIES COMMISSION				
3					
4	September 1, 2010 - 10:12 a.m.				
5	Concord, New Hampshire				
6	RE: DE 10-194				
7	RESIDENTIAL RENEWABLE ENERGY GENERATION				
8	INCENTIVE PROGRAM: Modification of Incentive Payment for Small Residential				
9	Renewable Generation Facilities. (Hearing to receive public comment)				
10					
11	PRESENT: Chairman Thomas B. Getz, Presiding Commissioner Clifton C. Below				
12	Commissioner Amy L. Ignatius				
13	Sandy Deno, Clerk				
14					
15	APPEARANCES: (No appearances taken)				
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18					
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22					
23	Court Reporter: Steven E. Patnaude, LCR No. 52				
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2		I N D E X			
3				PAG	GE NO.
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6	Mark	: Weissflog			11
7	Star	n Nadeau		17,	57
8	Matt	Currier			21
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21	Cmsr	. Ignatius	23,	43,	54
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23					
24					

Τ	PROCEEDING
2	CHAIRMAN GETZ: Good morning, everyone.
3	We'll open this hearing in docket DE 10-194, concerns the
4	Residential Renewable Energy Generation Incentive Program.
5	On October 2nd, 2009, the Commission issued Order 25,020
6	establishing a process to permit owners of small
7	residential renewable generation facilities to apply for
8	incentive payments pursuant to RSA 362-F:10, which
9	provides a one-time incentive payment to a residential
LO	owner of a small renewable photovoltaic or wind energy
L1	generation facility of \$3.00 per watt, up to a maximum
L2	payment of \$6,000, or 50 percent of the system's costs,
L3	whichever is less. During 2010, the Legislature repealed
L 4	that statute and inserted the following replacement
L5	language that "For good cause, the commission may modify
L6	the program, including reducing the incentive level."
L7	In terms of the history of the
L8	alternative compliance payments for calendar years 2008
L9	and 2009, there was a total deposit of \$5.78 million into
20	the Renewable Energy Fund. And, at this point, there is
21	an uncommitted balance of approximately \$1.5 million.
22	Given the experience in the Program of 20 applications per
23	month, there's a total average payments of \$1.5 million
24	annually. And, assuming that that rate of participation
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continues, the Program could be exhausted before the end
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       of fiscal year 2011. Accordingly, we have concluded that
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 3
       good cause may exist to support a modification of the
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       incentive payment.
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                         In the order of notice setting up this
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       opportunity for comment, which we issued on August 13, we
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       indicated that the -- a proposal to reduce the payment to
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       $1.50 per watt and the per system maximum to $3,000 for
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       small residential energy facilities. The purpose of the
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       hearing today is to provide opportunity to the public to
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       comment on whether the incentive payment should be
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       reduced; and, if it should be reduced, to what level; and
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       to hear comment on any other issues related to the
14
       Program.
15
                         And, what we will do is, in terms of
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       process, the sign-up sheet that a number of people have
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       already signed up, and I will just go through that sheet
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       in order, allow people to make their comments. And, I'll
       also note that, in our notice, we indicated that we will
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20
       receive -- accept written comments through September 7.
       So, just ask if there is anything else from the Bench?
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22
                         CMSR. BELOW: Well, just to clarify,
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       though the order of notice refers to an uncommitted
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       balance of approximately 1.5 million, as is somewhat more
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explained in the other docket where we're considering the
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 2
       Commercial and Industrial Incentive Program for the
 3
       Renewable Energy Fund, when you factor in what should be
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       allocated between the residential and the C&I program,
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       pursuant to the new statute that calls for us to try to
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       balance based on the consumption between those sectors,
 7
       which is roughly 41 percent residential; 59 percent for
 8
       C&I, then what we're really left with is about
       1.17 million for this, essentially, residential PV and
10
       wind or electric renewable rebate program for this fiscal
11
       year, from July 1 through June 30 of next year. So, we're
12
       sort of only dealing with about a $1.17 million budget;
13
       part of which, almost a third of which has already been
14
       committed, as I understand it, and maybe Jack can clarify
15
       that, what the current status is. But -- so, we're
16
       probably dealing with only about six or 700,000 through
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       June 30th of next year that's available for rebates for
18
       this program.
                         CHAIRMAN GETZ: And, I guess, the bottom
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20
       line being, for this proceeding and for the companion
       proceeding that we took public comment on Monday, with
21
       regard to the Commercial/Industrial Rebate Program, what
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23
       we're trying to accomplish is to determine what's the best
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       approach to spending what are a limited amount of dollars
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for these rebate programs. And, so, we're seeking your
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- 2 comment on what's the best approach to spending those
- dollars.
- 4 So, with that, the first commenter is
- 5 Clay Mitchell.
- 6 MR. MITCHELL: Thank you, Commissioners.
- 7 I would gladly, if it's appropriate, yield my -- first to
- 8 Jack, if Jack has any information that would provide
- 9 greater context for any of the public that would speak.
- 10 MR. RUDERMAN: I don't think I have a
- 11 whole lot to add. As comments are made, I'm happy to
- interject, if there are additional figures or facts that I
- 13 can bring to the attention of everyone. But my plan was
- to wait until we've heard folks speak, and then respond
- 15 with some comments addressing the Commission and those who
- 16 are here today.
- MR. MITCHELL: Thanks.
- 18 MR. RUDERMAN: But I appreciate the
- 19 offer. Thank you.
- 20 MR. MITCHELL: You're welcome. Good
- 21 morning. My name is Clay Mitchell and I'm the President
- 22 of the New Hampshire Sustainable Energy Association. Our
- 23 membership is primarily made up of residents of New
- Hampshire and some small/medium businesses. I understand,

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I will be brief, the Commission is operating under a great
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 2
       deal of constraints. And, the context that I wanted to
 3
       provide for you is -- relates to our membership and
       residents who have been in the long decision process to
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 5
       invest in solar. I'm fully aware of the monetary limits
 6
       that you have to operate under, but a lot of people are
 7
       very -- at varying stages in their decision-making process
 8
       about investing in solar. And, as such, I would provide
9
       you with that context in the hope that you recognize that
10
       some people are counting on their rebates as they stand
11
       now. And, that your transition to a new rebate level be
12
       defined and gentle, so that people can adapt to it. I
13
       understand that that may place limits on the tail-end of
       that. But giving the defined dates and the defined
14
15
       amounts allows people an honest chance to achieve their
16
       decision and their objectives with implementing renewable
17
       energy.
18
                         That goes as well for the small business
       community that has recently been sprouting up and being
19
20
       supported by your programs. And, I think that it will be
       easier to adapt to a stepped and sustained incentive, one
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       -- rather than one that dramatically changes in a short
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23
       time frame.
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                         I will also provide some more in-depth
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I will also provide some more in-depth $\{DE 10-194\} \{09-01-10\}$

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1 written comments about technical aspects, but I think that
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- 2 it's more important for me to speak about the context of
- 3 our membership. And, that's all I really have. Thank
- 4 you.
- 5 CHAIRMAN GETZ: Do you have a specific
- 6 recommendation, in terms of what the dollar per watt and
- 7 the per system maximum should be?
- 8 MR. MITCHELL: Well, my hope was, and
- 9 that's -- I was going to try and do some mathematics on
- 10 the fly, hearing about the committed numbers. But the
- 11 idea that the existing incentive would continue for a bit,
- 12 to allow people to step up and make their decision. That
- 13 there would be a step, one step down to an incentive
- maximum of maybe something like 4,500, and then a final
- 15 step to 3,000, so that people can adapt to this new
- 16 incentive level. With the understanding that, if there
- 17 are greater contributions because of alternative
- 18 compliance, that the Commission could then ratchet it back
- 19 up. But having either periods of time or numbers of
- 20 rebates at that step level allows people to make those
- 21 decisions in a more fiscally responsible way.
- 22 CHAIRMAN GETZ: Thank you.
- 23 CMSR. BELOW: A question. As I think
- you understand what we're trying to balance is, and the

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concern that we've heard is not having the program run out
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 2
       of money abruptly and shut down for a significant period
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       of time, so that there might be no rebates available, and
       that's sort of the trade-off we're working at. If the
 5
       rebate level stays at its current level, the Program will
 6
       probably run out of funds well before the end of the
 7
       fiscal year, if not the calendar year.
 8
                         And, so, I guess my question is, is the
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       -- from your point of view, the bigger concern the overall
       cap on the rebate level, that's the 6,000 or 3,000 or
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11
       something in between, versus the amount per watt,
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       realizing that the 6,000 cap is reached at a 2 kW system
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       at $3.00 per watt. And, even at $1.50, you'd reach the --
       you'd reach a $3,000 cap at 2 kW as well. So, the
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15
       question is, is your concern primarily about the over -- I
16
       think, from our experience, we've seen most people put in
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       larger systems than the rebate per kW pays for, because
18
       they run into the $6,000 per system cap. So, my question
       is, is that your primary concern, that that overall amount
19
20
       per system not drop by half in one big step?
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                         MR. MITCHELL: Versus the per kilowatt
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       system?
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                         CMSR. BELOW:
                                       Yes.
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MR. MITCHELL: I'm not -- I think, from

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1 the perspective of our organization and our members, we
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- 2 like to see -- I think it's more important that more
- 3 people share in the incentive. And, I know that that is a
- 4 little bit contrary to my initial comments, that I want
- 5 the incentive to stay at a level. That consistency has to
- do with the decision process. The amounts, I think, need
- 7 to reflect greater opportunity for all socioeconomic
- 8 status, people who have all different sizes of homes.
- 9 And, so, what I think is important is seeing a program
- 10 that's in place. And, I'm not sure I can determine on the
- 11 fly which is more important; is it a per kilowatt number
- 12 or a max? What I think is -- our organization's position
- 13 would be that, you know, we would like to see more systems
- enjoy the rebate, and, therefore, you know, that it's the
- 15 per kilowatt that we're more concerned about -- or, I'm
- 16 sorry, I think it's the system cap would implement that
- 17 better than the per kilowatt limitation.
- 18 CMSR. BELOW: Okay. Thank you.
- MR. MITCHELL: You're welcome.
- 20 CHAIRMAN GETZ: Are you contemplating to
- 21 do something more specific, in terms of the written
- 22 comments?
- 23 MR. MITCHELL: Absolutely. And, based
- on those questions, I will address them specifically.

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                         CHAIRMAN GETZ: Okay. Great.
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       you.
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                         MR. MITCHELL:
                                        Thank you very much.
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                         CHAIRMAN GETZ: Mark Weissflog.
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                         MR. WEISSFLOG: Good morning,
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       Commissioners.
                       I concur with Clay. I believe the
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       reduction of the incentives from $6.00 -- or, excuse me,
 8
       $3.00 to $1.50 may be a little large. There are many
       customers that have delayed their decision because of the
       current economic situation. And, it's quite a large
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11
       decrease in the available monies. So, what ends up
12
       happening is I think you're going to see a large decrease
13
       in the number of applications that will be submitted.
14
                         As you indicated, the sweet spot is a 2
15
       kW system, and it is unfortunate that the cap corresponds
16
       with $6,000, or $3.00 a watt. Most of the 2 kW systems
17
       right now are running, at least for us, in the 13, little
18
       over $13,000 mark. And, when you jump to a 3 kW system,
       that's between 19 and $20,000. And, there's, obviously, a
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20
       lot more money that the individuals have to commit to get
21
       to that 3 or 4 or 5 -- or 4.99 kW system. So, the
       incentives are really tiered toward smaller systems, and
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23
       they're disproportionate in what they are incentivizing
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       when you're doing that.
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                         If the program could reflect a tiered
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       system, that allows those monies to be spread out amongst
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       larger systems again. So, what you're doing is trying to
       incentivize people to put in larger systems and spend a
 5
       little more of their capital dollars, leveraging some more
       of the state's monies, I think that would be very
 7
       fruitful. So, that tiered system may, in fact, promote
 8
       larger systems and more kW to be installed in the state.
 9
                         The other question I had, I guess, and
10
       this -- I don't know if anybody is in the audience from
11
       Public Service, but we were painted a picture just
12
       recently that, after 2011, fiscal year 2011, the incentive
13
       or the availability of the RPS funds, the ACPs, would
       increase pretty drastically. And, they may not be
14
15
       directly related to the solar carve-out portion, but they
16
       would be increasing pretty significantly. So, those
17
       monies may be, if those projections hold true, would have
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       a number of more dollars available to the funds.
                         And, I will submit some comment on this
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20
       in writing.
                         CMSR. BELOW: Maybe just to expand a
21
       little bit. I think what you're -- what I hear you saying
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23
       is that a smaller than $3.00, smaller incentive per kW,
       but not reducing the cap as much, the amount per system,
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                        {DE 10-194} {09-01-10}
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1 might incent some people to put in larger systems.
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- 2 Because, right now, there's no -- there's no additional
- 3 incentive or rebate beyond the 2 kW system. Whereas, if
- 4 whatever the incentive level is pushed out to 3 or 4 or 5,
- 5 that that might help people --
- 6 MR. WEISSFLOG: Absolutely. And,
- 7 abstractly, I didn't really write this out, but you could
- 8 think of a -- I've always -- I've never seen any states do
- 9 this, but a reverse tiered system, where you offer \$1.00 a
- 10 watt for the first 2 kW or \$1.25, and then you go up to
- 11 \$2.00 a watt for the third kW. So, you're spending, for
- 12 the first 2 kW, \$2,000, the third kW you get another
- 13 2,000. So, you're spending \$4,000 for a 3 kW system, of
- 14 systems monies, and that incentivizes residents to install
- 15 larger systems, and you're getting more, you know, bang
- 16 for your buck.
- 17 CMSR. BELOW: And, I think the number
- 18 you just gave for a 2 kW versus 3 kW suggests that the
- 19 incremental cost is somewhat linear. I've heard it stated
- 20 that it's not always linear, that a larger system doesn't
- 21 cost -- the amount, the cost per kW tends to go down with
- 22 larger systems. What would be your sense beyond even 3
- kW, up to 5 kW, or even more?
- MR. WEISSFLOG: Typically, in the, at $\{ DE 10-194 \} \{ 09-01-10 \}$

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least in our experience, 1 to 4 or 5 kW is pretty equal,
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- depending upon the actual installation site. That, say,
- 3 6.00, 6.25 a watt is pretty linear. Normally, on larger
- 4 systems, 10, 20, 50, you know, 300 kW systems, there is
- 5 some economies of scale there. But, given New Hampshire's
- 6 geography and, at times, the project sites being so spread
- out, it's kind of hard to pick up those economies of
- 8 scale, unless you have multiple projects in a similar
- 9 area.
- 10 So, again, given the fact that the
- 11 Program's been doing well, and I will commend both PUC,
- 12 Jack's office, on this Program, because I think it's very
- 13 successful, and as evidenced by all the systems that have
- 14 been installed.
- 15 CMSR. BELOW: Do you see residential
- 16 customers wanting to put in larger than 5 kW systems or
- having the ability to do so?
- 18 MR. WEISSFLOG: Absolutely. It is
- 19 somewhat restrictive. Actually, in design, even to get to
- 20 5.2 or 5.4 kW, which finishes out a string, if you're
- 21 using central inverters, is prohibited by this. So, what
- 22 we see is, people being bound by the law because they
- 23 cannot install that next module or the next two modules,
- that really gives them a little more economy of scale,

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1 because they can do different string arrangements. So,
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- 2 we've had many incidences where we had to scale back on
- 3 the string arrangement, being the size of the array, and
- 4 the type of inverter utilized, because of that 5 kW -- no
- 5 larger, actually, it's a 4.99 kW system, because 5 kW is,
- 6 again, prohibited.
- 7 CMSR. BELOW: So, do you think there
- 8 would be merit in lifting that 5 kW cap? Because it seems
- 9 like the total amount on the system would come into play
- 10 long before you hit the 5 kW cap?
- 11 MR. WEISSFLOG: Absolutely. And, that,
- in the discussions at the Legislature and at the Science &
- 13 Technology Committee meetings, it was my understanding
- they felt that people that installed systems larger than 5
- 15 kW had the financial wherewithal to afford the entire
- 16 system, which is far from the truth. That, really, as a 5
- 17 kW system in New Hampshire typically takes care of, for
- 18 the average New Hampshire home, probably two-thirds of
- 19 their electrical needs. Obviously, there's a lot
- 20 better-performing homes now, but there's a lot of them out
- 21 there that still need a lot of work. And, you know,
- 22 two-thirds of your annual energy bill is great, but it
- isn't 100 percent. And, there are some people that would
- like to do that, pre-purchase their energy for that

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period, but can't, because of the law.
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 2
                         CMSR. BELOW: Thank you.
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                         CHAIRMAN GETZ: When you mention
       "two-thirds of the average home, a New Hampshire home",
 5
       what are you thinking about in terms of the average home?
 6
                         MR. WEISSFLOG: The average home, 800
 7
       kilowatt-hours a month, I believe, is the New Hampshire
 8
       average, somewhere in there, which is below national
 9
       average. And, I believe somewhere, 9, 9,600
10
       kilowatt-hours annually I think is the average New
11
       Hampshire home. So, a 5 kW system, or 4.99, in an average
12
       installation, would produce approximately 6,000
13
       kilowatt-hours annually; most of it being in the summer, a
14
       lot less in December. So, there are customers that peg
15
       their decision to "what's the percentage, the solar
16
       fraction, that this solar electric system is going to do
17
       for me?" Is it 10 percent? Is it one-third? And, you
18
       get in a 2 kW system that produces 2,400 kilowatt-hours,
       you know, that's just shy of 25 percent of their average
19
20
       annual energy consumption. And, while it's very
       effective, and what we typically do is, when there's a
21
       customer that doesn't have energy efficiency improvements,
22
23
       is, obviously, you want to peg that production to the
24
       current bill, but we promote energy audits. And, at that
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1 point, they're looking at two-thirds or 80 percent of
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- their energy bill covered by the solar electric system,
- 3 and then a reduction, which is very easy to do in their
- 4 consumption on the other side. So...
- 5 CHAIRMAN GETZ: Okay. Thank you. Stan
- 6 Nadeau, "Nadeau".
- 7 MR. NADEAU: Good morning. My name is
- 8 Stan Nadeau. I'm a selectman of the Town of Milton, New
- 9 Hampshire. And, I guess I want to talk in different
- 10 trades than these two gentlemen have. I'm going talk as
- 11 -- for our small community. There's approximately 3,400
- 12 people in the Town of Milton, and it's very much a blue
- 13 collar town. Unfortunately, the education wasn't there of
- 14 the availability of these rebates. Approximately one
- 15 month ago, as a Board member, we instructed our Town
- 16 Administrator to get the ball rolling to get the education
- 17 there. Start having meetings to get our residents there,
- 18 to let them see what's available, let them see how they
- 19 can save on either thermal or electric.
- 20 My fear is that, now that we got the
- 21 ball rolling a little bit, and if you people do choose, as
- a Board, to reduce these amounts, that all my effort's
- 23 been kicked to the curb a little bit, because I would like
- to see assurance, first of all, that if you do make a

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       decision to reduce the existing rebates, that it starts at
 2
       a certain date. And, everyone that's already applied is
 3
       covered. They're not going to be reduced. And, I agree
       with these two gentlemen, a lot of people in our town, a 2
 5
       kW is very expensive to them. We probably have a 10 plus
 6
       unemployment rate in Milton, if not closer to 12. Very
 7
       few, maybe two or three places for employment. It's very
 8
       much, the old saying, "a bedroom community". And, as a
 9
       selectman, I'm trying to help people save money. And, to
10
       reduce these rates, I could almost bet money that I will
11
       not be successful in getting a majority of, if any, of our
12
       people to involve the upfront money, because, let's face
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       it, you have to put the money out first, and, at this
       time, it's very hard to have that money to lay out. And,
14
15
       I, myself, just within the last month, put in a thermal
16
       for the domestic hot water. I was unaware of the rebates
17
       for the electric. I had dropped off my application today
18
       for the electric. And, the timing is not even good for
       me, and I do pretty well for myself. I have a wedding to
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20
       pay for. My ex-wife is up to $28,000 for that right now;
       I have to pay half of it. It is what it is.
21
22
                         But, my fear is that, and I understand
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       you'd like to have everyone share in the pie, but all good
       things come to an end. And, I feel that, and if you look
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at the ratio for the thermal, out of $960,000 that was
allocated, there's only about 50, $60,000 that's been
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- 3 used. So, either the education wasn't there for that, the
- 4 people weren't told, or that's going, at fiscal end 2011,
- that money may still be sitting there. So, there's a win
- 6 there and a loss as far as electric, in my book. It's
- 7 going to come to an end sooner or later. Not everybody is
- 8 going to be happy, no matter what their cost is -- or, the
- 9 amount of rebate is.
- 10 I, myself, would like to see the rebates
- 11 stay the same. If, in fact, you do choose to reduce them,
- I agree with these two gentlemen that it should go on a
- 13 scale. And, I differ a little bit on the -- only because
- 14 I'm speaking for the Town of Milton, on the size of the
- units, 2 kilowatt is probably going to be the 99 out of
- 16 100 units in our town, if not 100 percent of the units.
- So, I'd like to see that focused on more, because I think
- 18 that's the average size house that -- what people can
- 19 afford to buy. Not so much what they can get on payback
- 20 for their money, but what they can afford in their pocket,
- 21 right now, to lay out, and then wait for the rebate and
- then wait for the tax breaks.
- 23 Those are my concerns. I hope we get a
- response relatively quick, so I can know which direction

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to go, as far as the town, and how far I want to push
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 2
       education to the people. Because I've already talked to a
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       company out of the Portsmouth called "SEAREI". They're an
       organization of volunteers for solar. And, we already are
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 5
       starting to set up meetings for them to come in and see
 6
       people, and I'd like to know -- I don't want to give the
 7
       wrong information. So, please let the town now on your
 8
       decision.
 9
                         But I would like to see a lot of effort
10
       given to the people that really need it the most that have
11
       the less to spend, like the small-town people, you know,
12
       like Milton, that's a real blue collar town. That's
13
       pretty much it. And, thank you for bearing with me.
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                         CHAIRMAN GETZ: Okay. Thank you. And,
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       also, what we'll make sure is that, when our decision is
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       issued, that we'll get it out to the complete e-mail
17
       address of everyone who showed up today.
18
                         MR. NADEAU: Now, are your thoughts at
       this point that, if the Board was to decide to reduce,
19
       that it would be reduced at a certain date? That everyone
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       that's applied already would be covered for the existing
21
       rebates? Or, do you feel that you might back step it?
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23
                         CHAIRMAN GETZ: Well, I'll turn to Jack
       on that, whether there's an issue that we have under
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                        {DE 10-194} {09-01-10}
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1 consideration.
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- 2 MR. RUDERMAN: Sure. And, we've heard
- from several folks asking "is this going to be
- 4 retroactive" --
- 5 MR. NADEAU: Correct.
- 6 MR. RUDERMAN: -- or is it just going to
- 7 be some arbitrary date?" And, so, I think we're mindful
- 8 of that. And, I would imagine that Staff's recommendation
- 9 to the Commission would be to be able to set a date in the
- 10 future, that we would give fair notice to everybody that
- 11 the rebate is going to be reduced as of date X.
- 12 MR. NADEAU: I think that's the only
- fair thing to do, if, in fact, that is the decision.
- 14 Thank you.
- 15 CHAIRMAN GETZ: All right. Thank you.
- 16 Matt Currier.
- MR. CURRIER: Good morning. Matt
- 18 Currier, with Adros Energy. With the rebates, certainly,
- 19 we're into solar, talking with customers, the rebate has
- 20 to be there. The \$3,000 reduction is just not going to
- 21 have the economics work. So, finding a way to keep that
- 22 as high as it possibly can. And, I'd also like to see the
- 23 cap removed. Maybe a 10 kilowatt system, as far as the
- sizing of the system. Because we're finding, those people

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1 that can afford the solar system, tend to want to have at
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- least half, if not more, of their energy reduced. And,
- 3 we're really not getting there with the 2 kW.
- 4 Yes, the 2 kW is the cheapest entry
- 5 point, if you would, for the smaller system, and that's a
- 6 good thing to get started. As we say, "just start and do
- 7 something", whether it's by efficiencies or the 2 kW.
- 8 But, I think, by looking at the economics and saying "if
- 9 the rebate goes down to just 3K, the economics, for most
- of the customers, are not going to work anymore." And,
- 11 they're just going to stop the investment on it.
- So, part of me says, "should we exhaust
- 13 the fund, keep the momentum going that we have with the
- 14 solar program now, and kind of roll this out and continue
- 15 to build the momentum that we have?" Because, as you were
- 16 saying, "education is key." Trying to get the word out
- and educate is finally starting to work now, we're getting
- 18 much more interest. Having the 3K go -- cap, really, I
- 19 think hampers the implementation and deployment of solar
- 20 systems.
- 21 So, I'd like to see, certainly, a 10
- 22 kilowatt, if there is a cap, as far as the size of the
- 23 system, and then keep that rebate as high as you can.
- 24 And, the tiered approach may make sense that Mark was

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1 talking about, to really incent a larger installation and
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- a bigger rebate to that. Perhaps that will help extend
- 3 the amount of money.
- 4 So, other things that I thought about is
- 5 perhaps energy efficiency measures, or that can be an
- 6 adder, if they're investing in the audit and doing
- 7 improvements. Perhaps that's another way to structure the
- 8 rebate system, to incent those people to be more
- 9 conserving, and kind of put those two hand-in-hand.
- 10 And, then, if there is a change,
- 11 certainly, a clean transition is important. And, how
- 12 that's rolled out, how do we tell people how much time do
- 13 they have. Certainly, grab a date, have it go forward. I
- would hate to see it grandfathered in to already people
- 15 that are applying and basically making their decisions
- 16 now.
- 17 CMSR. IGNATIUS: Mr. Currier, a
- 18 question.
- MR. CURRIER: Yes.
- 20 CMSR. IGNATIUS: You were just tying the
- idea of possibly incented more efficiency. And, I wasn't
- 22 sure if you meant to require efficiency, in order to be
- 23 eligible for rebates, to build up that side of the
- encouraging of efficiency, in order to take advantage of

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1 rebates for actual installations? Or, something
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- 2 different, which would be rebates of the cost of some of
- 3 the efficiency measures, such as an audit or other actual
- 4 --
- 5 MR. CURRIER: I don't know that it has
- 6 to be contingent on the improvements, but maybe a higher
- 7 rebate amount if you've done some of the improvements.
- 8 Done an energy audit, gone to CFLs, or do the different
- 9 things that you can do to reduce your electric consumption
- 10 better.
- 11 CMSR. IGNATIUS: Thank you.
- 12 CHAIRMAN GETZ: Okay. Thank you.
- MR. CURRIER: You're welcome.
- 14 CHAIRMAN GETZ: Mike Fay.
- MR. FAY: Yes. How are you?
- 16 CHAIRMAN GETZ: Good morning.
- MR. FAY: Good morning. I kind of want
- 18 to build on what Matt was just talking about. And, it
- 19 didn't occur to me initially. I was trying to figure out
- 20 how we could, myself, as a retailer/installer could try to
- 21 get the most bang for the buck. And, one of the things
- 22 that I found -- I was in the car business a long time ago.
- 23 And, rebates, you know, motivate people to act. But, if
- the rebate is there all the time, sometimes people just

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1 assume, and there's not that sense of urgency. They
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- 2 assume it's going to be there at all times. I was looking
- 3 at it, to potentially do something to make it more
- 4 seasonal. You know, most people are motivated, the people
- 5 that I talk to, I find the 2 kilowatt system, you know,
- 6 the most heavily incentivized, is a great way to approach
- 7 a customer. And, I find very many of them are very
- 8 excited to know that they can get a \$15,000 system for,
- 9 you know, 4,000 bucks, you know, with all the
- 10 subtractions. And, a lot of people build from there, and
- 11 that's terrific.
- 12 But, to have the, you know, rebate be
- available potentially for a limited time, all right, and
- 14 this is -- I'm just throwing it out for discussion,
- 15 because I'm not 100 percent sure it will work. But, if it
- 16 could be done like from April to September, all right, and
- then maybe step down as funds, you know, tend to dry up,
- 18 you could do that.
- 19 But, to add to what Matt was saying,
- 20 having maybe an energy efficiency rebate program for
- 21 energy audits in the wintertime, so people that are
- 22 interested potentially in solar, most people aren't going
- 23 to want to spend the money. They're not motivated in the
- wintertime; they're dealing with Christmas, they're

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dealing with holidays. I don't think business is going to
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 2
       be that great anyway. So, if we can steer the customer
 3
       potentially to, you know, get an energy audit during that
 4
       time, and, based on that energy audit, potentially give
 5
       them a larger rebate, you know, in the springtime, or set
 6
       it up somehow so it goes hand-in-hand. Because most solar
 7
       retailers, I think, have other aspects to their business,
 8
       and they're not looking to, you know, count on solar to
 9
       keep them afloat the entire year. I think it's a little
10
       unreasonable, at least this day and age, or at this time
11
       in the trend moving forward, I think it's a little
12
       unreasonable to think they can. And, so, most of them
13
       have other things that they're selling, renewable
       products, you know, biomass, coming into the fall, for
14
15
       example.
16
                         So, you know, to have -- potentially
17
       give these people or solar retailers the opportunity maybe
18
       to get into energy auditing for their customers as they're
       approached, it builds great relationships, and it also --
19
20
       I think it's a great way to cast a net wide, you know, and
       get more people on board. And, it would be a process to
21
       where, if it's done properly, I think we could get the
22
23
       most bang for the buck.
24
                         CHAIRMAN GETZ: All right.
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1	questions?
2	(No verbal response)
3	CHAIRMAN GETZ: Thank you.
4	MR. FAY: Thank you.
5	CHAIRMAN GETZ: Kim Frase.
6	MR. FRASE: Thank you, Commissioners. I
7	think the rebate at \$3.00 for a watt, up to 2,000, has
8	probably always been a little steep for the small system.
9	I agree that it's a great sell for a small system. But,
LO	in the overall scheme of things, I think it should have
L1	been more 4,000 watt, you know, if you're going to drop
L2	it, maybe drop it to a dollar and a half a watt for a
L3	4,000 watt system. Now, granted, once you put in a 4,000
L4	watt system, you're still in the \$6,000 rebate, which may
L5	exhaust your funds. But I think you're going to find
L6	you're going to have a little less participants, because,
L7	you know, some of the smaller systems might not fly,
L8	because, you know, the payback isn't quite as good as it
L9	had been with the 6,000.
20	CHAIRMAN GETZ: Can I just ask a
21	question? When you said "the rebate's a little steep",
22	you think meaning that it's more than
23	MR. FRASE: At 2,000, I personally think
24	

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1
                         CHAIRMAN GETZ: Excuse me, sir.
 2
       only one of us can --
 3
                         MR. FRASE: Oh, sorry.
 4
                         CHAIRMAN GETZ: -- get translated to Mr.
 5
       Patnaude at a time. I just want to make sure I understand
 6
       what you're saying. That the rebate was more than was
 7
       needed, is that what you're saying?
 8
                         MR. FRASE: I think it was -- it may
 9
       have been, you know, especially where we're at right now,
10
       I think, at $6,000 for a 2,000 watt system, was probably a
11
       little more generous than the state needed to be. And, I
12
       think, if it had been $1.50 a watt for 4,000 watt systems,
13
       I don't know what your average, Jack probably knows what
       the average systems have been going out at, and I think
14
15
       it's probably somewhere around 4,000. So, you know, your
16
       4,000 to 5,000 watt systems still would be appreciating
17
       the maximum rebate. The smaller systems wouldn't get the
18
       maximum rebate, but the state would be saving some of the
       monies in the fund.
19
20
                         So, I've kind of always thought that.
21
       But, now that we're in the state we're in now, I think
       increasing the -- increasing it to 4,000, you know, $1.50
22
23
       the watt up to 4,000 watts would be a good idea, or at
24
       least to 3,000 watts for $1.50 a watt wouldn't be bad.
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1
       And, you're going to have a few less participants. So, I
 2
       think you're going to find, when you crunch the numbers,
 3
       you know, it's going to be hard say, see in a few months,
       maybe it wouldn't happen, but you'll probably come out to
       a similar end result -- well, it would actually be
 5
 6
       different than if -- I think, if you cut it to $1.50 a
 7
       watt for 2,000 watts right now, by basic math, you're
 8
       going to cut your draw in half, right? You know, just by
9
       simple math. But, because you're going to lose so much
10
       interest in participants, you're probably going to cut it
11
       in half again. So, you're trying to, you know, you were
12
       trying to save, you know, a million dollars, like, a
13
       million, a million and a half dollars, whatever it was,
14
       you would save, you know, twice that. Because people
15
       aren't going to be doing it as much as, you know, as they
16
       had been. So, I think, at $1.50 a watt for 3,000 watts or
17
       $1.50 a watt for 4,000 watts, would stretch it out and you
18
       would probably have enough money to get through the fiscal
19
       year.
20
                         And, as far as the cap, I agree with
       everybody else that brought that up. I think a 10,000
21
       watt cap for a system would be another good idea. Because
22
23
       one advantage we do have, at least with my New Hampshire
24
       Co-op customers, is we can -- we have the Renewable Energy
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1 Credit funds that we can use a little bit. And, once you
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- get into a 4 or 5,000 watt system, that number gets a
- 3 little more attractive, and it starts offsetting the money
- 4 they're losing, you know, by this reduction in the rebate.
- 5 So, you know, as far as the Co-op's, and I'm not sure -- I
- 6 know Public Service doesn't participate in the Renewable
- 7 Energy Credits, but the Co-op does. So, for my Co-op
- 8 customers, I have that advantage for the larger systems,
- 9 you know, a customer could have 3, 4, \$500, depending on
- 10 the size of the system, to offset, and per year, to offset
- 11 the money they're losing from the -- well, not "losing",
- but they're not -- that you're reducing from the rebate,
- if you change it.
- 14 CMSR. BELOW: So, just to be clear, what
- 15 you're saying is that, from a selling point of view, even
- if a customer maxed out on the rebate they could get from
- this program, at 3 or 4 or 5 kW system, some people will
- 18 go ahead and put in a larger system, because both the
- 19 federal tax credits available, plus they could get --
- MR. FRASE: Correct.
- 21 CMSR. BELOW: -- Renewable Energy
- 22 Credits.
- MR. FRASE: Correct.
- 24 CMSR. BELOW: And, for the larger size

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1 systems, 7, 8, 10 kW, it's worth putting in the metering
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- 2 to get the RECs?
- 3 MR. FRASE: Absolutely.
- 4 CMSR. BELOW: Okay. Thank you.
- 5 MR. FRASE: And, you know, at 10 -- you
- 6 know, like what Mark said, you know, you get your system
- 7 here, you really need to get to 5.4 to make the math work
- 8 out right, and you can't. You have to either change the
- 9 inverter, and then maybe they can't expand on a row,
- 10 because you had to change an inverter to make it work at
- 11 4.9. So, it really ties your hand.
- 12 And, I do disagree a little bit on a
- 13 commenter, I forget your name, but I don't -- I think,
- 14 whatever you do, my opinion, I think the rebate should
- 15 stay year-round, even if it's less. I think starting and
- 16 stopping a program would virtually start and stop the PV
- for me. You know, when the program runs out, you know, if
- 18 people know, in January, that there's not going to be any
- 19 money till June, I'm not going to make one sale, you know,
- 20 for that time period. So, I think a lesser rebate is
- 21 better than no rebate for half a year. As I -- I don't
- 22 think it's something that should start and stop. It's a
- 23 challenge you're going to have to try to come up with a
- 24 magic number of what's going to make it to next July 1st,

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and, you know, good luck with that. But I think ending
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- it, you know, for two or three months, you know, it's just
- 3 going to stop. You're not going to have any. You know,
- 4 it will stop, because, you know, why is someone going to
- do something when they know in three months they're
- 6 probably going to get 6, you know, 3 or 4 or \$5,000 for a
- 7 system.
- 8 And, then, Jack kind of answered the
- 9 question. But I've got four or five applications in, and
- 10 I'm probably going to have four or five more coming across
- 11 your desk real soon, because people are afraid that
- 12 they're going to lose \$3,000 here. I assume you're not
- 13 sitting on the rebates, you're going to keep processing
- them, the applications?
- 15 MR. RUDERMAN: That's correct.
- 16 MR. FRASE: And, so, when you say you're
- going to come up with some date at which there will be a
- 18 cut-off, and I know you don't know when now, but are you
- 19 thinking it's the date that the application is presented
- on your desk or the date you've actually approved it?
- 21 Because it takes four or five weeks for you to get
- 22 approval, just so my customers can kind of know, "well,
- 23 I'm thinking, am I going to get a \$6,000 rebate or a
- 24 \$3,000 rebate?"

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1 MR. RUDERMAN: I think the idea is to
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- look at the date that the application is submitted.
- MR. FRASE: Okay. Good. Because I've
- 4 got several people right now that are probably going to do
- 5 it, and they're waiting for me tonight to see what the
- 6 feel, I know it's not etched in stone, but it may make a
- 7 difference of the four or five systems that I got on the
- 8 books right now.
- 9 CHAIRMAN GETZ: Well, let me just say
- 10 this, I guess. I can't -- we're not going to say anything
- 11 definitive from the Bench today.
- MR. FRASE: I realize that.
- 13 CHAIRMAN GETZ: We hear what you're
- 14 saying. And, we'll take it into consideration.
- MR. FRASE: Right.
- 16 CHAIRMAN GETZ: And, we'll be very clear
- in our decision on what the applicable dates are.
- 18 MR. FRASE: Okay. Yes. Thank you.
- 19 CHAIRMAN GETZ: Chris Booth.
- 20 MR. BOOTH: Is it okay to draw something
- 21 on that board?
- 22 CHAIRMAN GETZ: Sure.
- 23 MR. BOOTH: I'm wearing three hats here.
- 24 Get more money. Okay. I'll introduce myself first. I'm

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1 Chris Booth. And, I'm basically an electrical engineer.
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- 2 I've spent about 15 years designing high-voltage power
- 3 supplies. And, the last couple of years, I've been doing
- 4 solar advocacy. I'm been collecting signatures on this
- 5 petition, which I'm going to give to you. I took out the
- 6 ones -- I'm collecting signatures from all over the world.
- 7 And, I took out the ones that don't identifiably have a
- 8 New Hampshire resident or are just unidentified.
- 9 Initially, I was just having them sign it. But, more
- 10 recently, I've been having them add their location, which
- is a little bit more helpful.
- 12 And, the thing to look at on this graph
- 13 here is that, right now -- well, in 2008, the world was
- 14 getting 0.02 percent of its energy from solar. Now, we
- 15 can anticipate that, in 20 years, and I really mean that,
- 16 we'll be getting 65 percent of our energy from solar. We
- only have two choices: Either pay \$20 a gallon for gas
- 18 and heating oil or get 65 percent of our energy from solar
- 19 and 25 percent from wind. There's no other choices
- available.
- 21 And, the second hat that I'm wearing is
- 22 I started a company to build solar panels. And, right
- 23 now, I'm looking for two pieces of paper; one for the PUC
- 24 -- well, not really the PUC, but from an electric utility

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1 that is a contract to sell the electricity at a fixed rate
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- 2 for 20 years, and a second piece of paper is a contract
- 3 from somebody that has a large parking lot and is willing
- 4 to allow me to install solar panels there. Those are the
- 5 only two pieces of paper that I need. Okay?
- 6 The third hat that I'm wearing is, yes,
- 7 I am running for the U.S. Senate. I will be on the ballot
- 8 in November as an Independent.
- 9 My recommendation, and since you can
- 10 anticipate everybody wanting solar on their rooftop, is to
- 11 -- is to try to get enough money so that, for the first
- 5 percent of the installations, you fund them at \$6,000,
- up to 4.99 kilowatt. There's actually two programs, my
- understanding is there's two programs. There's one for
- 15 systems that are 5 kilowatt and above, and there's some
- 16 mysterious pool of money available for that group of
- systems, and there's a second pool of money that we're
- 18 talking about today for the 4.99 and below kilowatts.
- 19 And, I'm only going to address the 4.99 kilowatt systems.
- 20 And, my recommendation is that they be funded, for the
- 21 first 5 percent of the installations in the State of New
- 22 Hampshire, that's take how many houses there are in the
- 23 State of New Hampshire, and 5 percent of them fund them at
- 24 \$6,000. The next 5 percent, fund them at \$3,000. And,

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the next 10 percent, fund them at $1,500. You're going to
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- 2 have to get more money to do that.
- 3 Okay. Now, here's the second thing that
- 4 I want to show you. This is a map of the United States.
- 5 And, what it does is it multiplies the amount of solar
- 6 energy that comes in to the United States, times the
- 7 average electric rate in that state. And, you can't
- 8 change the amount of solar coming into the state, other
- 9 than having a lot of pollution and, you know, creating a
- 10 lot of smog in Los Angeles to, you know, to block the Sun.
- 11 Other than that, the Sun is going to be the same.
- Now, if you look at the map, you can see
- 13 that we, in New Hampshire, Maine, and Rhode Island,
- 14 Massachusetts and Rhode Island have about the same
- 15 break-even as California, Arizona, and Nevada. And,
- 16 that's because we pay a lot for electricity, and that more
- than compensates for the fact that they have a lot more
- 18 Sun than we do.
- 19 The first state to break even was
- 20 Hawaii. You can buy solar panels for \$9.00. You can't
- 21 read the numbers there. But, if you bought solar panels
- 22 for \$9.00 a watt, you'd break even in Hawaii. The second
- 23 state to break even is Connecticut. If you buy solar
- 24 panels for I think it's -- I'm going to have to walk up

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and see, $5.40 a watt, you'd break even in Connecticut,
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- 2 because they have outrageously high electric rates there,
- 3 even though it's the same electric company as we have here
- in New Hampshire. New Hampshire, you'd have to, with
- 5 incentives, get costs down to \$4 and I think it's 43 cents
- 6 (\$4.43), something like that, there. And, that's
- 7 dependent on what the electric rate is. The electric
- 8 rates have been going up; the amount of Sun doesn't
- 9 change.
- 10 So, those are hard numbers that you have
- 11 to achieve. And, so, for the first 5 percent of
- installations, you want to get that \$6,000 incentive
- 13 available, so that they can count on being able -- in
- business, all you're looking for is "what can you count
- 15 on?" You know, I said that "I'm looking for two pieces of
- 16 paper. I want a 20 year contract from somebody who owns
- land, and I want a 20 year contract from somebody who's
- 18 going to buy the electricity." And, I can't accept a
- 19 contract that says "well, maybe for the first six months",
- or something like that.
- 21 And, so, all of the homes that are going
- to install solar, they need to know that this \$6,000 is
- going to be available. And, if it's going to be cut off
- 24 because of inadequate funding, then they need to know at

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1 least six months to a year ahead of time that that's not
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- 2 going to be, because no sales person can go and sell
- 3 something if there's no certainty that the numbers are
- 4 going to work, and that they are going to break even
- 5 there. Okay.
- 6 I think that pretty much covers it. I'm
- 7 also going to give you a copy of my brochure, which has
- 8 the paragraph about energy. It says "Oil, coal, natural
- 9 gas, and nuclear are only increasing in price, and are
- 10 essentially irrelevant and inconsequential in comparison
- 11 to wind and solar." Thanks. Any questions?
- 12 CHAIRMAN GETZ: Thank you.
- MR. BOOTH: Okay.
- 14 CHAIRMAN GETZ: Pablo Fleischmann.
- 15 MR. FLEISCHMANN: Thank you very much.
- 16 I'm not running for any office. I just want to, first of
- 17 all, say that I think the program that exists now has been
- 18 very successful and people are excited about it. And,
- 19 there's a bit of fear that it's going away. And, you
- 20 know, that's part of reality.
- 21 I'm assuming, on one level, that you
- 22 will revisit this in a year from now, once we know what
- 23 the fund looks like in July 2011. That any decision
- that's made, that's proposed now, will have to be

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1
       reevaluated to try to keep the percentages balanced?
                         CHAIRMAN GETZ: Well, I think it's fair
 2
 3
       to say, over time, as -- if there are changes in the
       Alternative Compliance Payments, and if the Renewable
 5
       Energy Fund fluctuates significantly one way or the other,
 6
       we'll always be looking at that.
 7
                         MR. FLEISCHMANN: Right. I just was
 8
       making that as a statement. I just sort of assumed that.
 9
       And, I think that other folks that have mentioned, if
10
       there's any way to phase this in, as opposed to, you know,
11
       being very abrupt, would be wonderful. I'm sure that
12
       Jack's office is seeing an influx, a steep increase in the
13
       last few weeks, once the docket order was put out. I know
       that people are just scrambling, and it's actually hard to
14
15
       keep up with on the ground. So, whatever way you can
16
       phase this in and give us as much time as possible to
17
       acclimate to the new program. I think, also, the $1.50 a
18
       watt is a decent compromise, considering the limited funds
       available. But that if we could have a tiered cap of some
19
20
       sort would be a little nicer way to go. So, that "4,500"
       I heard mentioned, or even keeping the 6,000, or tiering
21
       above a 2 kilowatt system. So, whether, as Mark Weissflog
22
23
       said, a reverse incentive, or the other way, where, after
24
       the $3,000 rate is achieved, maybe $1.00 a watt, up to,
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1 you know, a new cap of 4,500 or 6,000. Just trying to be
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- 2 creative with the realities of the fund.
- 3 And, which leads me to, I think, the
- 4 most important thing that actually hasn't been raised, and
- 5 I don't know what the PUC can do about this, is to
- 6 actually try to achieve the sustainability of the fund, so
- 7 that we don't have to revisit this based on an unknown
- 8 entity. I haven't heard anyone raise the words "Systems
- 9 Benefits Charges" as a possibility of phasing in more
- 10 money into this type of program. I think the rebates are
- 11 essential for keeping business consistent. And, I don't
- 12 know how effective the System Benefits Charge that the
- 13 utilities are collecting, how are they really benefiting
- 14 people, and if we can actually tap into them from the
- 15 sustainability aspect of things, I'd love to see that.
- 16 That's about it. I think, other than
- that, I'm reiterating -- would be reiterating what other
- 18 folks have said.
- 19 CHAIRMAN GETZ: All right. Thank you.
- MR. FLEISCHMANN: Thank you.
- 21 CMSR. BELOW: Before you go, did you
- 22 want to weigh in on the question of whether the 5 kW cap
- 23 matters?
- MR. FLEISCHMANN: It is difficult to

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1 work around. But I'm working in the Monadnock Region, and
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- 2 I'm finding it just amazing how many people actually
- 3 benefit with the smaller systems. So, it is difficult and
- 4 somewhat arbitrary to just pick a number of 5 kilowatts.
- 5 So, I can see the benefits of removing that.
- 6 CMSR. BELOW: Thank you.
- 7 CHAIRMAN GETZ: Thank you. Tyson
- 8 Miller.
- 9 MR. MILLER: Hi. How are you today?
- 10 CHAIRMAN GETZ: Good morning.
- 11 MR. MILLER: My name is Tyson Miller.
- 12 I'm on the Canterbury Planning Board. Canterbury has been
- 13 fortunate to just receive an EECBG Grant from the federal
- 14 government to build solar photovoltaic PV systems for the
- Town for three of our buildings; two 15Ks and one 5K.
- 16 Part of that grant is to encourage and be open, well,
- we're actually going to the classrooms, talking about our
- 18 photovoltaic. We're going to be showing any Legislature
- 19 -- legislators or other town officials around. We're
- 20 trying to get the ball rolling in Canterbury, and there's
- 21 a lot of interest in the public on doing their own
- 22 photovoltaic.
- 23 I think cutting back on these incentives
- 24 at this point is just almost in reverse of the way the

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country seems to be going. We have other encouraging
 1
 2
       things in the works, like prices of solar photovoltaic is
 3
       slowly going down. We have the PACE Program, if you're
       familiar with that, which may go back into gear, which
 5
       allows the towns to put together energy districts and
 6
       provide bonded money to homeowners to build photovoltaic,
 7
       which sort of eliminates the need -- the worry about
 8
       having a 25 year payback. Because the Town can then
       collect the tax, they actually had the payback on the
10
       individual house's taxes. And, if the person sells a
11
       house after five years, the payback continues to the Town.
12
       So, if you're investing for 25 years, you're not really
13
       having to worry about having to stay in that house.
14
                         But I'd like to look at the big picture,
15
             I see the Public Utilities Commission, I see the
16
       utility -- the emphasis should be more now on the grid
17
       than the generating of electricity by the big utility
18
       companies. Down the road, I could see individuals
       actually producing more electricity than they need in
19
20
       their houses, and that electricity going into the grid
       system. Back in college, there was the old saying that
21
       "the railroads went out of business because they
22
23
       considered themselves as train companies, and not
       transportation companies." And, I think the utilities
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should start thinking of themselves as a grid system, with
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- 2 the homeowner as a partner, that they may then -- somewhat
- 3 who might be taking away from the power that they're
- 4 generating and the sales they're selling. This could work
- with paying the homeowner for the wattage they're
- 6 producing over and above their needs, say, at wholesale
- 7 rates, like they're paying the other providers of
- 8 electricity they're buying from. This would encourage
- 9 people to build larger photovoltaic systems. And, you
- 10 could get away from incentive programs if people can
- 11 actually earn money, at the same time they're paying
- 12 nothing on their electric bill.
- 13 I'm pretty much an amateur at this, and
- I don't know what kinds of incentives the Public Utilities
- 15 Commission has got. So, I'm just speaking from the point
- 16 of view of a layman. But I would also like to reiterate
- to get more money for it that Mr. Booth stated. And,
- 18 that's it.
- 19 CHAIRMAN GETZ: Okay. Thank you very
- 20 much.
- 21 CMSR. IGNATIUS: One question.
- MR. MILLER: Sure.
- 23 CMSR. IGNATIUS: Mr. Miller, by
- encouraging not reducing the rebates, and, as you say, not

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go the opposite direction that everything else seems to be
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- 2 going on energy policy, the result with a limited fund
- 3 would be the program would run out fairly quickly. Is
- 4 that your view? If you have to choose one, one bad result
- 5 or another, that would be preferable, to use it up with
- 6 some higher rebates and end the program until more funding
- 7 comes through?
- 8 MR. MILLER: It's sort of a choice
- 9 between two evils, but I guess I would want to -- I would
- 10 choose to lower the rebates, to have some money going out
- 11 there than none. But, again, I think the big picture
- 12 should be that the utilities -- well, I think I'm correct
- 13 that, if you reach the limit of your house's use on your
- meter, they don't pay you any money. That's the end. Is
- 15 that correct? You don't actually get money as a credit
- 16 from the utilities at the end of the year, if you generate
- more electricity than your house would use.
- 18 CMSR. BELOW: The law has just changed
- in that regard.
- MR. MILLER: Oh, it has.
- 21 CMSR. BELOW: But there's some
- implementation work to be done.
- 23 MR. MILLER: I see. But, thinking of
- the home provider as a partner, and for energy

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independence, which, under the EECBG Grant, people always
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- 2 thought of that now lately as incentive money, when
- 3 actually it came from the previous administration as
- 4 national security, to get off the use of foreign oil.
- 5 And, the more we have, we redistribute this generating
- 6 power around the community, the more independent we're
- 7 going to be. And, even if a large power source in this
- 8 country were to go down, we would still have some
- 9 generating ability coming out of our local homes,
- 10 etcetera. Thank you.
- 11 CHAIRMAN GETZ: Thank you. Is there
- 12 anyone else who would like to speak before we hear from
- 13 Mr. Ruderman? Ma'am.
- 14 MS. HATCH: Hi. My name is Jen. I'm
- 15 with Revision Energy. We're renewable energy solar
- 16 installers. We're actually based in Maine, but we're
- opening in New Hampshire. We also do work in New
- 18 Hampshire. To reiterate some other people's comments, I
- 19 think what we would like to see is a slight reduction in
- 20 the rebate versus an abrupt halt in the rebate. I think
- 21 what we've seen in Maine, our experience, is when they
- 22 have money and then run out of money, it makes it very
- 23 difficult for us to manage people's expectations about
- what they're going to be able to have available to them

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       for incentives. I think $1.50 per watt installed is a
 2
       fair number to put out there. And, I think $4,000 as a
 3
       cap, versus 3 or 6, is also a good compromise. Where, if
       6 is too much for the program to sustain; 3,000 might be
 4
 5
       too small for -- to actually incentivize people to do a
 6
       system that they wouldn't otherwise do without that
 7
       rebate.
 8
                         I know that the Maine state rebate is
 9
       $2,000 right now, and we are still selling solar electric
10
       systems. I think that's on the lower end. New Hampshire
11
       rebates, at $6,000, is very progressive, in my opinion.
       And, if it can't sustain, I think $4,000 is a good
12
13
       compromise, versus 3.
14
                         My main concern, because I deal with a
15
       lot of the paperwork for our clients, is being able to
       manage our clients' expectations. So, whether, I think
16
17
       someone made the point, is it going to be -- the rebate,
18
       are they going to get $6,000 when the application arrives
       at the PUC's desk or when it actually gets approved?
19
20
       Because, in our experience, it has taken weeks for
       approval to, you know, happen, because if whether, if we
21
       can't, you know, we might have a hard time getting a
22
23
       permit from the town, which is required, or the site
24
       survey might come back to us, because it was incorrect the
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first time. So, whatever the case may be, there's a lot
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- 2 of back-and-forth that takes weeks before we can actually
- 3 say "yes, your rebate's been approved." And, so, you
- 4 know, they also have to sign a contract. So, if they --
- 5 no one wants to sign a contract with us without knowing
- 6 what their rebate is going to be. So, that can be
- 7 difficult as well. So, being able to manage those
- 8 expectations and having a clearer deadline that, at this
- 9 date, any applications that arrive at the PUC's desk will
- 10 be approved at 6,000, versus, beyond this date, 4,000.
- 11 And, I think we'll see a huge flood of applications come
- 12 in. So, that will be another thing to think about as
- well.
- 14 And, I think, for the 5 kilowatt versus
- 15 the 10 kilowatt, I see no reason why 10 kilowatts couldn't
- be approved for residential systems. I think, you know,
- why not let someone have a bigger system, if that's what
- 18 they want. The typical size residential system, in our
- 19 opinion, experience, anywhere between 2 kilowatts to 7 or
- 20 8 kilowatts. So, why not let them do a bigger system, if
- 21 they can afford to and want to. That's all I have.
- 22 CHAIRMAN GETZ: Thank you.
- MS. HATCH: Thanks.
- 24 CHAIRMAN GETZ: Mr. Ruderman, do you

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      have any comments?
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                         MR. RUDERMAN: I do. Thank you, Mr.
 3
                 I guess the first thing I'd like to stress,
       because I think some of the folks in the room understand
 5
       this, but others may not, is that what we're doing here is
 6
       we're acting out of necessity. This isn't just "hey,
 7
       maybe the rebate is a little generous, let's knock it down
 8
       and bring it in line with other states." That's not
9
      necessarily the thought process. What we have is a
10
      program that has been hugely successful. And, I think has
11
       gone way beyond any projections that any reasonable people
12
      had when we first started. We've been in operation for 13
13
      months. We've received 443 rebate requests under this
      particular program, totaling requested rebate funds of
14
15
      more than two and a half million dollars. And, that is
16
      not sustainable, given the funding pool that we are
17
      working with. And, as Mr. Fleischmann pointed out, it is
18
       a very unpredictable funding pool. One that has seen
       tremendous fluctuations in only its first two cycles, from
19
20
       4.5 million in July 1, 2009, to 1.3 million which just
       came in this past July 2010.
21
22
                         So, we don't have a lot of money to work
23
       with.
             What we had budgeted prior to this proceeding in
       the companion proceeding, DE 10-212, concerning the
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1
       Commercial Rebate Program that we are developing also, if
 2
       you look at the budget that was presented in the Staff
 3
       memo to the Commission in that docket, we had set aside
       roughly $950,000 for this particular rebate program, the
 5
       residential program for installations of PV and wind under
             And, as was pointed out in the opening remarks from
 7
       the Bench, we're currently going through, typically we're
 8
       seeing at least 20 applications a month, requesting, on
       average, $5,800 in rebate funds. We're at a pace where,
10
       if we don't make any changes, at the end of the year we
11
       will have spent at least 1.4 million. So, we're close to
12
       500,000 over budget, if this rate of applications
13
       continues. And, that leaves us in a very -- or, would
       leave us in a very difficult position.
14
15
                         The program is mandated by law.
16
       1628, enacted in 2008, requires us to operate this program
17
       and to make these rebates available. It does give us --
18
       we do now have authority, due to the recent legislation,
       to make an adjustment in the level of rebate funds that
19
20
       are available. But the legislation says "we shall provide
       rebates for systems under 5 kW."
21
22
                         So, with a shortfall, we would have two
23
       options. You know, one would be to suspend the program,
       as people here have talked about; obviously problematic,
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1
       if we're under a mandate to make the program available.
 2
       Secondly, very likely to have a very negative impact on
 3
       the industry that has sprouted up in response to this
       rebate program, so all of the installers and the
 5
       electricians and others who are participating in the
 6
       program and have come to depend on, we would end up with,
 7
       you know, the stop-and-start model that we have heard so
 8
       much about from folks who manage these funds, funds
9
       typical -- I'm sorry, funds similar to these in other
10
       states. What we have heard is the most devastating thing
11
       that you can do to a developing industry is to have a
12
       rebate program and to go off a cliff and then shut it
13
       down. And, then, you've got a situation where employers
       have ramped up, they have bought equipment, they have
14
15
       brought on new employees, they have trained people, and
16
       all of a sudden they can't support their own business,
17
       because the program vanishes.
18
                         In addition, you have a public that is
       very disappointed and frustrated, and unhappy that some
19
20
       people got in and got their rebate, and then others, who
       didn't get in at that time, now have no way to access
21
       rebate funds.
22
23
                         So, the other option would be
       essentially to keep spending at this rate and eat into
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funds of other programs. And, that would be very
1
 2
       problematic, because that money would likely have to be
 3
       diverted from the Commercial/Industrial Program that we're
       just developing, which itself has a very modest budget.
 5
       And, in view of the legislation that Commissioner Below
 6
       referenced, last session's HB 1270, we have to balance the
 7
       expenditures of funds in this program in proportion to
 8
       retail sales for the residential sector versus the
       non-residential sector. And, the split there is roughly
10
       41 percent residential, 59 percent for the non-residential
11
       or commercial and industrial sector. So, there's just a
12
       reality here that we have got to figure out a way to spend
13
       less money on this program, as successful as it is and as
14
       important as it is to continue it and keep it going.
15
                         I think it's noteworthy that the
16
       proposed reduction to $1.50 per watt rebate is very
17
       consistent with other states in the region. We've done
18
       some research on rebate programs in other states in the
       Northeast, and, in fact, in other regions. There's no
19
20
       program in the country that I'm aware of that offers $3.00
       per watt. Most programs are at somewhere between $1.00,
21
       $1.50, maybe $1.75 per watt. So, I think what we're
22
23
       proposing is fairly reasonable. And, I think it's
24
       reasonable to assume that, if that rebate is set at -- if
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the rebate is at that level in other states, in that many

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2
       other programs, it must be pretty close to the tipping
 3
       point, the amount you need to actually incent people to
 4
       buy these systems.
 5
                         I do hear the concerns that folks have
 6
       expressed today about sort of an abrupt shift from $3.00
 7
       to $1.50. And, we've had several speakers propose that we
 8
       phase that in. And, I think that's, you know, a very
       interesting suggestion, and one that we should give
10
       serious consideration to. I'm not prepared today to, you
11
       know, sort of to make a definitive recommendation
12
       regarding that, but it certainly seems to me like that's
13
       something we should keep in the mix and take a look at as
14
       we move forward.
15
                         Another point I wanted to mention, in
16
       terms of the rebate amount, and whether it's enough to
17
       continue to draw New Hampshire citizens that's investing
18
       in these systems, is we have to keep in mind also that
       there has been a decline in the prices for PV panels over
19
20
       the last several years, and even over the last, you know,
       12, 13 months that our program has been operating. So, I
21
       think that also speaks to the reasonableness of looking to
22
23
       reduce the amount of rebate that we're offering.
24
                         We also have heard a lot of comments
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today about this 5 kW cap and a recommendation that we
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 2
       should lift it. And, I've received phone calls over the
 3
       year, I have heard this from many folks out there. I
       don't disagree with that at all. I do think there is
 5
       potentially an issue of whether the PUC has the authority
 6
       to do that unilaterally. HB 1628 set that cap at 5 kW.
 7
       And, HB 1270 gives us the authority to modify the rebate
 8
       program. It's an open question whether or not that would
       include actually changing the parameters of the system
10
       size that was established by the Legislature. So, I think
11
       that's something, frankly, that we need to spend some more
12
       time looking into as a legal issue.
13
                         We also have heard concerns that some
       folks may have applications in to the PUC. And, if we
14
15
       reduce the rebate, that those applicants, who had expected
16
       the full rebate currently offered, would, sort of without
17
       much notice, find out that their rebate was reduced.
18
       don't think that's the intent here. As I've stated
       before, the idea would be to provide notice ahead of time
19
20
       to the installers and to the general public that a rebate
       reduction is going to happen, and it will be phased in as
21
       of a certain date. And, applications that are received
22
23
       prior to that date will still receive the full rebate
24
       amount at its current level. So, I think that's something
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that is -- we should be firmly committed to, and I don't
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- 2 see any reason why we couldn't do that.
- I guess the last thing I would comment
- 4 on is Mr. Fleischmann's comment about the funding
- 5 mechanism here, and that it presents a challenge. And, I
- 6 would just like to say that that is a reality. And, it's
- 7 something, I think, that probably is the province of the
- 8 Legislature. But, as the Fund Manager, I do have to say
- 9 that, not knowing how much money will come in each year
- ahead of time, and, you know, really having no clue
- 11 sometimes whether we could be talking about a million
- 12 dollars or \$10 million, does make it very difficult to
- 13 plan programs, to budget for programs, and to ensure the
- 14 program continuity that everyone here I think recognizes
- is so important to keeping these programs on track and
- 16 running successfully. So, that's a challenge we're
- dealing with. I don't know that we will be able to
- 18 resolve that in this docket, in fact, I'm pretty certain
- 19 that we won't be able to resolve it in this docket, but I
- think it's a very important point.
- So, that pretty much concludes my
- 22 remarks. I'm happy to take any questions you may have.
- 23 CMSR. IGNATIUS: Mr. Ruderman,
- Mr. Nadeau, I think it was, from Milton, said that, if I

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followed it correctly, that he thought that only $60,000
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- 2 had actually been expended in rebates? And, if I
- 3 misstated your comment --
- 4 MR. NADEAU: That was on the thermal,
- that was on the thermal rebate, not on the PV. That was
- 6 the thermal.
- 7 CMSR. IGNATIUS: Thank you.
- MR. NADEAU: But, just for scale, I was
- 9 trying to relate back to scale how the education wasn't
- 10 out there.
- 11 CMSR. IGNATIUS: Thank you. That helps.
- 12 Just to be certain, the amount that's actually been
- expended in rebates over that 13-month period, you gave us
- 14 the amount that was requested, with the 443 applications
- 15 coming in. How much has actually been sent back out?
- MR. RUDERMAN: \$1,686,000.
- 17 CMSR. IGNATIUS: And, that's in how many
- 18 different installations?
- 19 MR. RUDERMAN: I don't have that number
- 20 in front of me right now. I'm sorry, I do. It's 296.
- 21 CMSR. IGNATIUS: And, then, there's
- 22 another handful that are pending with your office right
- 23 now?
- MR. RUDERMAN: Yes, I would say more

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1 than a handful. In fact, I believe we received 27
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- 2 applications yesterday. So, there seems to be quite the
- 3 rush as word has gotten out about this proceeding and the
- 4 direction that we're considering.
- 5 CHAIRMAN GETZ: Well, the pending
- 6 applications would be the 443 number that you mentioned
- 7 earlier, minus the 293 number?
- 8 MR. RUDERMAN: Yes. Exactly.
- 9 CHAIRMAN GETZ: So, the hundred and --
- MR. RUDERMAN: 296.
- 11 CHAIRMAN GETZ: All right. Thank you.
- 12 And, do you have updated numbers on the Thermal Program?
- 13 MR. RUDERMAN: The last I checked in, we
- were up to over 50 applications. And, I'm going to guess
- 15 that represents over -- requests totally more than
- 16 \$200,000 in rebate funds.
- MR. NADEAU: If I may, I printed this
- 18 off this morning, the graph of what's been allocated.
- 19 CMSR. BELOW: It's probably important to
- 20 note that the vast majority of the money in the Solar Hot
- 21 Water Program is federal ARRA funding that came through
- 22 the Office of Energy & Planning. So, for this fiscal
- 23 year, we only have tentatively budgeted or budgeted
- 24 250,000 as the state sort of matched to leverage those

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1 federal dollars. So, though, it's a significant program
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- 2 that has a long ways to go before it uses up the money,
- 3 most of that money is federal money that we're leveraging
- 4 with only \$500,000 over this year and next year from the
- 5 Renewable Energy Fund.
- 6 CHAIRMAN GETZ: All right. Commissioner
- 7 Ignatius just pointed out that we've received some e-mails
- 8 and other things in writing. And, of course, we'll put
- 9 those in our docketbook, and they will be available on
- 10 line, as will the written comments that we expect by
- 11 September 7th.
- So, is there anything further this
- morning?
- MR. NADEAU: If I may? There's a couple
- 15 things. One, what also happened with the house sales,
- 16 when they discontinued the rebate or the credit, for the
- 17 federal credit, is when the house sales went -- they came
- 18 to just about a stop. So, that shows history of what the
- 19 public's action is going to be when you eliminate either
- 20 credits or rebates. I agree that, you know, you got to
- 21 look at this before it comes to be an elephant in the
- 22 room. But I don't want, and I hope that the Board takes
- in consideration that you don't know someone's income by
- going by and seeing a solar panel on their roof. I think

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the people that need it the most should be more -- it
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- 2 should be -- the former should be zoned into them more
- 3 than wealthy people. I feel that this 5 K and above is
- 4 not the norm, for my town especially. I think 2 or 3 K is
- 5 the norm. I feel that the system right now, the formula
- 6 is set where -- somewhat right. Obviously, the amount of
- 7 rebates is in discussion, and probably going to change.
- 8 But I would like to see a lot of consideration given to
- 9 the people that need the assistance more. And, that's
- 10 not, obviously, above-average income people.
- 11 I don't know if I'm getting across what
- 12 I'm trying to say here?
- 13 CHAIRMAN GETZ: No, we understand your
- 14 point.
- MR. NADEAU: All right. I think the
- 16 people, you know, because I think the average income in my
- town is like \$30,000. That's nothing. And, these people
- 18 need help. And, this is one way of getting them help.
- 19 All right? Thank you very much.
- 20 CHAIRMAN GETZ: Mr. Booth.
- MR. BOOTH: May I have add one, one
- 22 thing. I want to add something about net metering. That
- 23 all of these people that are getting solar on their
- rooftop are going to be using net metering. Net metering

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is just an accounting procedure, it's not something you apply for. You know, when you get your electric bill, if
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- 3 it's negative, well, then you roll it over to the next
- 4 month. And, at the end of year, you know, which you need
- 5 to decide when to do it, don't do it during the summer,
- 6 but do it during the winter, then you figure out what to
- 7 do with what's left over at the end of year there. And,
- 8 there's two states, Ohio and Arizona, that have no limits
- 9 on net metering, on any amount system. You know, you can
- 10 have a 5 gigawatt system and still use net metering in two
- 11 states. And, I think, in New Jersey, there's no limit on
- 12 the number of consumers that have net metering, up to I
- 13 think it's 2 megawatts. And, that's the sort of program
- that I'd like to see in New Hampshire, is just accounted
- 15 -- it's considered an "accounting" procedure, not
- 16 something that you apply for. And, that it be available
- to all consumers, up to, you know, a megawatt, or even
- 18 5 megawatts. Five megawatts is an important number,
- 19 because at that point you have to go directly to the New
- 20 England Power Pool, you can't go through the power
- 21 company.
- 22 CMSR. BELOW: Just so you're aware, the
- 23 -- we, of course, do have net metering in New Hampshire.
- 24 And, the Commission did work closely with the Legislature

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1 to work on modifying that law, so it now does provide for
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- 2 up to 1 megawatt size systems that can be net metered.
- 3 And, there is also a provision that the surplus could be
- 4 paid for.
- 5 MR. BOOTH: Right. That's fine. But
- 6 it's an accounting procedure, it's not something that you
- 7 apply for, you know, and there's no cap on it. That's
- 8 what you have to consider it as. You know, it's not
- 9 something -- you don't apply for net metering. You just
- 10 -- if you're -- you know, net metering should -- and solar
- 11 should be just like going out and buying a toaster or an
- 12 air conditioner. You know, you plug it in and you add
- 13 power to the Grid, just like, you know, you don't apply to
- 14 the electric company to get a toaster or an air
- 15 conditioner, and you shouldn't apply to the electric
- 16 company to put solar panels on your rooftop. If your bill
- 17 at the end of the month is negative, guess what? You were
- 18 generating electricity, and you get a credit that gets
- 19 rolled over. You know, so it's just an accounting
- 20 procedure. It's not something that you should be asked to
- 21 apply for. And, the cap in New Hampshire -- by the way,
- the first person to site solar energy on a rooftop was Tim
- 23 Meeh, who is the person who worked with you in getting the
- 24 net metering law established here in the State of New

Т	Hampshire. Inanks.
2	CHAIRMAN GETZ: All right. Thank you.
3	MR. MILLER: Just a quick addition. I
4	believe the Town paid \$600 to the Public Utility to
5	Unitil for its net metering application, which is a cost
6	to add onto everything else.
7	CHAIRMAN GETZ: Okay. Anything further?
8	(No verbal response)
9	CHAIRMAN GETZ: Okay. Hearing nothing,
10	then we'll close this hearing and take the comments under
11	advisement. Thank you, everyone.
12	(Whereupon the hearing ended at 11:32
13	a.m.)
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