

In The Matter Of:
COMMUNITY SOLAR ENERGY PILOT PROGRAM
AFTERNOON SESSION

July 24, 2018

JH Buehrer & Associates

Original File 072418 CSEPP.txt

Min-U-Script® with Word Index

1 STATE OF NEW JERSEY
2 BOARD OF PUBLIC UTILITIES
3 BPU DOCKET NO.: Q018060646

4
5 COMMUNITY SOLAR ENERGY PILOT PROGRAM
6 STAKEHOLDERS MEETING

7
8
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10 MICHAEL WINKA
11 ARIANE BENREY
12 EMMA YAO XIAO, ESQ.

13 DATE: JULY 24, 2018

14 TIME: 2 P.M.

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1 MR. SHEEHAN: This is Session
2 III, Value of the Credit. This one I
3 think we're going to start off with a
4 presentation from Rutgers, our hosts.
5 Clinton Andrews, I think, is going to
6 be...

7 AUDIENCE MEMBER: He walked out.

8 MR. SHEEHAN: Okay. Clinton
9 Andrews will present the first chunk of
10 the next presentation on Session III.

11 MR. ANDREWS: Okay. Thank you
12 very much, folks. We've been asked by
13 the Board of Public Utilities' staff to
14 help think through the financial
15 assumptions that are relevant for
16 setting public policy in this area. And
17 it sort of requires us to put ourselves
18 in the heads of solar developers who
19 might be interested in community solar
20 projects, and try to think how does it
21 pencil out, what are the key factors
22 that determine whether a project makes
23 sense to pursue or not.

24 And so what we are doing, and we
25 are asking for your help in this, is

1 trying to figure out what are those most
2 important parameters and what are the
3 reasonable values to assume in sort of
4 the financial modeling that can then
5 form in policy development.

6 And so we want to approach this
7 subject in four parts: Introducing our
8 overall objective, which I've already
9 previewed, talking about the major
10 inputs that we are imagining would go
11 into a financial decision-making, and
12 there's a bunch of uncertainties that
13 are associated with them as well to see
14 if we can get a handle on what those
15 are. We'll talk briefly about a
16 modeling platform to pull us all
17 together and then to discuss what are
18 the most important, most salient things,
19 what did we miss and basically get the
20 conversation in this portion of the --
21 of today's event going.

22 Okay. So what we're after are
23 to understand the financial concerns for
24 the New Jersey context. And so some of
25 you who are developers have experience

1 elsewhere with Community Solar, some of
2 you who are developers within New Jersey
3 have experience with solar, but not
4 necessarily with Community Solar. And
5 so among us we're hoping to find the
6 right mix of values for key items.
7 We're going to put all this into a
8 publically available model that some of
9 you may be familiar with that comes out
10 of NREL. It's been pretty well vetted.
11 And then we're going to do a lot of
12 what-if analysis in assisting the BPU
13 members and policy members.

14 So the basic model, pretty
15 straight forward, there are costs
16 associated with producing electricity
17 from solar sources, and there are
18 revenues, and if there's a net -- when
19 you subtract revenues from costs, that
20 means it's probably not going to fly as
21 a solar project unless there's some form
22 of incentive provided.

23 And so we're basically asking
24 the question under what circumstances is
25 there likely to be a financial shortfall

1 and then what circumstances is it going
2 to be something that the market just
3 takes care of without us -- without
4 state government needing to get heavily
5 involved.

6 And so to make this clear, this
7 is not an economic analysis of
8 intangible benefits and avoided
9 omissions and stuff like that. This is
10 a much more straightforward business
11 type of analysis that we're doing that
12 sort of establish an initial basis for
13 developing policy.

14 Okay. So here's the big picture
15 of the modeling platform. It gives you
16 a flavor of the inputs and possible
17 outputs. And so we have solar costs,
18 which include major items like the
19 purchase of panels and other equipment.
20 We, of course, have some exciting new
21 policy developments to deal with that
22 range from tariffs on Chinese-made
23 panels through to a tax reform bill,
24 which has changed lots of people's
25 assumptions. And then we know that

1 there are labor costs and soft costs
2 that we've developed some experience
3 within New Jersey in understanding, but
4 those might be different in some ways
5 for the Community Solar case.

6 There are some other things
7 which have historically been not
8 particularly important but might become
9 important in the Community Solar
10 context, and one of those is whether we
11 have to buy or lease land or rooftop or
12 a parking lot. All of those might
13 become significant, and we're hoping you
14 will tell us.

15 There are costs of capital
16 assumptions that we will be needing to
17 make, and that means we're going to have
18 to be making assumptions about what
19 sorts of structures, what proportion of
20 debt and equity are people playing with.
21 There's the ongoing costs once you've
22 got the thing built, and then an
23 important difference for Community Solar
24 is going to be customer acquisition, is
25 this a significant cost or is it a minor

1 cost. Is it something that we need to
2 pay attention to and we're hoping you
3 will tell us that.

4 All of that we are able to
5 transform into a cost of electricity to
6 provide a kind of a benchmark for
7 assessing the relative importance of
8 things and for doing our what-if
9 analysis. So that's the cost side.

10 On the revenue side there is a
11 world of possibility because this is an
12 area of active policy making, and the
13 rules of the game are going to determine
14 what sorts of revenues are possible.
15 And so we are bracketing those
16 possibilities with four scenarios here.
17 We're hoping you will tell us if those
18 are the right scenarios to represent the
19 range, and you might even have opinions
20 over which scenario you prefer.

21 So at one end of the spectrum we
22 might imagine that Community Solar is
23 not eligible for SRECs, and it's also
24 not eligible for net metering. In other
25 words, what you get is the wholesale

1 price of electricity. On the other
2 hand, you might imagine a more lucrative
3 world from the solar developer's
4 perspective where SRECs are still there
5 and they're still valuable, and you also
6 are able to do net metering and able to
7 basically sell your electricity at
8 wholesale -- at retail.

9 And then there's all sorts of
10 mix-and-match possibilities between
11 those. And those are going to yield
12 quite different revenue projections that
13 range probably by a multiple of three or
14 four. And we want to make sure that
15 we've understood whether this is really
16 the full range that we ought to consider
17 and what you think of them.

18 And then costs minus revenues,
19 yields, the potential shortfall that
20 might need to be made up with additional
21 public policies or might yield a signal
22 that Community Solar is going to fly.

23 Okay. Let's dive into the next
24 level of detail now, and I'm starting
25 with some historical data. This is New

1 Jersey's capital and installation costs
2 for a variety of different sizes of
3 solar installations across the three
4 major utility territories for the year
5 2017.

6 Just picking one number, for
7 installations that are at the 100
8 kilowatt size level, the mean
9 installation cost is \$2,974 per kilowatt
10 in the PSE&G service territory in 2017.
11 But the standard deviation is \$753. So,
12 in other words, there's a really wide
13 range around that 2,974 amount, which
14 suggests that the basic cost to have an
15 installed solar system actually varies a
16 lot from installer to installer to
17 installer. And we need help figuring
18 out what that means and how we should
19 account for that uncertainty in policy
20 development.

21 Another source, and you know,
22 this is an area where both Lawrence
23 Berkeley National labs and the National
24 Renewable Energy Labs have, over years,
25 done a lot of good work assessing the

1 changing cost of solar. This particular
2 slide is taken from NREL's benchmark
3 study of about a year ago. And just to
4 be clear, we're not using the total
5 dollars per watt number because it's
6 been superceded by more recent
7 experience, but we are finding the
8 distribution of costs into profit, sales
9 tax, labor, balance of system inverter,
10 module, and everything to be a plausible
11 distribution. And if that's not a good
12 assumption, we hope you'll tell us.

13 There are substantial
14 differences, especially as we get into
15 Community Solar. We can imagine rooftop
16 installations, we can imagine
17 ground-mounted installations, and we can
18 imagine canopy installations, such as we
19 have over on the Livingston campus of
20 Rutgers, where we have covered the
21 parking lots with solar canopies and
22 everybody likes to park their car under
23 them on days like today.

24 There appears to be a cost
25 premium associated with canopies, and

1 what we've seen is that, depending on
2 which source you look at, we're talking,
3 you know, maybe a 30-percent premium for
4 canopies. If you have information that
5 suggests otherwise, please let us know.

6 In January we saw the beginning
7 of the trade war. It's in the newspaper
8 every day now, you know, the latest news
9 as of lunchtime was that you soy bean
10 farmers no longer have to worry because
11 there's going to be an extra package of
12 subsidies directed at soy bean farmers,
13 and so we'll buy you off one by one. So
14 far they haven't said if there was going
15 to be subsidies for solar.

16 But anyway, a 30 percent tariff
17 on imported solar cells from China
18 represents a significant increase in the
19 cost of that component, but the question
20 that we will be -- that we're posing to
21 you is does that add up to a significant
22 change in the overall attractiveness of
23 solar, given that you also have all of
24 the other components that do not
25 necessarily have the tariff, and you

1 have the labor costs and you have all
2 the other bits. And there's nothing in
3 the way of peer review work on this, but
4 the trade press is suggesting we'll be
5 seeing price increases somewhere between
6 10 and 40 cents per watt. So we'll be
7 interested in what assumptions do you
8 think we should be making in this area.

9 The Investment Tax Credit. The
10 new tax bill has continued something
11 that was actually started earlier that's
12 saying, well, currently 30 percent of
13 installed costs are eligible for
14 investment tax credit, but that is going
15 to step down over time until we -- in
16 the year 2021, which is not that far
17 away, where, as we understand it,
18 residential investment tax credit is
19 going to go down to zero, and for
20 commercial and industrial it's going to
21 drop to 10 percent and stay and flatten
22 out there.

23 There are some additional
24 accounting games that people regularly
25 play that we here in the ivory tower

1 probably dimly understand, and we will
2 be asking for your advice on what are
3 the reasonable assumptions to be made
4 there. You know, can you include the
5 credit in the same year that
6 construction begins, and that kind of
7 thing.

8 And now we'll go on to -- we
9 searched and searched and debated, broke
10 down numbers, erased numbers, and
11 decided to end up with this slide that
12 says we don't know, we hope that you do.
13 How much does it cost to acquire a
14 customer? What is the -- what is a good
15 churn rate to assume and how does this
16 change if you're talking about low- and
17 moderate-income participants compared to
18 others, and how do all of these affect
19 not only what we should assume regarding
20 the actual cost of acquiring a customer,
21 but what's the typical size of a
22 customer.

23 And then as we think about the
24 different ways that Community Solar can
25 be implemented, one is to pretend that

1 it's just a giant residential
2 installation that's kind of distributed
3 in its ownership. And then should we be
4 assuming that acquisition costs are
5 similar to experience that New Jersey
6 has with residential installations, or
7 is it really a different model that is
8 going to be related to some other
9 metric, you know, or some other analogy,
10 or do we have evidence from other states
11 about what the reasonable values are.

12 Switching over to the revenue
13 side, I mentioned those four scenarios,
14 eligible for SRECs or not, net metering
15 or not, and here are some plausible
16 numbers to give you a little bit of the
17 flavor of how much a difference it makes
18 to revenues. So in the no net metering,
19 not eligible for SRECs world, that would
20 suggest that we're down in the 5 cents a
21 kilowatt range. That's typical
22 wholesale price. Unless you tell us
23 otherwise, unless you tell us that's a
24 bad assumption.

25 If we think about bringing SRECs

1 into the picture, the current value of
2 an SREC, looking at the one-year average
3 prior to today, is that they're in the
4 \$200 range. So does that suggest we
5 should add 20, 21 cents to the kilowatt
6 hour plus the 5 cents for the wholesale,
7 and is 26 cents a reasonable assumption,
8 or should we discount future SRECs
9 because we're seeing that market phasing
10 out.

11 All of this is, of course, open
12 to public policy-making as well, but all
13 of you who are in business are making
14 assumptions along these lines right now
15 to try to figure out how much of a risk
16 you are willing to take.

17 We can add in that metering and
18 thereby, you know, be able to sell the
19 electricity at a retail rate, which
20 would potentially put the revenues up in
21 the 35, 36 cents per kilowatt range.
22 You know, quite attractive. And so
23 that's why these revenue assumptions are
24 so important for the model because they
25 represent -- they span such a wide range

1 just looking at a couple of the
2 variables that go into it.

3 Okay. So we are using NREL's
4 Crest model, Cost of Renewable Energy
5 Spreadsheet Tool, that's our garbage
6 grinder to bring all the assumptions
7 together and spit out a livable cost of
8 electricity.

9 This is a model that's been
10 around for a while. It's been pretty
11 well vetted, most of the bugs are out of
12 it. Our main challenges, in fact, are
13 scrubbing out some of the tax code
14 assumptions that really represented what
15 they were a year ago and don't represent
16 what they are today.

17 There are other models
18 available, and you know, developers are
19 likely to use models that have much more
20 engineering detail and detailed weather
21 assumptions. We thought that level of
22 detail was inappropriate for this policy
23 analysis type of work because it's more
24 important that we get the big picture
25 right, and given the ranges of

1 uncertainties that we've already sort of
2 laid out exist along many of the key
3 variables.

4 Here are a bunch of the
5 assumptions that we are planning to make
6 unless you tell us that we're full of it
7 and ought to make different assumptions.
8 And I think the way this can work is
9 after I finish speaking, which will be
10 very soon, you might have a favorite
11 number that you want to come up and
12 comment on. And then in addition we
13 have the written comment opportunity
14 that would let you really hone in on
15 particular assumptions and help us
16 choose more wisely as we try to assemble
17 a reasonable set of assumptions for
18 policy analysis.

19 So just starting in the upper
20 left what's subject to the investment
21 tax credit and to accelerate
22 depreciation. Is 94 percent of capital
23 a reasonable amount or should it be more
24 in the 70s? Are there opportunities to
25 apply bonus depreciation? Is 60/40

1 approximately the right equity to debt
2 split? Is 10 percent a reasonable
3 internal rate of return for the equity
4 part of the investment? Is 6-1/2
5 percent a reasonable rate of interest to
6 assume for the debt portion? Is there a
7 loan fee, should be it be 1 percent,
8 should it be some other number?

9 Capacity factor. Remember we're not
10 doing detailed engineering calculations,
11 we don't have a weather deck behind us.
12 And so is a net capacity factor in the
13 14/15 percent range plausible, and do we
14 have the right annual degradation rate
15 assumed.

16 Ongoing costs for operation and
17 maintenance is the \$15.00 per kilowatt
18 year reasonable. This comes from NREL.
19 Or is it different in New Jersey. I
20 know many other things are different in
21 New Jersey, so that might be one of
22 them.

23 Tax rates, state rate, federal
24 rate, the blended rate is already
25 suspect to me given the new tax law.

1 But insurance, capital costs. You know,
2 we're seeing nice dramatic declines in
3 how much it costs to buy solar panels
4 over the last several years. Is that
5 trend likely to continue.

6 Do you have to pay for land,
7 either to lease it or to buy it.
8 Customer acquisition, again we don't
9 even dare put straw man numbers there,
10 all we are willing to put is question
11 marks. So clearly an area where we need
12 lots of input. Should we be assuming
13 property taxes or royalties in any of
14 this. And, of course, the tariff
15 discussions that we've already had.

16 Okay. So I'm closing with
17 questions. And so here are a dozen
18 questions that we would love you to
19 answer, and if you don't answer it,
20 we're going to make up answers as part
21 of the policy analysis. And so we would
22 like to do it in a way that's informed,
23 and so just walking down it, per watt
24 capital costs, what's eligible for
25 investment tax credits and accelerated

1 depreciation, how much does it cost for
2 customer acquisition, especially -- and
3 let's separate that to the low- and
4 moderate-income category here. Churn
5 rates, different types of installations,
6 rooftop, ground-mount, canopy, what are
7 the right differentials to assume.

8 Leasing or acquisition of the location
9 where we're going to put the panels,
10 property taxes, SRECs, cost of capital,
11 replacement inverters. They don't
12 necessarily have the same lifetime as
13 the panels, so what's the right
14 assumptions there, royalties, tariffs,
15 and there may be other things that we
16 haven't thought of.

17 Okay. So this is work that a
18 group of us have done, Will Irving and
19 Jaci Trzaska have carried a lot of the
20 weight here, Frank Felder has been super
21 helpful in making sure that we look at
22 the big picture, and Jennifer Sennick
23 (ph), who is not listed here, has been
24 playing a role in looking for good
25 policy analogies from other states and

1 good organizational ways to organize it,
2 institutional mechanisms and things like
3 that.

4 So there is an e-mail address
5 for sending your comments to, and that's
6 Communitysolar@NJcleanenergy.com. So I
7 think that's also in today's agenda, so
8 be sure to send lots of comments. So I
9 will stop there.

10 AUDIENCE MEMBER: Will the
11 slides be available?

12 MR. ANDREWS: As far as I know.

13 AUDIENCE MEMBER: Will you put
14 it on your site?

15 MS. BENREY: We'll send those
16 slides on to our web server. That's the
17 e-mail to ask.

18 MR. ANDREWS: Okay. I'm done.
19 Thank you.

20 MR. SHEEHAN: Okay. We're going
21 to move on with our other speakers at
22 this point, CCSA.

23 MR. SMITHWOOD: Sorry to
24 introduce myself briefly in the last
25 session. Melissa gave a reference to

1 CCSA in her opening presentation. I
2 guess I'll just briefly, before I get
3 going, give you a better sense of who we
4 are. So we are a national trade
5 association. We have 50 members now, so
6 we've nearly doubled in a short period
7 of time. We have developers,
8 owner-operators, pure-play Community
9 Solar providers, developers that
10 participate across market segments.

11 So to get into this discussion
12 of the value of the bill credit, I want
13 to start with some of the point that I
14 think is pretty basic, but is important
15 to remember as we get into some of the
16 discussions of when the bill credit
17 should be and what kind of projects that
18 would enable.

19 The bill credit is really the
20 means by which customers realize the
21 economic value of their participation in
22 the program. Just as much in the same
23 way that customers receiving bill
24 credits for exports onto the grid. So
25 there are different models out there in

1 terms of subscriptions, but it's pretty
2 similar to an arrangement where you are
3 build after the credits minus the cost
4 after the subscription, that's your net
5 savings.

6 So the bill credit is really
7 important to ensure the customers
8 realize that, economic value proposition
9 and it relates to project economics but
10 it's not revenues that flow directly to
11 the project. It's a bill credit showing
12 up on the customer's bill. So a basic
13 point but kind of something to anchor
14 our conversation around.

15 So I enjoyed the professor's
16 presentation. I think he raised -- you
17 know, there are a lot of variables out
18 there in the New Jersey market right
19 now, and the BPU has a pretty Herculean
20 task of trying to come up with these
21 rules in a short period of time. So I
22 think we've taken a slightly different
23 tact, which is to kind of think about
24 what is the current situation in the
25 market and what is the context in which

1 the BPU is creating this pilot, and
2 what's their kind of nexus in decision
3 making.

4 And our view is when you look at
5 the about half gigawatt of projects
6 already in the pipeline and the about
7 600 megawatts of head room created by
8 the current legislation that pulled
9 forward the SREC cap, the 5.1 percent
10 goal, we think that even with assuming
11 the 20 percent attrition rate, by the
12 time you get to the end of this year
13 there's going to be enough applications
14 out there that the program will be fully
15 consumed.

16 So, you know, the BPU is still
17 determining whether the program should
18 be closed based on applications or
19 closed based on when projects are
20 energized, but from the perspective of a
21 project developer you're going to be
22 looking at that queue and saying, well,
23 my project is energized so there will be
24 SRECs left, and the likely answer is
25 going to be no.

1 So we're coming from this very
2 pragmatic standpoint of even though the
3 statute, specifically in SRECs successor
4 language says Community Solar should be
5 explicitly included, we think it's a
6 practical matter that this pilot program
7 has to be developed with the presumption
8 that SRECs are not going to be
9 available.

10 So that really makes the bill
11 credit program size citing flexibility
12 and access to Class I RECs critical.
13 And in this discussion I think there's
14 been a lot of discussion about various
15 program design objectives, various types
16 of projects people would like to see.
17 And maybe this isn't the best analogy
18 but it's like a balloon, if you push in
19 on one spot, it's going to push out on
20 other another, and these things are all
21 interrelated. Sites there are more
22 difficult to develop because they're
23 brown fields, they're roots where you
24 have structural concerns, you know, it
25 has to be counter-weighed by the fact

1 that the SREC market is likely to be
2 full.

3 With that said, as this program
4 moves forward, SRECs successor program
5 is really an opportunity to create
6 adders and other incentives to
7 incentivize the type of projects that
8 various stakeholders want to see on
9 certain sites and potentially with
10 certain subscribers.

11 This has been done in other
12 markets, the smart program in
13 Massachusetts, the Megawatt program in
14 New York, they're differentiated adders
15 for different types of projects. There
16 was a reference to flowable takes (ph)
17 this morning. Massachusetts even has a
18 flowable take (ph) entered.

19 So getting kind of into the
20 specifics of what the credits should be,
21 we think the bill credit should be a
22 full retail rate credit, and that's kind
23 of based on three points: One is, and
24 really starting from this bottom dash
25 here, is pragmatism. The timeline

1 doesn't -- that we have to develop this
2 program doesn't allow for a full value
3 of solar development. States that are
4 doing this in a robust manner, it's
5 taking years.

6 But we do have, moving bottom to
7 the top here on those dashes, we have a
8 number of value solar studies. The last
9 one done in New Jersey was about six
10 years ago, but much more recent ones
11 with similar markets and similar
12 marginal costs, like Maryland, that
13 justify our residential retail rate
14 credit easily. So it's a fair proxy for
15 value, but we don't have time to do a
16 full value credit development. And to
17 get to the top dash here it parallels
18 that metering framework that we have in
19 place, and the legislation effectively
20 doubled the REMCAP (ph), so that's a
21 framework that's working and that people
22 want to continue with.

23 The bill credit should be
24 maintained for 25 years. The point is
25 not that future iterations of the

1 program -- so New Jersey said in three
2 years we want to really do a robust
3 value-based crediting scheme that all
4 projects going forward have to have the
5 same credit. It's that when a distinct
6 project needs to know what that credit
7 rate's going to be for customers, so
8 that those can go in the financial
9 models.

10 And then similar to the states
11 that have modified their tariffs, you
12 see these kinds of provisions to be sure
13 that, you know, the project economics
14 are stable. And then bill credit
15 recovery, one part of if the state did
16 want to move to a value-based crediting
17 scheme, it really kind of requires a
18 reinvention of distribution process, and
19 that's happening in New York and
20 California, are really kind of the
21 leaders on that.

22 So ideally we're seeing a lot of
23 evidence that in the real world now that
24 distributed generations on a scale we're
25 avoiding a lot of infrastructure costs

1 that would otherwise be born by
2 ratepayers, and we need to go capturing
3 those costs in a rate case. As a
4 practical matter for this pilot, those
5 bill credits, because that otherwise
6 would be lost revenue to the
7 distribution utilities, should be above
8 related costs. Costs of those bill
9 credits should just be recovered and not
10 by a passable charge so we don't have a
11 lost revenue concern from the utilities.

12 So that's under the value of the
13 credit, and then something which is
14 gonna seem kind of pedestrian, but I
15 want to start off with a real live
16 example here is the bill crediting
17 process, how bill credits are allocated
18 to customers on their bills and
19 accounted for is critically important.

20 To their first slide the bill
21 credit is how the customer receives the
22 value of their Community Solar
23 participation, their subscription. What
24 we've seen in Massachusetts, which has a
25 very successful program, it's a very

1 simple -- it's been built on a very
2 simple tariff. Not to take this on a
3 tangent, but in Massachusetts you get
4 something called schedule Z when you're
5 that metering customer, and you fill out
6 the account you want credits to go to.
7 So like I'm in the process of getting a
8 rooftop system, but my sister is in the
9 same utility service territory. I can
10 put her -- I can give her credits from
11 my system. So it's a flexible system.

12 The down side is the utility's
13 billing processes is really not scaled
14 to the success of the program, it's
15 being done annually and without
16 sufficient processes even to do it
17 manually. And so what we've seen is
18 customers receiving credits on their
19 utility bills months later, and in some
20 cases those credits have gone to the
21 wrong customers. And so that creates a
22 lot of frustration. The Community Solar
23 is paying their subscription. In a lot
24 of cases the solar companies have taken
25 on them to say, well, forego a payment

1 while this gets corrected, but it really
2 gets back to the utility's billing
3 processes to really resolve that
4 problem.

5 So I'm getting into specifics
6 here, but I really want a level set on
7 this is a problem that we want to make
8 sure does not recur in other markets
9 because it's really frustrating for
10 customers.

11 So the process. Community
12 Community Solar providers, or what we
13 tend to call subscriber organizations,
14 need to submit a report to the
15 utilities, ideally electronically, again
16 to try to prevent errors and making it a
17 smooth process, on the subscribers to
18 the project and how much of the
19 project's generation is attributable to
20 those customers.

21 So if it was a 100 kilowatt --
22 well, I'm not even going to bother doing
23 math, but if they have a, you know,
24 10-kilowatt system and whatever
25 proportion of that project is 10

1 kilowatts, you know, that generation
2 needs to be credited to that specific
3 customer.

4 So the EDCs, the utilities that
5 apply that bill credit to the accounts
6 of all those subscribers, based on the
7 their proportion of the production, so
8 whatever their subscription entitles
9 them to in terms of a portion of the
10 project's generation, and then metering
11 that bill credit should roll over month
12 to month.

13 So these projects are no
14 different than any other solar project,
15 the production varies seasonally, and
16 you want customers to really capture the
17 value of that additional generation in
18 the summer by rolling those credits
19 over.

20 So importantly is a feedback
21 lobe, so the Community Solar providers,
22 this subscriber organization, sends a
23 report in, credits are allocated out,
24 and then the utility should really send
25 a report back for accounting purposes,

1 so you can see, okay, I see this report,
2 and, yes, the math adds up to 200
3 percent and the credit's not what it's
4 supposed to be and then there's kind of
5 an accounting control there.

6 And then the last point, there
7 was a question on how do we size these
8 projects relative to customers. What we
9 see work in other markets, because
10 you're going to want to create
11 flexibility to subscribers, you know,
12 they may need to transfer their
13 subscriptions, they may want to upsize
14 their subscriptions, you know, you're
15 inevitably going to have some churn, in
16 kind of the most successful model is to
17 allow that project to retain credits for
18 a period of time, typically a year, and
19 then they can allocate those credits
20 out. So if they lose a customer and
21 then another customer comes in a month
22 later, those credits can be allocated
23 over to that new customer.

24 And then barring that, you know,
25 customers -- or the subscriber

1 organization or project owner should
2 have the opportunity to sell the
3 unsubscribed energy to the utility at
4 avoided cost.

5 So that's what we've got on bill
6 credit. I'm happy to answer any
7 questions.

8 MR. SHEEHAN: Thank you very
9 much.

10 MR. SMITHWOOD: Thanks.

11 MR. SHEEHAN: Our next speaker
12 is Ondrea Kanwhen.

13 MS. KANWHEN: Hello. My name is
14 Ondrea Kanwhen, that is K-A-N-W-H-E-N.
15 I hope you guys are having a great
16 afternoon. It's been wonderful to
17 attend all these different sessions and
18 analysis.

19 About myself, I'm the founder of
20 Bona Global Energy and Solutions. We
21 do -- we're focused on providing
22 financial analysis, sales support, and
23 project management services. So I'm
24 going to actually keep a lot of what I'm
25 going to say brief because throughout

1 today everybody's basically mentioned
2 what I planned to talk about, especially
3 the very last presentation, I have to
4 say I concur, I agree, with all the
5 points that are mentioned. But there
6 are a few points that I would like to
7 mention.

8 So I actually model the
9 scenarios in question 14, and I'll
10 provide them in detail in the written
11 comments. One of the things I found --
12 or one of the few things that I found
13 was that the cost of acquisition of
14 subscribers actually created a huge
15 impact on the IRR for the -- for
16 example, the 5 Megawatt project. And
17 that was the most economically
18 attractive project, and I still saw IRR
19 when I added in the customers
20 acquisition costs.

21 And while in regular residential
22 multi-family projects you will have that
23 customer acquisition cost to take into
24 consideration, with Community Solar it
25 is a bit larger just due to the fact

1 that you're acquiring a lot more
2 customers, and, of course, in turn, this
3 is a cost that you're going to
4 continually have year after year. So I
5 did see that the IRR dropped 500 basis
6 points just by adding in that.

7 And then the second drop that I
8 saw was the -- in adding savings for
9 subscribers, that especially with the
10 market that we're targeting, when I
11 added an additional 25 percent bill
12 savings for subscribers, I noticed an
13 additional 800 basis point drop in IRR.

14 And I guess it's up for debate
15 whether or not we'd like to add such a
16 high bill savings for the subscribers.
17 However, just from my experience selling
18 to LMI residents as well as multi-family
19 housing, that's the first thing you have
20 to propose when you walk in the door, is
21 savings. They're interested in other
22 things as well. However, if you don't
23 have savings to show on the sheet when
24 you walk through the door, then it sort
25 of stops your conversation.

1 So then there seems to be two
2 parts to that savings that we've seen,
3 and one is the value of the credit, and
4 I do agree with the previous
5 presentation that the credit should
6 equal the retail rate.

7 If there is a lot of fluctuation
8 in the valuation of that bill credit,
9 like we're seeing in New York, it causes
10 quite a bit of difficulty doing a
11 financial analysis and giving reliable
12 numbers to a financial entity, that in
13 20 years this is what your project is
14 going to return. And, of course, the
15 subscriber also will run -- may run into
16 even higher costs in the initial...

17 So the next thing that I saw
18 were developer costs that -- and the
19 main developer costs was the customer
20 acquisition costs, which I had mentioned
21 before. That cost I modeled out -- I
22 can provide the numbers for that at
23 another time as well. That's through
24 research and only a very small sample
25 size, so I'm sure a lot of other people

1 would be able to provide additional
2 numbers for that. But those numbers
3 are, of course, affected by the type of
4 subscribers that you are getting. I
5 don't know have numbers put out between
6 LMI and non-LMI customers. But it's not
7 just LMI, it's also the number of
8 subscribers.

9 If you have a 5 Megawatt project
10 and you have a huge project that's
11 taking up 80 percent of the power that's
12 generated, then, yes, your customer
13 acquisition costs aren't going to be
14 that high. If you can find subscribers
15 that will sign up for a 20-year term,
16 that would also change your yearly
17 customer acquisition rates. However, I
18 have not been able to, so -- in 20
19 years. So that's something I don't have
20 experience with. I would see something
21 more of a 12-month, 18-month of a
22 subscription and then you, of course,
23 would have to do a churn.

24 So those are the points that I'd
25 like to bring up that needs to be taken

1 into consideration. I feel like there
2 should be some sort of additional
3 incentive to incentivize LMI
4 subscription because of the additional
5 costs that may be incurred. And I
6 definitely believe that the SRECs, or at
7 least some sort of REC should be
8 available to developers to offset the
9 cost of solar. Otherwise, it's going to
10 be very tough to incentivize developers
11 to take on these projects.

12 That's it. Any questions?

13 MS. BENREY: So thank you. So
14 you provided additional detail, but just
15 on the one number that I found
16 interesting. You said you modeled a
17 25-percent bill savings. Is that, in
18 your experience -- has that been a
19 threshold to get people interested?

20 MS. KANWHEN: Most of my
21 experience has been with LMI and doing
22 floor sales to LMI and as well as
23 Housing Authority for low-income
24 individuals. So, yes, 20 to 25 percent
25 was what we were targeting, and so that

1 was the goal. I can try to sell more,
2 but that's how the model is, yeah. And
3 in doing research for this I thought SEI
4 quoted 30 percent, but I don't remember
5 an initial number.

6 MR. SHEEHAN: Thank you very
7 much.

8 Direct Energy Solar? Daniel
9 Schneider. New Jersey Resources Act.

10 MR. SCHNEIDER: Okay. We had a
11 slightly different perspective on this,
12 but, you know, you guys paid good money
13 to be here, so let's tee up some
14 differences of opinion.

15 When we look at this model, we
16 think it is most analogous, not quite to
17 sort of a retail -- third-party retail
18 supply model. So, you know, the idea is
19 now that we have some power to sell, we
20 have a retail customer that wants to buy
21 that power, and we're going to kind of
22 create a transaction to make that
23 happen.

24 So the way a third-party retail
25 supplier would work is they would charge

1 you an overall generation charge that,
2 in most cases, particularly for
3 residential customers, is going to be
4 what you might hear, your basis
5 generation service rate. And that right
6 now, if you -- you know, it depends on
7 the utility region that you're in, that
8 right now can run from 8 to 9 to 10
9 cents a kilowatt hour.

10 So what we would be thinking of
11 was, okay, now instead of paying for
12 that, Mr. Customer, you will sign up for
13 this solar power that we're going to
14 provide to you from this solar facility
15 located in your utility service
16 territory. And then that BGS cost that
17 you now incur on your bill, that bill
18 credit is going to go away and will be
19 replaced then by what we're going to be
20 charging you.

21 Now, just as in the third-party
22 supply model, we would say let's make
23 this real easy. The utility already has
24 an infrastructure set up, building
25 infrastructure, to be able to account

1 for, you know, what power that retail
2 supplier provided to you at what price,
3 make sure that's reflected on your bill,
4 collect the payment from the customer,
5 revert the funds back to the supplier,
6 and also provide the overall credit and
7 collection service.

8 So we think about that model as
9 something to really think about now as
10 we're starting to see the cost of solar
11 come down, see that it's generation that
12 we can put in our own New Jersey world,
13 and literally, you know, now serve the
14 electric loads of customers, and that
15 that can be a model that we apply here
16 for Community Solar for virtual net
17 metering for community choice, that that
18 model is kind of scaled.

19 Also, as the cost of solar has
20 come down pretty significantly, you
21 start to look at if you can build a
22 large scale project and get all the
23 economies to scale, as folks have talked
24 about. You're not too far from being
25 able to deliver a price that's

1 attractive to that price to compare the
2 BGS rate, and so it starts to come
3 together.

4 So in the best-case scenario in
5 the state if you can do this, for
6 instance, in the PSE&G territory, which
7 has the highest BGS rate, if you can
8 build the largest system you could, five
9 megawatts in this case, a ground-mounted
10 system in, say, a landfill or brown
11 field, you would not need much of an
12 incentive at all to make that -- the
13 economics of that work. The customer
14 would get their bill credit, they'd get
15 a little savings.

16 The utility, by the way, gets
17 fully paid for transporting the power,
18 which is how the deregulation market was
19 originally set up, is they should be
20 agnostic as to where the electron comes
21 from. They should be paid, though, for
22 the use of the poles and wires, and the
23 state should be happy with that because
24 you have less of a need of contribution
25 from non-participants. So how do we do

1 more of those.

2 You know, the other piece of
3 that would be, to make that model work,
4 we do have to start to get more serious
5 about this value of solar thing that
6 people have been talking about. So if
7 we're going -- whenever I get to the
8 pulpit, I will say this, but we need a
9 value of solar study here in this state,
10 not a study done by this group or that
11 group, but a study that kind of is where
12 the state pulls together the expertise,
13 goes through the process and says here's
14 going to be our methodology for how we
15 do this.

16 Because if we're going to be a
17 clean energy state, we're going to need
18 it in the bag and done so that we're not
19 relitigating it every time we want to do
20 something new. We need a number. If
21 you look at Minnesota, their number is
22 13 cents. You can look at New York,
23 their number is something else. There's
24 no right number, but there is a number,
25 and I think we need that.

1 Now, if I use Minnesota's
2 number, which includes the peak value of
3 the energy, it includes the avoided
4 generation costs that that facility is
5 contributing to, the avoided
6 transmission costs, the avoided power
7 plant O & M, the environmental benefits.
8 All of those things start to add up to
9 what a solar system from a relatively
10 large facility here in New Jersey can
11 deliver. So you start to have the
12 economic justification behind that
13 price.

14 Now, the problem is, as you
15 start to move out of that idealized
16 project and you go to a smaller project,
17 you go to a rooftop project, you go to a
18 project that has multiple customers,
19 when you're talking about churn and
20 things like that, then your costs go up.

21 You would need a premium, here's
22 where you would need incentives, if you
23 were doing that project with JCP&L or
24 ACE territory, you would need a multiple
25 of that if you were doing a rooftop

1 Community Solar project and a multiple
2 on that if you were doing a canopy.

3 That all gets back to the
4 earlier question I raised about, well,
5 you know, so if we're going to be happy
6 with a diverse set of projects here,
7 we're going to need some source of
8 funding to be able to support those
9 incentives. I won't belabor the point
10 about the options.

11 So that is -- you know, when we
12 submitted our comments, we did some
13 analysis on all the scenarios that you
14 posed, and we can give you some specific
15 numbers there that relate to, you know,
16 what the incentives are under the
17 different cases.

18 If you're going to have
19 commercial customer in the mix, that
20 adds another level of complexity because
21 they're priced-to-compare rate is not --
22 is energy and it's also a per-kilowatt
23 basis for capacity and other charges, so
24 you need to figure out how to do that a
25 little bit differently.

1 But that's kind of the -- that's
2 our thought process on the theory then,
3 but I also do recognize pragmatism, too,
4 and if we're going to be stumbling
5 around for a while figuring out what the
6 right incentive structure is to get this
7 pilot going, then, yeah, I mean, maybe
8 full retail credit is the way to go just
9 to expedite it. But I'd like us to be
10 thinking how can we start to break
11 through a new paradigm here.

12 MR. WINKA: So in the value of
13 solar have you ever looked at the cost
14 benefit analysis at Rutgers down to the
15 clean energy program on an annual basis,
16 so it has the avoided T & D cost, the
17 avoided environmental costs. I don't
18 think it has resiliency in that, but...
19 so it has those stack values in there.
20 Does that do a proxy for what you're
21 talking about, or do you want to take a
22 look at it and send us comments?

23 And I would suggest that folks
24 do that. So we do that annually, Scott
25 Hunter's program, Sherry Jones effect.

1 MR. SCHNEIDER: Yeah, I wasn't
2 aware it was -- is there a number we
3 refer to? Any ranges you can share? I
4 mean, what's the...

5 MR. FELDER: So why don't we
6 distribute the latest one, and maybe you
7 can take a look at the factors that --
8 we're asking every year for comments on
9 avoided T & D costs and all of those
10 things. So, you know, if we can do
11 something that's a proxy that you think
12 is something that's close enough, that's
13 something we can do.

14 MR. SCHNEIDER: Yeah, and just
15 to be clear I'm not saying that needs to
16 be done for this pilot, I'm just saying
17 that needs to be done at some point
18 over, you know, a reasonable period of
19 time in a rigorous, robust way.

20 What I see in other states is it
21 does take some time to do this. It's a
22 proceeding and you've invited one expert
23 and he says it's worth 3 cents, and
24 another expert and he says it's worth 30
25 cents and eventually you come to some

1 consensus on what makes sense. But it
2 is a proceeding, and then there becomes
3 an official methodology. But, again,
4 I'm not suggesting that has to be done
5 before the pilot but it could be a
6 reference point for us.

7 MR. SHEEHAN: Jonathan Ratner.

8 MR. RATNER: Yeah, just some
9 very briefly. This is obviously a real
10 trick shot particularly because of the
11 fact that the elimination of the SREC
12 program is overhanging this pilot period
13 and we don't know exactly what we're
14 transitioning to.

15 So I think there's certainly the
16 challenge of making sure that the
17 incentives and the credit is established
18 in such a way that there's sufficient
19 uptake for the pilot. There are
20 certainly examples of other states'
21 pilot programs that have not really
22 garnered very much enthusiasm and many
23 takers for doing projects.

24 I think it's also critical to
25 ensure that the BPU has thought in

1 advance about methodologies they might
2 be able to use to translate the results
3 of the pilot and make use of those
4 results given that no doubt the
5 crediting environment will be different
6 three years from now.

7 The only other comment that I
8 wanted to make was just that it seems
9 like net metering will likely be a piece
10 part of the equation, and the model
11 that's been used for net metering for
12 traditional rooftop solar has always
13 basically used prior historical customer
14 usage to establish the maximum size of
15 the installation, but the retail rate
16 has been always capped at basically
17 zeroing out your bill at the level
18 that -- of electricity that's overall
19 been used or supplied.

20 And then immediately you go to
21 avoided costs, and it just seems to me
22 that there is an argument to have the
23 retail rate applied up until such a
24 point as not simply you zeroed out your
25 bill, but you have surpassed your

1 baseline historical usage because I
2 think that is a better approach in order
3 to incentivize energy efficiency, you
4 know, it kind of measures by the
5 customer. If they know that once they
6 get to net zero through the net metering
7 that they're just going to be
8 compensated and avoid costs, that does
9 significantly lessen the incentive for
10 energy efficiency measures. That's it.

11 MR. SHEEHAN: Thank you very
12 much.

13 Vote Solar.

14 MS. KASOTIA: Hi again. We
15 don't really have any new comments than
16 what's already been offered. I think
17 someone had touched on earlier, that to
18 get customers interested in Community
19 Solar program, you want to make the
20 value of credit meaningful. So we are
21 recommending that we start with the
22 retail rate for the value of credit and,
23 as others have talked about, if we do
24 move to on the value of credit study,
25 Minnesota is a good example, so we would

1 recommend that how Minnesota did its
2 study and the different aspects that
3 were utilized. So that's it. Thank
4 you.

5 MR. SHEEHAN: Pine Gate
6 Renewables.

7 MR. BIXBY: My name is Evan
8 Bixby with Pine Gate renewables. I
9 apologize, I was not able to attend the
10 morning session, but I'm glad to be here
11 now.

12 So for the value of credit there
13 are a few things that we would like to
14 sort of harp on to make sure they get
15 implemented into the program.

16 The first thing is the value of
17 credit, whatever it turns out to be,
18 needs to be transparent and calculable
19 by developers. In other programs that
20 we've seen, such as in New York, there
21 is an information asymmetry that is
22 developed between the developers and the
23 utilities where developers can't go in
24 and be able to calculate what these
25 rates are because some of the parts of

1 the value stack are hidden behind
2 so-called proprietary utility
3 information and knowledge. That makes
4 it very difficult to develop and finance
5 projects, as well as it makes it very
6 difficult for the actual subscribers to
7 be able to understand how their credits
8 are being valued.

9 To go into a community and tell
10 someone, yeah, we have this great
11 Community Solar program you can sign up
12 for and get a discount, and someone
13 asks, well, okay, how does that actually
14 work. Net metering make a lot of
15 intuitive sense to a subscriber.
16 Something like a value stack, where it's
17 hidden behind all of these obscure
18 values, makes that very difficult to
19 explain to a subscriber, for them to
20 understand what that real value
21 proposition is there.

22 And so at the very least we
23 advocate for net metering, but I believe
24 that there should be an added benefit on
25 top of net metering. There are

1 ancillary benefits, such as
2 environmental actions, such as a legacy
3 (ph). And as long as those components
4 of a value stack are transparent and
5 understandable and easily explained, not
6 only from a development side, but as
7 well as to a potential subscriber, that
8 will make this program all the more of a
9 success.

10 A few other things that I think
11 should be addressed in the crediting
12 system is that these credits need to be
13 administered in such a way that they
14 remain compatible with budget billing.
15 This was an issue that arose in New York
16 State. They had a two-bill system where
17 if a subscriber became a member of a
18 Community Solar environment and they
19 were on budget billing, they lost their
20 budget billing. For a lot of people
21 that's something that they rely on to to
22 be able to make their monthly finances
23 work.

24 And we also think that SREC
25 should be a part of this program. We

1 understand the challenges around the
2 closure of the SREC program, but there
3 needs to be adequate dovetailing
4 communication between this working group
5 and the new SREC replacement program to
6 ensure that that is as successful as
7 possible. Thank you.

8 MR. SHEEHAN: Thank you very
9 much.

10 That concludes the
11 pre-registered individuals. Now we're
12 moving on to Mr. Long.

13 (No response.)

14 ACE?

15 MR. SUNDERHAUF: Hello again. A
16 few comments from the Atlantic City
17 perspective. One of the cost items I
18 noticed on the original chart were
19 distribution costs and interconnection
20 costs, the distribution system upgrade
21 costs listed. It's certainly one thing
22 that we want everyone to be aware of
23 when thinking about the system cost of
24 the Community Solar facility.

25 From the billing standpoint we

1 too agree that bill credits should be
2 simple to understand and calculate, or
3 remember the utilities are going to
4 calculate them. They have a liability
5 process, we want to reduce billing
6 errors, we want to produce billing
7 errors for our staff to review, and we
8 want to make them fairly simple and
9 transparent.

10 It's likewise applicable to both
11 the host facilities and to customers
12 that are being recruited to these
13 Community Solar facilities. So, again,
14 very clear values and very clearly
15 transparent is an important part.

16 And one of the things that we've
17 always heard is credits could be based
18 on third-party supplier prices. Very
19 hard for us to administer and we would
20 not recommend any use of a third-party
21 supplier pricing in that calculation.

22 Monthly credits should be
23 minimized. The variations should be
24 minimized month over month. It really
25 complicates the billing process and

1 creates additional potential for errors,
2 as we bill and pay all those various
3 subscribers and also hard to communicate
4 to people who subscribe to Community
5 Solar facility. We don't want to
6 engender a lot of traditional billing
7 questions or complaints related to that
8 as well.

9 The one thing that we're very
10 cognizant is if we pay costs above
11 market value, there will be some
12 subsidization to other non-participants.
13 We need to recognize that and be aware
14 of what that does to other participants.
15 That does affect all income groups, we
16 just need all to be cognizant of that.

17 And one of the other questions
18 that came up earlier is how close a
19 Community Solar facility needs to be to
20 the community that it serves. And our
21 view is that these Community Solar
22 facilities should be cited anywhere
23 within the utility footprint of each
24 utility and they can get subscribers
25 from across that utility footprint, and

1 that way there will be more locations
2 that these Community Solar facilities
3 could connect at a lower distribution
4 cost impact and also an interconnection
5 impact and also land use considerations
6 become a less of a potential issue.

7 It's going to greatly -- make it much
8 more complex to cite these and
9 interconnect these at a relatively low
10 cost so we have some level of
11 flexibility. The community is much
12 broader than some streets that are close
13 to one another.

14 One of the things that we also
15 will note is if some form of advanced
16 metering were available, it would allow
17 these facilities, the Community Solar
18 facility and the subscribers, to be
19 billed in the same potential billing
20 cycle. And right now there are
21 Community Solar facility and the other
22 people are on different monthly cycles,
23 greatly complicates the billing, greatly
24 complicates any understanding of exactly
25 how the production is translating into a

1 credit back to the customer. So there
2 are significant advantages if we can
3 basically do it all at the same time.

4 And so we have AMI in other
5 jurisdictions, but that would allow some
6 greater flexibilities in terms of
7 information by the consumers. So those
8 are the added remarks that I had.

9 MR. WINKA: That last point,
10 would you see that as -- so each
11 subscriber would then be upgraded with
12 an advanced meter, or is that a
13 wholesale utility upgrade of the
14 advanced meter system?

15 MR. SUNDERHAUF: Right. It's
16 obviously a policy issue in New Jersey.
17 At the point where AMI is universal,
18 that would be ideal, right, because then
19 you'd have the ability to move things
20 around as you needed to. Until that
21 time you'd have to consider what the net
22 metering characteristics would be.

23 So ideally we would want to
24 meter the participants in some type of
25 remote metering capability. But then

1 given the complexity of that, then
2 metering may not be realistic. So it's
3 kind of a timing issue related to AMI.
4 We would point out that with that remote
5 metering flexibility you do have
6 actually have a lot more flexibility of
7 how you bill these accounts and how you
8 group communities together in terms of
9 that billing, unfortunately. Thank you.

10 MR. SHEEHAN: Lina Smith from
11 Food & Water Watch.

12 MS. SMITH: Hello again. To the
13 question of the value of solar, we would
14 encourage the BPU not to implement a
15 value of solar program.

16 When this type of valuation was
17 implemented in New York to replace the
18 metering, renewable development came to
19 a screeching halt. The policy created
20 uncertainty and confusion in the solar
21 industry and amongst its customers,
22 resulting in project in over 100
23 communities being cancelled, which
24 represented over 600 megawatts.

25 Implementing such a policy in

1 New Jersey would likely be just as
2 disastrous for solar developments. And
3 a more effective and preferable policy
4 would be to extend metering benefits to
5 Community Solar projects like has been
6 mentioned before.

7 New Jersey could consider
8 equitable net metering non-community
9 solar where ratepayers are credited at a
10 retail rate for up to 120 percent of
11 their annual electricity generation,
12 receiving bill credits with the option
13 for annual payments for excess
14 generation up to the 120 percent cap.

15 If solar owners' generation
16 exceeds 120 percent of their generation,
17 the utility that serves them should be
18 required to credit a BPU-administered
19 fund to support the development of LMI
20 community solar project at their retail
21 rate for their excess electricity put
22 into their grid.

23 Regarding excess credits on
24 subscriber bills, we recommend that
25 subscribers should have the options of

1 rolling over their credits at the end of
2 the year or receiving a check from the
3 utility.

4 Until the question of renewable
5 energy credits unbundled as RECs should
6 not be allowed to be sold to utilities
7 to meet renewable electricity standards
8 or sold to electricity customers as a
9 way to offset their fossil fuel usage
10 and claim renewable energy benefits
11 while actually utilizing fossil fuels or
12 other sources of electricity. These
13 credits are used to offset fossil fuel
14 burning elsewhere, and there is no
15 guarantee that SRECs will result in more
16 solar energy being built.

17 But bundled RECs should be
18 regenerated and sold with electricity to
19 electric utilities if a Community Solar
20 project generates excess electricity.
21 The proceeds from the excess generation
22 should be credited to subscribers billed
23 and on an annual basis. Compensation
24 for excess generation from a Community
25 Solar project should be credited to a

1 BPU fund that will support the
2 development of low-income solar projects
3 including reducing subscription costs
4 for LMI subscribers who join the project
5 or current members of Community Solar
6 project.

7 However, if unbundled SRECs are
8 used in the state, they should be
9 available to Community Solar projects
10 and credited to subscribers for the
11 portion of energy available in their
12 subscription up to 120 percent of their
13 electricity usage.

14 Revenue generated from unbundled
15 RECs beyond 120 percent of their
16 electricity usage should be credited to
17 a BPU administered fund to support the
18 development of low-income solar. Thank
19 you.

20 MR. SHEEHAN: So are you
21 advocating for -- are you advocating for
22 scaling the facilities based upon the
23 load or scaling as large as you can and
24 using this credit system?

25 MS. SMITH: Based upon the load.

1 MR. SHEEHAN: Okay. So you're
2 not expecting a lot of this credit
3 system, it's just in the event?

4 MS. SMITH: In the event.

5 MR. SHEEHAN: Okay. Thank you.

6 Next up is Lyle Rawlings.

7 MR. RAWLINGS: Thank you, Ken
8 and Mike, and the other staff. I'm Lyle
9 Rawlings. I'm the president and
10 co-founder of the Mid-Atlantic Solar
11 Energy Industries Association, or MSEIA.
12 MSEIA, going on 21 years now, has been
13 advocating for solar energy in New
14 Jersey.

15 And for all of that time we've
16 done so under three basic principles
17 they're very easy to say, you can see
18 them on our website. Those three
19 principles are grow solar as much as
20 possible, obviously; do so at the least
21 possible cost to ratepayers and deliver
22 the greatest possible values of public
23 good; and, third, maintain a diverse
24 market that provides incentives for
25 local businesses to grow and create

1 jobs.

2 MSEIA has a wide variety of
3 different members and we haven't come to
4 a consensus on what they're recommending
5 for net metering yet. It's a very
6 complicated topic, and a variety of our
7 members with a lot of different views on
8 Community Solar need to come together.
9 We have a policy committee meeting
10 tomorrow and we hope to get there in
11 time to submit comments.

12 But if we apply those basic
13 fundamental policy principles that we
14 have, I think we would have to say that
15 Community Solar projects should not
16 place a greater burden on ratepayers
17 than the default way of doing the same
18 thing.

19 For instance, if you have a 5
20 Megawatt Community Solar project, that
21 should not have a greater total
22 ratepayer burden than a 5 Megawatt
23 project in that same location if it were
24 just to sell power to the grid. So what
25 is that total rate impact?

1 First of all, let's look at what
2 is the total rate impact if we do a real
3 true net metered project on somebody's
4 roof. Now, that's -- it's murky, it's
5 hard to understand this concept of bill
6 credits, and I don't think I've got a
7 real handle on it yet.

8 The two pathways that cost of
9 solar gets to ratepayers, the way it's
10 laid on ratepayers, are first through an
11 attribute payment that stands for the
12 qualities, those environmental
13 qualities, that we've heard about from
14 others, and we do that through an SREC.
15 So the SREC is the attribute payment.

16 The other part comes in a net
17 metered project when the utility company
18 goes for a rate recovery proceeding or a
19 rate recovery mechanism or a periodic
20 rate case. So how much is that? This
21 is so murky that when I talk to utility
22 people I say, please, explain this to me
23 like I'm eight years old.

24 So if you really get down to the
25 basics and look at the numbers, if you

1 take the residential net metered
2 customer and he puts solar on his roof,
3 the utility takes their total lost
4 revenue, that credit on the bill, and
5 they subtract their avoided costs, costs
6 that they didn't have to pay because of
7 that solar generation.

8 And that part of it is pretty
9 murky, but basically for a residential
10 customer their credit is the same as the
11 retail rate, unlike in commercial where
12 it's complicated by the demand costs.

13 So if the customer is paying 17
14 cents per kilowatt hour, their bill
15 credit is 17 cents per kilowatt hour.
16 The utility roughly is going to
17 calculate an avoided cost that's about
18 13-and-a-half cents a kilowatt hour.
19 There's many components to go into that,
20 some of which is a little bit
21 questionable.

22 But that means they go for a
23 rate recovery of about 3-and-a-half
24 cents a kilowatt hour. That becomes
25 part of the ratepayer impact. Now it's

1 the SREC plus that 3-and-a-half cents of
2 kilowatt hour.

3 Now, when I ask them, okay, so
4 what is the avoided cost if it's a
5 virtual net meter. If we have this five
6 Megawatt out in the field somewhere
7 pumping power into the grid, then what
8 is that avoided cost? And I can't get
9 any answer. I think everybody's still
10 trying to figure that out, what is the
11 real physical credit to ratepayers, the
12 real market value that they're getting
13 for the solar in that case.

14 On the low end you could say
15 it's just L & P plus capacity, which is
16 the same thing you get paid if you
17 develop that project and just sold power
18 to the grid. That's on the low end. On
19 the high end you might say it's the same
20 as it would be if it were net metered,
21 it's that same 13-and-a-half cents. So
22 somewhere in between there or on one end
23 or another is the actual avoided cost.

24 Whatever that number is,
25 whatever the real number is, the delta

1 between that and the bill credit that
2 the BPU defines for a Community Solar
3 project becomes part of the rate impact.
4 So presumably that avoided cost is going
5 to be lower than the bill credit that
6 you guys defined for Community Solar.
7 That difference is part of the rate
8 impact for that project, and then
9 there's whatever else it gets as an
10 attribute payments, like SRECs, if the
11 Community Solar project gets SRECs.

12 So we would say if we're staying
13 true to our principles, that you've got
14 to deliver solar at the lowest cost to
15 ratepayers. That total of the recovery
16 the utilities are going to get for the
17 Community Solar project plus the SREC or
18 other attribute payment, that total
19 should not be more than the default case
20 for building that same megawatts.

21 What is the default case? Well,
22 the default case is a grid supply
23 developer develops that 5 Killowatt
24 project, just cells the power to the
25 grid, and you pay him an attribute

1 payment and that's it. So I think if we
2 stay true to our principle, we would say
3 the Community Solar total rate impact
4 should not be more than that default
5 base case. And I believe that perhaps
6 is the way the BPU should look at it.

7 Now, I'm a Community Solar
8 developer in Massachusetts and in New
9 York, and one of the aspects of
10 Community Solar that's been mentioned
11 here a lot is that there are costs that
12 occur, the customer acquisition cost,
13 the customer maintenance cost, service
14 costs, there's the subscriber discount
15 that's a cost, and then there is the
16 additional risk and higher cost of
17 capital for the developer.

18 Those aren't ratepayer costs;
19 those are costs on the developer, but
20 that can result in the need for a higher
21 incentive payment. So that's something
22 we have to be aware of and guard
23 against.

24 There was one other thing I said
25 in terms of our principles when I said

1 lowest possible ratepayer cost, I also
2 said deliver the greatest value of
3 public good. So the one case in which
4 we can say a higher rate impact for a
5 community solar project would be okay is
6 if it's serving a public policy goal
7 such as helping low-income ratepayers.
8 In that case a discount for low-income
9 ratepayers is a public good and could
10 justify a little bit higher compensation
11 in terms of the rate.

12 That is all my remarks for now.
13 Thank you.

14 MR. SHEEHAN: Thank you very
15 much.

16 That concludes the individuals
17 who signed up. Was there anybody else
18 who would like to come up and speak on
19 this topic?

20 MS. KEMP: Hey everyone. Good
21 afternoon. Melissa Kemp. I was up here
22 this morning on behalf of CCSA, and this
23 afternoon I'm just going to comment on
24 behalf of the Cypress Creek Renewables.

25 As I mentioned, we're a large

1 solar storage company across the country
2 with a big investment in the northeast.

3 I just wanted to comment on a
4 couple of quick things. One was the
5 framing of the potential, you know, bill
6 credit as making sense as a third-party
7 supplied credit. And, you know, just
8 thinking through that logically here's
9 what our reaction was:

10 One, it just fundamentally under
11 values their resources in an apples to
12 oranges comparison. When I get a
13 third-party credit on my bill or have an
14 escrow partner as a homeowner and
15 business owner, that is for energy
16 supply, commodity in the market, and
17 capacity.

18 And we're supplying a lot of
19 these Community Solar projects, we're
20 supplying more value than that. New
21 Jersey has not gone down the path of
22 trying to value that yet, but the
23 decision -- you know, there definitely
24 are attribution and transitions as to
25 the values, it's a recognized category

1 of value that hasn't been touched here.

2 Number two, there's a huge
3 environmental value and the SREC program
4 are placeholders for that. As we've
5 already talked about, I know Brandon
6 mentioned up here earlier there are not
7 going to be SRECs in any available for
8 Community Solar. Like we'll submit the
9 modeling in our filed comments, you
10 know, the capacity is very much on its
11 way to being used up by early Q1 of next
12 year. So I would say, you know, looking
13 at the D&T value and the full E value
14 are things that Community Solar is
15 providing different than just a normal,
16 conventional generation, third-party
17 supply method. I just wanted to make
18 that point.

19 You know, I would say I know
20 there's some difference of opinion here,
21 but we welcome the value of this
22 approach to solar if that's what you
23 guys decide you want to do. You know,
24 we don't have time for that now. And so
25 what we recommend strongly is not to try

1 to rush, no shortcuts to get to some
2 kind of number there. It has never
3 resulted in good or appropriate outcome
4 for lots of stakeholders.

5 And instead make that a project
6 and New Jersey can consider whether it
7 wants to do it and do that in the future
8 going forward and recognize how much
9 work it actually is to do that.

10 And I guess I would just repeat
11 the last thing from earlier, which is,
12 you know, retail rate is not a big deal.
13 You have a precedent here in New Jersey
14 for using that. There is a ton of data
15 out there as it being not an
16 unreasonable proxy for value, which we
17 have an impact here and we acknowledge
18 that. But it's not actual reality now,
19 we're not paying retail right like
20 Hawaii where it's 30 cents, and maybe
21 that's a real controversial number for
22 value. This isn't a range of values
23 that come in across the country, but
24 clearly to the point taken, New Jersey
25 wants to go down that path, we should do

1 the work. But there's not time to do
2 that work properly for this Community
3 Solar pilot program.

4 I think that wraps up the
5 comments that I wanted to add. I
6 appreciate everyone's time.

7 MR. SHEEHAN: Thank you very
8 much. Anyone else who would like to
9 step up?

10 MR. McDONALD: Good afternoon.
11 I'm Cameron McDonald with Oster Energy
12 (ph). I'm actually a developer of
13 Community Solar in other states as well.
14 I just look to the BPU to say I know you
15 guys are on a limited time table to
16 accomplish your goals here, but you have
17 a lot of good things that other states
18 that have put in place that you have
19 access to review and look at, which cuts
20 your need for time down quite a bit.
21 But you also have the luxury of seeing
22 what didn't work.

23 And being a Community Solar
24 solar developer in New York State and a
25 solar developer in New York State over

1 the past two years I would say don't
2 stifle the developer by getting ahead of
3 yourself. And some of the things they
4 did were great, and I want to go back to
5 where we were before, but definitely
6 take a look and see what's worked in
7 states like California, New York, and
8 Massachusetts and look at what didn't
9 work so you can avoid those.

10 Another point I wanted to make
11 is people brought up escrows. I don't
12 agree with using the escrow value, but
13 what I would agree with is on the
14 recovery and possibly taking it a step
15 further where escrows have, in certain
16 utility territories, and I think some in
17 New Jersey offered, was POR, or purchase
18 of receivables. This would give
19 financiers even more risk mitigation
20 working on projects if the utility was
21 to just offer recovery, time of purchase
22 of receivable or even pay a point or
23 two, I think it was 2 percent for the
24 escrows.

25 That gives the financiers even

1 more structure to lean on and, you know,
2 safety to lean on, and really that's
3 what it comes down to is if you can get
4 the capital markets and the financiers
5 behind these projects, the private
6 sector will get the projects built.
7 That benefits the LMI projects, but as
8 most solar developers are out there, a
9 lot of us don't have the balance sheets
10 to do the projects on our own, so we
11 need the certainty, and that comes from
12 the BPU. So those are just my comments
13 there, if you have any questions.

14 MR. SHEEHAN: Thank you very
15 much. Okay. That was Session III. We
16 are running about 15 to 20 minutes
17 behind schedule.

18 So we will go right into Session
19 IV. This is Applications and
20 Interconnection. With that I think
21 we'll start with our first speaker,
22 which is Atlantic City Electric.

23 (No response.)

24 MR. SHEEHAN: Okay. Then we'll
25 move on to our second speaker, CCSA,

1 Justin Wilson.

2 MR. WILSON: Good afternoon.

3 I'm Justin Wilson speaking for CCSA here
4 today. My company is reflected for a
5 Community Solar developer with projects
6 in 16 states, and so I wanted to talk a
7 little bit about some of the best
8 practices we see in the application and
9 interconnection process for Community
10 Solar.

11 So I think our principle here is
12 that we want the Community Solar project
13 to be -- the program to be designed and
14 administered to run transparently and
15 efficiently. We've heard transparent
16 mentioned a couple of times, in
17 particular around the bill credit. That
18 transfers over into many of the
19 different components of developing a
20 program.

21 As we proposed earlier, with
22 regard to dividing up that capacity in
23 the program, we believe that each EDC
24 should administer a BPU-approved pilot
25 program based on those categories to

1 earlier questions. And so the way we
2 kind of see this working is each EDC
3 would have its own interconnection
4 queue. It would really be the place
5 where applications go, that's how you
6 apply to the program. They would be
7 managed on a first come, first serve
8 basis with high project maturity
9 requirements and have those project
10 maturity requirements be ongoing
11 throughout the interconnection process.

12 And so that makes sure that as
13 projects are entered into the queue,
14 that they over time are being developed
15 and being accepted into the program and
16 begin serving customers as quickly as
17 possible.

18 And then we believe that
19 existing projects should not be aloud to
20 reclassify as Community Solar projects.
21 Really the purpose of this program is to
22 add new, clean generation that customers
23 are wanting to place onto the grid.

24 A little bit on EDC reporting
25 requirements, and this is separate than

1 the issues that Brandon talked about
2 earlier with bill credits. And it
3 really has to do with the
4 interconnection queue and giving the
5 development community the information it
6 needs to make good decisions on where to
7 site projects and what available
8 capacity is still up there.

9 So each EDC should post weekly
10 updates to an interconnect queue report
11 as long as the path remains pilot
12 program capacity in each year. We've
13 got a set of information that needs to
14 be included, the date that the program
15 queue is updated, overall program size
16 and capacity remaining, what capacity is
17 in service, and the total capacity
18 allocated as well.

19 Then on a slightly longer-term
20 basis monthly would be preferred,
21 quarterly can also work. It's just a
22 little bit more overall information, a
23 little bit more granular in detail. So
24 the status of the application, including
25 those that are active or in commercial

1 operation, and in particular the
2 withdrawn. It's very good practice to
3 have an insight into what projects may
4 have been in the queue at one point, but
5 have dropped out of the queue for
6 another reason that can allow us to
7 understand perhaps where projects are
8 placed on the grid.

9 So, again, and then the -- some
10 information on the activity of the
11 applications and kind of what different
12 phases that they are in, if it's study
13 or design or construction. Yeah, and
14 then the overall numbers, again very
15 similar to what we'd want on a weekly
16 basis or just updated in the same
17 quarterly report.

18 And I think that's it. I would
19 say the overall, again going back to the
20 principle, is transparently and
21 efficiency. We think that electric
22 distribution companies, they know theirs
23 systems, they know where projects are
24 going to be in the queue, and they can
25 very efficiently manage the programs

1 themselves. I'm happy to take any
2 questions.

3 MR. WINKA: So just in the
4 statute it says the BPU shall make
5 available on its Internet site
6 information on solar projects. So you
7 don't see a conflict with what you're
8 saying to what the statute requires?

9 MR. WILSON: I don't see a
10 conflict necessarily. I think you can
11 certainly delegate it to the utilities.
12 I think you can certainly make a
13 favorable on the NJ Clean Energy page, a
14 site that, if developers would like to
15 advertise, available capacity for them
16 to do so.

17 You know, one of the things we
18 have in Colorado is in Colorado, where
19 my company is based, their original
20 legislation had something similar in it.
21 And the reality is that you have
22 sometimes development cycles, and so
23 sometimes there's a lot of project
24 capacity available, sometimes there's
25 not, and the websites just were not

1 being updated accurately. And so the
2 companies were getting calls about
3 interest in Community Solar but they
4 didn't have available capacity. So I
5 think from my perspective it's nice to
6 have, but not necessarily something that
7 every single project needs to be listed
8 in a contact form.

9 MS. BENREY: You mentioned that
10 projects should have a high maturity
11 requirement in order to be accepted onto
12 the queue. Can you elaborate a little
13 more on what those requirements should
14 be?

15 And specifically you can touch
16 upon -- either here or later upon what
17 requirements should exist or should not
18 exist with regards to customer
19 subscriptions that say should there be a
20 threshold percentage of customers who
21 have already signed up, at which point
22 the project is considered able to move
23 forward.

24 MR. WILSON: Sure. So on the
25 first question, the project maturity

1 requirements, I think there's a couple
2 of things to look for. To be placed in
3 the queue I think you want to have site
4 control, so that's ownership of land or
5 an option to lease or purchase that land
6 that's contingent on the project being
7 continued to approve.

8 You want perhaps some sort of
9 interconnection study or agreement
10 signed, and so different states have
11 different levels of interconnection
12 study, and you want that to be something
13 pretty substantial so that we know
14 pretty -- with pretty clear eyes what
15 the cost of interconnection would be.

16 And then there's a set of
17 permits that could be somewhat of a
18 checked box to make sure that local
19 jurisdictions have signed off in some
20 cases that this is a place that they're
21 planning to approve the development.

22 And then the second was
23 around -- sorry, your second question?

24 MS. BENREY: A threshold for
25 subscribers.

1 MR. WILSON: So I think with --
2 so in short, no, I don't think there
3 necessarily needs to be a threshold for
4 subscriptions. What I would say is
5 getting the subscribed and the
6 unsubscribed energy figured out is going
7 to -- and making sure that there is an
8 incentive for developers to have
9 subscribed energy is going to make sure
10 they have that capacity locked down
11 before they go and develop a speculative
12 project.

13 Thank you.

14 MR. SHEEHAN: Okay. It's Direct
15 Energy, Dan Schneider.

16 (No response.)

17 Pine Gate Renewables?

18 (No response.)

19 MR. McDONALD: So there have
20 been, and I'm sure a lot of the local
21 developers here are aware of this, quite
22 a lot of distribution hosting capacity
23 restraints on the distribution grid.
24 Developers should have access to
25 distribute grid line information in the

1 substation hosting capacities. Increase
2 the transparency there, it will decrease
3 costs for developers to actually get
4 these projects through, and you will
5 have a lot less failed applications at
6 the end of the day.

7 Utilities should also be
8 required to identify lines which in
9 their belief will receive the greatest
10 grid benefit from the addition of
11 renewable energy resources. Whether
12 that's load centric or however they deem
13 that to be of benefit is fine as long
14 as, as I said before, it's a transparent
15 process that we can look at and
16 understand what their methodology is.

17 That methodology should also be
18 standardized across all of the
19 utilities. It can be problematic if ACE
20 has been provided methodology from JCP&L
21 who been provided methodology from has
22 Orange Rock.

23 And utilities should also be
24 required to provide specific timelines,
25 costs, and deadlines for these

1 interconnection studies. We don't want
2 a repeat of what has happened in --
3 especially PJM right now where I think
4 the interconnection timeline is supposed
5 to be a year and a half, and now it's up
6 to almost three years now for their
7 interconnection queue.

8 When upgrade costs are required
9 by a utility, developers should have a
10 fair and efficient appeals process.
11 There should be transparency into why
12 they think the upgrades cost the way
13 that they do. And, again, these pricing
14 methodologies should be standardized
15 across all the EDCs. And the program
16 should have a separate interconnection
17 queue for Community Solar projects.

18 And that's everything that
19 seemed important to talk about in this
20 point.

21 MR. SHEEHAN: Thank you very
22 much.

23 MR. WINKA: Sorry. So you
24 mentioned hosting capacities and they
25 should be similar, so there's a number

1 of hosting capacities across the
2 country. Do you have one -- is
3 California's methodology better than New
4 York, better than Massachusetts, better
5 than Maryland?

6 MR. McDONALD: So the only
7 methodology that I personally have
8 experience with is New York's. All of
9 their utilities have released these
10 hosting capacity maps, and it's been
11 very helpful.

12 AUDIENCE MEMBER: Was that
13 required?

14 MR. McDONALD: Yes, it was
15 required by their public service. Any
16 other questions?

17 MR. WINKA: Thank you.

18 MR. SHEEHAN: Thank you. We're
19 going to go next with New Jersey
20 Resources.

21 (No response.)

22 Vote Solar?

23 MS. KASOTIA: So quick comments
24 on this section as well. We do think
25 it's important to create the application

1 and interconnection that's transparent
2 and streamlined, and the BPU should
3 direct each utility to administer a
4 program with a certain annual capacity
5 allocation in each service territory
6 during the pilot program.

7 We also recommend that BPU
8 explore ways to support projects that
9 will low-income customers and customers
10 in underserved communities. One of the
11 ideas we have is if BPU can provide us
12 assistance with the application process
13 through waivers or support for
14 interconnection fees, so that will help
15 those projects to move forward. That's
16 all that we have on this one.

17 MR. SHEEHAN: Thank you. That
18 concludes the individuals who have
19 signed up ahead of time.

20 We have Justin Wilson from the
21 Clean Energy.

22 MR. WILSON: That was me.

23 MR. SHEEHAN: Perfect. Thank
24 you.

25 ACE? Of course, we already had

1 you talk, so you don't have to come up
2 again if you don't want to.

3 MR. SUNDERHAUF: Sorry I wasn't
4 here for the beginning of the
5 discussion, but very quickly a couple of
6 items for your consideration.

7 Since we don't know the number
8 of Community Solar potential projects it
9 would be helpful, if there is a risk
10 that it might be oversubscribing a
11 particular service territory, that there
12 be some type of screening effort by the
13 BPU to determine which projects in which
14 order would actually be the ones that
15 would be selected for any period of
16 time.

17 We can do some preliminary
18 interconnection screening but in-depth
19 interconnection screening does require
20 some substantial time on our part be.
21 Could be far better than some screening
22 criteria that were applied by the BPU in
23 terms of determining which ones actually
24 should go through that process.

25 Beyond that we think the

1 existing interconnection process that we
2 use and the application process is the
3 appropriate one. But the one thing that
4 we would note is that because of the
5 size and scale of these projects and
6 they may all come in at the same time,
7 that that additional processing time may
8 be required on the part of utilities.

9 Those are my remarks. Thank
10 you.

11 AUDIENCE MEMBER: Can we ask for
12 a clarification?

13 MR. SHEEHAN: You can ask him.

14 AUDIENCE MEMBER: You said the
15 current interconnection process for net
16 metering?

17 MR. SUNDERHAUF: For net
18 metering, yes. It's the interconnection
19 process that I'm referring to. And,
20 again, it depends on the size of these
21 facilities, if they go up to the PJM in
22 size, but most of these will probably be
23 in a size they would just come through
24 the normal utility processes. But,
25 again, I think it's unclear and the

1 volume could come at the same time if
2 everybody's queued up. That's the one
3 thing we are particularly sensitive to.
4 Thank you.

5 MR. SHEEHAN: Lina Smith?

6 (No response.)

7 Okay. That appears to be
8 everyone who signed up for this session.
9 Is there anyone who would like to speak?

10 MR. ABBEY: Ross Abbey with

11 US Solar. Just a few quick remarks.

12 I'm going to overlap a little bit. Two
13 key questions, I think, that we have.

14 First question is, at what point
15 in the development cycle does the
16 developer who's going to bring the
17 project forward get a capacity against
18 the annual program limit and also get a
19 rate? Because until you have those two
20 pieces it's hard to pivot to subscribers
21 and contracting with subscribers. It's
22 hard to make a commercial offer to
23 subscribers until you've got that rate
24 assigned to a project and also to
25 financiers, unless you've got the

1 project rates.

2 So once you've -- once those
3 things invest in the project you might
4 also want to think about how long they
5 invest for, how long does the project
6 have to get done to actually bill the
7 solar facility before they lose that
8 vesting or is it forever -- I'm not sure
9 of a program that lets a developer take
10 forever. There has to be some type of
11 term limits. Thirty months might be
12 something to look at for that.

13 And then the other key question
14 is what does a project developer have to
15 demonstrate to give that reservation,
16 that limited reservation. And so that's
17 what you would require as project
18 requirements, project maturity
19 requirements.

20 So this is kind of a balancing
21 act. You know, on the one hand if you
22 allow projects to invest too early, then
23 maybe get higher dropout rates versus
24 making it up as you go before you get
25 that allocation. But I would I say the

1 two things we need to look at are, one,
2 the developer should have a site
3 address, and ideally site control to
4 make it demonstrate through legal
5 documents; a land use permit, at least
6 if it's a ground-mount kind of primary
7 use because that shows the developer has
8 gone to the city or to the county, he
9 has permission to use that. And then
10 the third piece would be apply for
11 interconnection study, and ideally in my
12 mind has a paper backing from the
13 utilities saying, yes, there is the
14 capacity on the substation on this wire.

15 Some states go further and
16 require the developer to incur any
17 interconnection costs and maybe even
18 have paid that interconnection cost. In
19 my mind that's a little bit -- you know,
20 interconnection for these sets of
21 facilities can be between \$100,000 to \$1
22 million. But I would keep those in
23 mind.

24 MR. SHEEHAN: Would you have any
25 squatting concerns for a process like

1 this, or is there a concern about people
2 grabbing hold early?

3 MR. ABBEY: Yes. Exactly. I
4 think that's going to be a concern. If
5 there was an unlimited market, then
6 maybe that's not a big concern. You can
7 give out of a thousand, you know,
8 capacity allocations, and if only a
9 third get built, it is what it is. But
10 certainly for the pilot program there's
11 a limit; you want to avoid that.

12 MR. WINKA: And so this may not
13 be a fair question because I'm going to
14 ask a question about ACE and they can
15 come up and comment on the comment, but
16 so they have a screening process, so the
17 interconnection process has some kind of
18 screening process. What do you think
19 about their comment on the screening
20 process? It would go to the BPU, the
21 BPU would say X, these are okay, these
22 are not okay, go ahead and file for the
23 interconnection.

24 MR. ABBEY: Would this be
25 screening based on kind of on the parcel

1 or...?

2 MR. WINKA: I'll leave that up
3 to ACE.

4 (Laughter.)

5 MR. WINKA: So you would have a
6 parcel, you would have the zoning, you
7 would have the planning.

8 MR. ABBEY: Yeah, at least the
9 market I've been involved in typically a
10 utility will do a capacity study, and
11 then there's a more in-depth facility
12 study where they say granted there's
13 transformer capacity, here's all the
14 upgrades you would have to do. And I
15 think that facility study, it could go
16 under different names, would probably be
17 more involved. And so you want to
18 second study to be in place as a proper
19 requirement, I think is a good question.

20 MR. WINKA: It's that you
21 presented us with a chicken-and-the-egg
22 situation, so we're not sure which goes
23 first.

24 MR. ABBEY: Well, it does put
25 more work on the utility. They study

1 all these things before they even get a
2 capacity, so you can go either way.

3 MR. WINKA: Okay. Thanks.

4 MR. SHEEHAN: Thank you.

5 MS. KEMP: Hey, everybody.

6 Melissa Kemp for Cypress Creek again. I
7 just wanted to build up on related
8 topics that CCSA and others have
9 covered.

10 The program administration
11 application requirements and then
12 reservation length, right. It's kind of
13 the administrative side of this
14 Community Solar program and what its
15 rules are its compensation approach.

16 As this is a transition for New
17 Jersey in terms of actually having
18 offsite facilities that can serve
19 customers, the one flag like separating
20 recommending -- a strong recommendation
21 to clearly separate distributed
22 generation interconnection from program
23 administration. And there's a couple of
24 things. Like one is a technical, right,
25 so interconnection processes and

1 Technical review screening study.
2 That's kind of -- what's the word I'm...
3 doesn't have a preference on what
4 program you're in, what you might
5 qualify for on the compensation side.
6 It's, you know, what's technically
7 viable on the grid and what are their
8 reasonable rules to manage that and make
9 sure it's done properly and that things
10 move along.

11 So there's a couple of key
12 things that we've learned in this
13 region, New York, Massachusetts, on like
14 things were missing at some point and
15 then more development opportunities in
16 Community Solar were open, and then all
17 of a sudden the interconnection
18 technical process, it was kept separate
19 from the program, and that's great. And
20 I highly recommend to keep that
21 separate, but, two, it just didn't have
22 an update, hadn't been reflected to
23 really take into account the amount of
24 interest or just the difference in being
25 offsite and not always having a customer

1 building that you already agree, that
2 you're working with the customer on.

3 So some of the things have been
4 kind of essential components in other
5 successful states, you know,
6 interconnection, technical process, it's
7 a separate program, it's first come,
8 first serve, it's sequential study so
9 you come in first, you get served first,
10 meaning that you're studying first in
11 the queue and other applications that
12 come in behind you on a feeder
13 substation are studying with you in
14 mind. Up to a point of timelines,
15 right, so making sure that we have
16 really good timelines on developers.
17 That's what we worked hard for in New
18 York, as well as other utilities, and
19 making sure that they're reasonable and
20 that they're strongly enforced.

21 The other piece was getting
22 information ahead of time. So you guys
23 are talking about hosting capacity, and
24 that's great, and California's the best
25 one out there, but it takes a lot of

1 work and time. And pre-application
2 reports are an easier starting way to
3 get -- but the point really is is that
4 if I'm a developer, I don't need to get
5 into your queue. I just want this
6 information about this feeder and this
7 substation, let's provide that without
8 clogging up what appears to us to be
9 projects actually in development, right.
10 I might just be looking at these parcels
11 or land with buildings, or these
12 landfills, or whatever it is.

13 So other states are really
14 helpful in making sure that we have a
15 good information ahead of time system in
16 place. Pre-application reports are one
17 easy way to do it, where you don't have
18 to have an old capacity map. It's
19 simply a you put in a form, you pay \$100
20 or whatever, and the utility sends you
21 back these 13 key pieces of data, and
22 your engineering team can process that
23 and then make a reasonable decision on
24 what you pursue -- a possible project
25 further.

1 And that fits in really well
2 with maturity requirements for queue
3 entry. Until you can ensure for people
4 in New Jersey what rules we have in the
5 book and making sure that there are
6 maturity requirements. Like we don't
7 want people getting in the region by
8 joining the interconnection application.
9 We want to make sure they do have some
10 land owner consent use in New York or
11 site control or something.

12 If you want to get in there and
13 look like your serious project is queued
14 and make people wait behind you, let's
15 make sure you have some actual, you
16 know, skin in the game, or whatever that
17 silly metaphor is.

18 So those are the bill things. I
19 know that's not your job at this table,
20 but I would just recommend maybe we
21 could initiate a process simultaneous to
22 this to make sure we keep up with
23 standards and make sure they're going to
24 fit and not have some weird effect when
25 this program does get up and running.

1 There are other pieces like making sure
2 the technical, if there is technical
3 streaming, as well as updated standards
4 for study. Someone just mentioned
5 payments. You know, like in New York
6 we're allowed to have a 25 percent
7 payment and kind of break up the money
8 so if folks do want to have a
9 requirement for putting some money on
10 the table, I think that's a very
11 reasonable concern. And so I just
12 wanted to mention all those things.
13 We'll follow up our comments with more
14 detail, but something that may be very
15 helpful.

16 MR. WINKA: You're follow up on
17 skin in the game would be helpful.

18 MS. KEMP: On the payment
19 segment?

20 MR. WINKA: Yes.

21 MS. KEMP: Absolutely.

22 MR. WINKA: Thanks.

23 MR. SHEEHAN: (Indicating).

24 MR. RAWLINGS: So a couple
25 things. On interconnection, if you go

1 to interconnect a grid supply project
2 now, and RVP for New Jersey is actually
3 also the president and founder of the
4 New Jersey Solar Grid Supply
5 Association, you've got a hard road
6 ahead of you to interconnect a grid
7 supply project, and presumably that's
8 going to be true for a 5 Megawatt
9 Community Solar project as well.

10 On the other hand, if you
11 develop a net metering project of the
12 same size, it's quick, easy, and cheap.
13 Now, if we want to do solar at the least
14 possible cost we want to interconnect it
15 in a way that's quick, easy, and cheap
16 and facilitates development, and we also
17 want to encourage the most low cost,
18 most efficient project.

19 Now, by a great margin the most
20 low cost, efficient project you could
21 possibly do is a giant rooftop. Now,
22 today if you do a giant rooftop, you
23 wouldn't be able to connect it to the
24 grid because it's so opposite of quick,
25 easy, and cheap.

1 So one thing you'll be hearing a
2 lot from MSEIA about is if we should
3 harmonize the interconnection process
4 with grid supply projects with the
5 process for net metering. It should be
6 just as quick, easy, and cheap to do
7 grid supplies.

8 So if I have a 20-acre rooftop,
9 I should be able to choose between a net
10 metered connection and a grid supply
11 connection with not very much difference
12 in cost. Because supply -- if I'm on a
13 roof, and I have a choice of connecting
14 on the customer side of the meter or
15 moving it 3 feet and going to the grid
16 side of the meter, there shouldn't be an
17 enormous difference in the process and
18 difficulty and cost just because I moved
19 it 3 feet. And this is a way to get the
20 lowest cost, most efficient solar. That
21 would apply to Community Solar as well.

22 Now, unfortunately, you guys
23 can't waive a wand and make that happen
24 because when you connect on the grid
25 side of the meter, you're under PJM

1 jurisdiction, and that's federal, not
2 under your control. But that's not
3 entirely true because those larger
4 costs, those great costs that are driven
5 when you go through a PJM
6 interconnection process, are largely
7 driven by the local utility. Many of
8 those costs are actually driven by the
9 local utility.

10 So maybe there's a way for you
11 to jump into that conversation and see
12 if that process can get quicker, easier,
13 and cheaper. And of course there's the
14 bully pulpit of the governor to go to
15 PJM and say, look, you guys, help us get
16 to these great renewable energy goals
17 that we've got, find a way to streamline
18 this interconnection process.

19 Now, on a not-so-related note,
20 going back to the conversations
21 we've had with the value of solar, CCSA
22 mentioned that five or six years ago New
23 Jersey did a value of solar study. I
24 believe the study that they're talking
25 about was commissioned by MSEIA and it

1 was done by Clean Power Research.

2 Clean Power Research is the same
3 outfit that did the Minnesota study that
4 was mentioned just before. That is a
5 wonderful study. It's called the
6 Minnesota pathways -- solar pathways
7 study. And it's not published yet, it
8 will be published around the end of this
9 month, and the results are fascinating.
10 They said we can get to 100 percent wind
11 and solar by 2050 at a cost of about
12 3-and-a-half cents per kilowatt hour.
13 And it has more value on this
14 conversation by how do we set the bill
15 credit or what is the value of solar.

16 And, by the way, the result of
17 our study was that Clean Power Research
18 calculated a value of solar in New
19 Jersey and Pennsylvania in different
20 nodes, but the average value in total
21 per energy plus attributes was 27 cents
22 per kilowatt hour, and the attribute
23 value alone was about 17 cents per
24 kilowatt hour.

25 At the time Richard Perez from

1 SUNY Albany, who was a primary author of
2 that report had a theory that we should
3 pay for solar what the value is. Now,
4 he no longer advocates for that. He's
5 taking a least cost approach. Let's
6 deliver it to ratepayers at the least
7 possible cost, and that's what this
8 pathways report is all about.

9 It's not only talking about the
10 value, but it's also talking about what
11 is the least cost way for us to get
12 there, what are the technical regulatory
13 and economic drivers that produce the
14 least cost and what is that.

15 That would have a great value
16 for this state because we have a high
17 falutin goal, a wonderful, incredibly
18 ambitious goal to get to 50 percent
19 renewables by 2030 and now an executive
20 order to get 100 percent by 2050.

21 That's a laudable goal, but there's no
22 plan on how to get there. And there's
23 different pathways, there's different
24 ways to get to that point, but one of
25 them is going to be the least cost way.

1 And whatever way that one was, if we
2 identify it, then we'll know if it's
3 steps we need to take now to start on
4 the right path, the more expensive path.
5 So that's the value of doing a study
6 like that. Thank you.

7 MR. SHEEHAN: Thank you.
8 Anybody else who would like to talk on
9 this topic?

10 (No response.)

11 With that mind, our next session
12 is scheduled to start at 4:45. I think
13 we will probably start that a little bit
14 early. I think we should probably take
15 a break on the last one. At least the
16 crew up here has to be here until 6:00,
17 so if we take a seven-minute break.
18 We'll be back at 4:30.

19 (A recess was taken from 4:20 to
20 4:34 p.m.)

21 MR. SHEEHAN: Thank you, Ladies
22 and Gentlemen. The good news is we are
23 scheduled to go until 6:00 p.m. The
24 better news is you all don't have to
25 stay. We will open up with Session V,

1 take those comments from people who are
2 here. We will then at that point
3 probably pause the record and keep the
4 record open until at least 5:45, based
5 upon the notice.

6 If people come in later, they
7 will get to put their comments on the
8 record, but once we are done with this
9 level of comments, we will close up and
10 let you all leave.

11 With that in mind, this is
12 Session V on customer subscriptions and
13 customer protection.

14 As has been our tradition, we
15 will start with people who have signed
16 up ahead of time and then follow up with
17 anyone who would like to discuss. As a
18 favor to the court reporter, if everyone
19 can slow down about 20 percent, that
20 would probably be beneficial to her.

21 With that in mind, I would like
22 us to start with Atlantic City Electric.

23 MR. SUNDERHAUF: Steve
24 Sunderhauf with Atlantic City Electric.
25 A couple comments related to

1 subscriptions and consumer protection.
2 A minimum of two subscribers is required
3 per legislation. We support that view,
4 that's similar to what our other
5 jurisdictions require.

6 Community Solar hosts should be
7 responsible for managing customer
8 subscriptions, and we don't see the
9 utilities kind of stepping into that
10 role. Customer subscribers must have an
11 active case billing account. In the
12 absence of an active account for a
13 subscriber, they sign a share use that
14 reverts to a Community Solar host. If
15 somebody is participating that doesn't
16 have an ACE account, I don't know
17 whether you envision that's a
18 possibility or not.

19 Community Solar must specify
20 each customer percentage share of
21 Community Solar production. Again, the
22 totals obviously cannot be skewed 100
23 percent. If they do, that's obviously a
24 math issue.

25 Any customer subscriber charged

1 must be provided at least 90 days in
2 advance of the first applicable billing
3 period upon adequate notification so we
4 can adjust our billing system so that
5 everyone gets the credit that they
6 deserve or they expect to see.

7 If a subscription sells less
8 than 100 percent of Community Solar
9 production, the remaining percentage
10 should be assigned to the Community
11 Solar host.

12 And related to consumer
13 protection, consumer protection should
14 be consistent with rules applied to
15 third-party suppliers, energy suppliers,
16 when you think about it. So those
17 suppliers -- those rules are fully
18 vetted, and that should provide some
19 level of guidance as to how we manage
20 Community Solar on a subscription
21 requirements.

22 So those are the comments I had.

23 MR. WINKA: Just a
24 clarification, I think you said the
25 minimum subscribers was two. There is

1 nothing in the statute that --

2 MR. SUNDERHAUF: I thought it
3 had stated two.

4 MR. WINKA: There is nothing --

5 MR. SUNDERHAUF: So it's my
6 interpretation of the statute. So I
7 thought it had specified two, but two is
8 what we envisioned. Thank you.

9 MR. SHEEHAN: Thank you very
10 much.

11 Vote Solar?

12 MS. KASOTIA: Okay. So Vote
13 Solar has learned from other communities
14 on the market that program rules must
15 specify how to achieve robust
16 participation by diverse customer
17 classes. As stated in Assembly Bill
18 3723, "The rules and regulations
19 developed by the Board shall establish
20 standards to ensure the ability of
21 residential and commercial customers to
22 participate in solar energy projects,
23 including residential customers."

24 So in order to do that we
25 already proposed a 15 percent program

1 carve out. We are also proposing that
2 50 percent of the program be a result
3 for residential and small commercial
4 customers. Again, I think it is
5 important to make sure that the program
6 creates those kinds of criteria to
7 ensure that those customers are reached
8 for participation.

9 We also recommend a minimum of
10 three subscribers per project and a
11 maximum subscription size of 40 percent
12 per subscriber. These minimums and
13 maximums are consistent with
14 programmatic best practices across the
15 country.

16 And we also think subscriptions
17 should be sized to match average
18 historical usage and they should be both
19 transferrable and portable within
20 individual utility service territories.

21 In terms of consumer protection
22 it is important to ensure that there are
23 appropriate consumer protection measures
24 in the Community Solar program. We
25 recommend looking at Maryland and

1 Minnesota as examples, as they both have
2 been mentioned. Pretty straightforward
3 consumer disclosure, checklists that
4 clearly identify key terms associated
5 with any subscription. This can be
6 useful not just to get an idea of how
7 they designed those checklists, but also
8 how to educate and protect consumers
9 that participate in New Jersey's solar
10 program.

11 Some of the other speakers said
12 that what BPU should explore is creating
13 checklists against predatory and
14 misleading sales tactics. And I think I
15 mentioned this previously, utilizing
16 multiple mediums to reach out to
17 customers, both online and in print and
18 in-person communication.

19 So those are the comments on
20 consumer protection. Thank you.

21 MR. SHEEHAN: Thank you very
22 much. Next will be UU Faith Action.

23 MS. HEMINGTON: My name is Carol
24 Hemington. I'm representing Unitarian
25 Universalist Faith Action, and we're

1 concerned with issues of equality and
2 social justice and also the environment,
3 so I'm going to address low-income,
4 environmental justice, and providing
5 enumerable energy to consumers.

6 In this topic attracting
7 customer subscriptions and providing
8 customer protection will be important
9 issues for these communities and three
10 important issues related to these
11 questions: Portability,
12 transferability, and consumer protection
13 rules.

14 As far as portability, we
15 believe that subscriptions should be
16 portable as long as the subscriber
17 remains in the original territory of the
18 Community Solar organization.

19 We think this is important for
20 these communities because members of the
21 community tend to move, they're more
22 likely to move, and if they can take the
23 subscription with them, this would give
24 the developer more stability in the
25 membership, it would allow the

1 subscribers to continue their
2 membership, there would be less
3 administrative costs when the subscriber
4 moves because you don't have to find new
5 subscribers, and flexibility would be
6 appropriate to a pilot program.

7 Transferability, we believe that
8 they should be transferrable in as many
9 situations as possible, that the rules
10 should be flexible to promote assurance
11 of consumers subscriptions to developers
12 and to allow subscribers to recover
13 costs and end their obligations as
14 simply as possible.

15 Now, consumer protection, I have
16 to get personal here. What is it about
17 solar that lends itself to all these
18 things that I keep getting in the mail
19 and all these robo calls?

20 I've been in the environmental
21 area my whole career I'm a bureaucrat.
22 I've also been -- I'm used to dense
23 language, I'm used to environmental
24 stuff. I get things in the mail. I
25 don't know who they're from. They kind

1 of look like they're official. It's
2 none of you, I'm sure. One of them had
3 a map of the state, so I'm like is this
4 from the state? That would be good.
5 But then I'm not sure, not from your
6 utility, you have to do this and you
7 have to do it by such and such a date,
8 and I put it over there. I'd love to
9 have solar, but it didn't make me
10 confident in signing up with that.

11 The other end of the spectrum is
12 I got a robo call yesterday from a solar
13 company. I'm retired, so I had just
14 awakened from a nap, and I said, oh,
15 solar, it had a New Brunswick phono
16 number on it. And I said, oh, they're
17 calling me from -- where did they get my
18 number.

19 So I said let me hear about this
20 solar, so I said yes to something and I
21 said yes to something. They said let me
22 put you on hold and then somebody came
23 on and said, I'm from such and such a
24 company, thank you for your order, I'm
25 here to qualify you. And I'm like, oh,

1 no, did I fall for one of those if you
2 said yes they're going to record you.

3 But the bottom line is if this
4 stuff is confusing me and I'm skeptical
5 and I still haven't signed up for
6 solar -- I'm sorry. It's very
7 confusing.

8 So what occurs to me is you need
9 to get customers, and if you don't get
10 customers, it's not going to work at all
11 especially if you put carve outs for LMI
12 groups.

13 So what our organization
14 advocates very strongly is things that
15 have been said before, education in the
16 community by people that these people in
17 the community know and trust.

18 And we would recommend maybe a
19 two-tiered approach. The first tier
20 would be getting the local community
21 groups that have been mentioned before
22 involved and maybe do some training of
23 them, and have some classes, some
24 education of them. And then perhaps
25 they can put forth panels, stakeholder

1 meetings, things in the community of the
2 people that are known and trusted by the
3 community.

4 And with all that you still need
5 transparency, you'll need to protect
6 consumers from misleading claims about
7 the impact of subscribing. We'd like to
8 see -- I think now if you subscribe to
9 solar, you can find out what the
10 difference would be between what you're
11 going to be paying and what you pay now,
12 the utility can provide that
13 information. We'd like to see ways for
14 them to compare those costs with their
15 current bills.

16 We would like the BPU to review
17 any marketing materials sent to
18 subscribers, and we would -- we
19 recommended in a different question that
20 the projects be registered and the
21 registrations be easy to verify.
22 Because even when I went on the
23 Internet, there's all these things,
24 which ones are real and which ones of
25 them aren't.

1 We would like to see on bill
2 monthly charges for repayment of any
3 initial loans and for use. I know that
4 could be a problem, but it seems to us
5 that would be the simplest way for
6 people to understand what they are
7 getting into.

8 We would like to see
9 standardization, standard disclosure
10 forms, we make some recommendations in
11 our written comments on what we have
12 included in the standard outline for a
13 solar quote.

14 We'd also like to see assurances
15 that developers will complete the
16 project or return deposits. And we
17 understand this requires an escrow
18 account for this.

19 We'd like subscribers to be able
20 to recover payments for the
21 subscriptions if their circumstances
22 change. And also other protections we'd
23 like to see in the contract would be no
24 yearly price installation beyond rate of
25 inflation, no transfer fees if the

1 subscriber moves and transfers
2 subscriptions.

3 That's all. Thank you.

4 MR. SHEEHAN: Thank you very
5 much.

6 CCSA, Ben Downing.

7 MR. DOWNING: Thank you all very
8 much for the opportunity. And thank you
9 for your patience and perseverance here.
10 So my name is Ben Downing. I work with
11 a 10-year-old solar developer based in
12 Boston, founded by two U.S. Army
13 captains.

14 Nexamp is a full-service solar
15 developer that specializes in community
16 solar largely in the northeast, but also
17 in Maryland, Illinois, and other states,
18 and, as was referenced, we are a member
19 of CCSA. We appreciate the opportunity
20 to be part of the discussion today and
21 my brief comments will focus on consumer
22 protection and subscription management.

23 From CCSA's perspective and I
24 can say that Nexamp shares this,
25 consumer education, as was referenced by

1 previous speakers, is key when it comes
2 to Community Solar even in the more
3 advanced state markets, Massachusetts
4 and Minnesota.

5 Community Solar is still very
6 new, and to the extent that there will
7 be a significant push, especially around
8 residential and particularly around
9 low-income and LMI participation, it is
10 critically important that not only
11 private developers, but non-profit
12 organizations that have longstanding
13 roots in the community, the public
14 agencies are all working together to
15 ensure that the communities that we all
16 want to serve are able to make decisions
17 about what projects best reflect their
18 values in investigating our broadly
19 shared goals.

20 I would say on this point I
21 joined Nexamp about a year and a half
22 ago, we were filling up one of our
23 projects in western Massachusetts, where
24 I grew up at the time, and I was asked
25 to make a few calls to potential people

1 to fill up those final slots.

2 I thought the easiest sell in
3 the world would be my mother, so I
4 called my Mom. And after I went through
5 the brief pitch around what signing up
6 for the subscription would sound, like
7 my mother simply said it sounds too good
8 to be true.

9 After taking a brief moment,
10 this was how I was going to pay for my
11 home that I just secured a mortgage on,
12 we ultimately were able to convince her
13 that it's critically important.

14 I share that partially because
15 it's funny, it points out how bad of a
16 salesperson I am. But more importantly
17 it points out the fact that there is
18 still a great deal of upfront consumer
19 education work that needs to be done.
20 And we find that it's most successful
21 not when it is done in a rushed, pushed
22 fashion, but when there is a sustained
23 and ongoing engagement in the community.
24 As long-term owners of these projects,
25 we see these not as a three-year program

1 but as a three-year investment, and we
2 all need to operate as such.

3 On customer disclosure we think
4 it is critically important that there is
5 a uniform, simple description of the
6 projects and the value proposition that
7 they propose. Obviously, every company
8 is going to have a different product, a
9 different contract that underlies that
10 customer disclosure, but if different
11 community groups, if different
12 individuals, if different families,
13 businesses are thinking about different
14 projects and where they want to
15 subscribe, they should be able to
16 compare those against one another, they
17 should not have to have a 30-page
18 document in one hand and a 30-page
19 document in the other hand, and then
20 work through it. They should have
21 something simple up front that they
22 could work through.

23 States have done this we'll move
24 to that in the next slide, but certainly
25 this is something that Maryland and New

1 York in particular have gotten right and
2 we'll show that.

3 And, finally, we think it's
4 important to provide innovation. We
5 don't want to say that here are all of
6 the things that have to be in a contract
7 from the start and only have one value
8 proposition for customers.

9 I think it's difficult, right,
10 this is the balance between how do we
11 allow different business practices to
12 come forward, but at the same point
13 continue to provide that protection and
14 ensure that whatever choice a subscriber
15 makes it is not one that he or she
16 regrets in the long run.

17 We believe at CCSA all the
18 leadership members, all the members
19 believe this is critically important.
20 If there is one bad community solar
21 project, then it's a bad thing for every
22 last one of us, and we want to hold
23 ourselves to the highest standard
24 possible.

25 This -- and it is obviously

1 incredibly small, but it is pretty
2 impressive, right? This is the single
3 sheet in Maryland that goes on top of
4 your contract, so that is the disclosure
5 form. You have the customer name, the
6 term, whether or not there is any
7 inflation, the estimated date of bill
8 credits. Obviously, some of these
9 things are beyond developer control, the
10 yare beyond regulator control, but to
11 the extent that it is possible, those
12 simple upfront terms ought to be up
13 front for customers to be able to make
14 those decisions.

15 And I should say this is not
16 where CCSA started, it is not where the
17 regulators in Maryland started. It's
18 not where anyone started. This reflects
19 a long-sustained process to get to this
20 point. But we think that's upfront work
21 that was done that New Jersey can
22 benefit from and what is a rapid
23 roll-out here.

24 Finally, on customer
25 subscriptions that was also a part of

1 this, we believe that there should be a
2 minimum of three subscribers per
3 project. For reference, that is the law
4 of the land in Illinois, and they're a
5 similarly situated program. We believe
6 that there should be a maximum of 40
7 percent for any one subscriber. That is
8 the case in Illinois.

9 So the baseline CS project in
10 Illinois, if they were to do no
11 residential participation, would at
12 least have to be 40, 40, and 20, but
13 certainly there are incentives to do
14 much more than within their REC program.
15 Massachusetts has a maximum 50 percent,
16 but then the rest is limited to small
17 subscribers, residential and small
18 business.

19 On size, we believe that there
20 is an argument for having a subscription
21 size up to 120 percent of load. That is
22 reflecting the assumed electrification
23 growth that we expect to see. While we
24 hope that underlining load for customers
25 is dropping through efficiency, if

1 customers are going to be bringing on
2 electric vehicles, we don't want to lock
3 them into an agreement that somehow
4 doesn't reflect their future needs. Not
5 a number that is locked down by any
6 means, right, we want to be part of the
7 discussion, but we want to reflect that
8 people are going to be making different
9 decisions around electrification in the
10 future and we want the Community Solar
11 systems to be a part of that.

12 And then, finally, on manage
13 many, as has been referenced by several
14 of the previous speakers, we believe the
15 subscription to be both affordable and
16 transferrable. We do not believe there
17 should be incentive against transferring
18 those credits, and that there ought to
19 be, as I believe ACE referenced, others
20 exclusively managed by developers.

21 So thank you all for the
22 opportunity for CCSA to be a part of
23 this process at multiple stages, and we
24 hope to continue to be a part of the
25 process and resource. And, again, we

1 just appreciate the opportunity.

2 MR. SHEEHAN: Would you be
3 comfortable with us sharing your
4 presentation here through the server?
5 You don't have to answer me now.

6 MR. DOWNING: I'm looking at
7 everyone. Yeah, we're cool.

8 MR. SHEEHAN: Okay. Thank you.
9 We're going to share all the slides we
10 received. We just wanted to make sure
11 you guys were comfortable with that.

12 MR. DOWNING: Absolutely. Thank
13 you very much.

14 MR. SHEEHAN: Thank you.
15 Pine Gate Renewables.

16 MR. McDONALD: So for this
17 section I would just like to point out a
18 few subsections of the market that I
19 think may be, not necessarily
20 marginalized, but just not thought of in
21 this program.

22 One are larger scale
23 subscribers, such as universities or
24 multi-family buildings or apartment
25 complexes being able to aggregate meters

1 so that a landlord could come in and
2 say, okay, I'm going to be paying for
3 all of your utilities, be able to
4 aggregate all of those meters for all of
5 the tenants in the building into a new
6 solar program.

7 There should also be no maximum
8 subscription size. Maximum subscription
9 sizes could unfairly exclude certain
10 community members such, as I said,
11 universities or larger subscribers who
12 want to aggregate meters.

13 There should be no limits placed
14 on residential versus subscriber
15 customers on a per-project basis because
16 different organizations have different
17 preferred subscriber strategies and
18 structures based on their specific
19 financing partners and the risks that
20 they're willing to take on that
21 aggregate credit. So, you know, not
22 having these restrictions will allow the
23 program to allow for unique project
24 structures, which will be able to serve
25 quite a range of customers.

1 Another thing that should be
2 included in this program design is the
3 allowance for community choice
4 aggregation in these projects. I think
5 that community choice aggregation could
6 allow for a lot of the subscriber
7 acquisition costs to be lessened if we
8 can go to a municipality and sign up
9 people in bulk that way instead of
10 having to go individual to individual.
11 It can provide much better benefits.

12 Any questions?

13 MR. WINKA: I'm not sure the
14 statutes for community aggregation would
15 allow for that, so you'd probably have
16 to tweak that statute. We can take a
17 look at that.

18 MR. McDONALD: Okay. Great.
19 Thank you.

20 MR. SHEEHAN: Okay. That
21 concludes the individuals that have
22 signed up ahead of time.

23 We have Justin Wilson.

24 (No response.)

25 Brandon Smithwood?

1 (No response.)

2 No wait, I read the form wrong.

3 I apologize for that.

4 Lyle?

5 MR. RAWLINGS: No need.

6 MR. SHEEHAN: Excellent. Anyone
7 who would like to step up to the mic?

8 (No response.)

9 Well, listen, Ladies and
10 Gentlemen, thank you very much. We
11 appreciate everyone coming out. We will
12 keep the record open until 5:45 based
13 upon the obligations of the notice.
14 Unless anyone has a desperate desire to
15 hear someone who might come in, you
16 don't have to stay.

17 We want to thank you for the
18 opportunity. This has been one of the
19 stronger staples that we've had in a
20 very long time. So I want to thank
21 everyone for coming out and your
22 thoughtful comments. We're looking
23 forward to continuing this process with
24 you. And thank you very much.

25

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(The proceedings adjourned at 5:45 p.m.)

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C E R T I F I C A T E

STATE OF NEW JERSEY)

) ss.

COUNTY OF BURLINGTON)

I, LAURA P. REAM, a
Shorthand (Stenotype) Reporter and
Notary Public of the State of New
Jersey, do hereby certify that the
foregoing hearing, taken at the time and
place aforesaid, is a true and correct
transcription of said deposition.

I further certify that I am
neither counsel for nor related to any
party to said action, nor in any way
interested in the result of outcome
thereof.

IN WITNESS WHEREOF, I have
hereunto set my hand this 3rd day of
August, 2018.

Laura Ream

LAURA P. REAM

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