

STATE OF VERMONT
PUBLIC UTILITY COMMISSION

CASE NO. 19-0855-RULE

PROPOSED REVISIONS TO VERMONT PUBLIC
UTILITY COMMISSION RULE 5.100

August 24, 2021
9:30 a.m.

Via GoToMeeting

Workshop held before the Vermont Public
Utility Commission, via videoconference, on August 24,
2021, beginning at 9:30 a.m.

P R E S E N T

COMMISSION MEMBERS: Anthony Z. Roisman, Chairman
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David Mullett, AllEarth Renewables
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Taylor Newton, Chittenden County Regional Planning Comm.
Tom Garden, Triland Partners
Eric Phaneuf, Aegis Renewable Energy
Bill Jordan, DPS
Alex Wing, Esq., DPS
Anne Margolis, DPS
Carolyn Anderson, GMP

1 (Meeting had begun when court reporter
2 arrived).

3 MR. K. ANDERSON: Okay. As I was
4 saying, I'm with ANR. I work in our central office.
5 I'm one of a few people that coordinate a review of
6 net-metering applications. In the order opening this
7 rulemaking, the commission asked whether tree
8 clearing should factor into the designation of a site
9 as being preferred. And in the notice for this
10 workshop, the commission stated it wanted to discuss
11 standards for forest clearing in connection with net
12 metering.

13 Those topics are of great interest to
14 my agency. Generally our position is that we
15 shouldn't be treating forested sites as preferred for
16 development. So I'm going to present some data that
17 we've collected on this topic. I'll very quickly
18 summarize the values of forests and highlight some of
19 the conservation policies we have in place for
20 forests today.

21 And then I'll present three options
22 that we have thought up that would help ratchet down
23 the amount of forest clearing we are seeing in
24 connection with the net metering. But before I do
25 that, let's see if I can advance the slide here.

1 I thought I would remind us that this
2 issue isn't new. So back in 2017, actually right
3 before I started with the agency, the commission
4 submitted a report to the legislature about the
5 net-metering program, and it included the then
6 proposed net-metering rule which I think is the basis
7 for the rule we have in effect today.

8 And the commission observed that in
9 that report -- that net-metering systems have been
10 disproportionately sited in undeveloped fields and
11 forest because those sites were less cost to develop
12 and went on to explain that this new proposed rule
13 would introduce incentives that would essentially
14 steer net-metering projects away from those
15 greenfield sites.

16 So interesting to me, that, you know,
17 four years into this new rule, that we are still
18 wrestling with a similar issue.

19 So on to the data. We at ANR receive
20 notice of all the net-metering registrations,
21 applications, and petitions so your NMR, NM and NMP
22 docket projects. We take all the NM and NMP
23 projects, and we put them -- so basically anything
24 over 15 KW. We put them on a weekly agenda that is
25 distributed to about a hundred staff across our

1 various departments for review and comment. One of
2 those staff, a colleague of mine named Noel Dodge at
3 Fish & Wildlife, wherever he observes that a project
4 proposes some forest clearing, he will georeference
5 that site plan for that project in GIS and actually
6 measure the area of forest cleared or to be cleared.

7 I keep a separate spread sheet of all
8 the projects by preferred site category and capacity,
9 so basically we merge those two data sets together to
10 come up with a list of all projects that have been
11 applied for since July 1, 2017. So the effective
12 date of the net-metering rule. And we have a list of
13 202 projects that have been reviewed and put on our
14 agenda.

15 Of that 202, we observe that 208 acres
16 of forest were proposed for conversion. And that
17 represents a little less than half of all projects.
18 So it's happening at a slim minority of projects. 27
19 percent involved more than an acre of forest
20 conversion per project. 14 percent more than 3
21 acres. And then 5 percent, or 10 projects, that have
22 involved more than 5 acres of forest conversion.

23 And in the chart on the left basically
24 just plots the distribution of those projects. So
25 the X axis represents each project sorted from low to

1 high in terms of forest converted. And then on the Y
2 axis is your acres of forest conversion per project.
3 We don't start seeing forest conversion until a
4 little past halfway in terms of the volume of
5 applications. And at the very high end we have had
6 some projects that involve over 9 acres of forest
7 conversion.

8 So let's see here. Another way to look
9 at the data would be to sort it by system capacity.
10 So in the bar chart or the bar on the left shows the
11 proportion of all 202 projects that fall into
12 different categories of clearing. So the dark shade
13 is no clearing. The next lighter shade is up to an
14 acre of clearing. The shade above that one the 3
15 acres. And at the very top that kind of gray/green
16 shade is clearing over 3 acres. And that left bar
17 kind of presents the same data that I was discussing
18 on the previous slide.

19 To the right of that our different
20 project capacity and kilowatt breakdowns. So you
21 have the same sort of tree clearing breakdown, but
22 for projects 50 KW and under to the immediate right,
23 then 50 to 149 KW, 150 to 499 KW, and then a separate
24 category for your 500 KW projects on the far right.

25 Unsurprisingly, you know, as capacity

1 increases the share of projects that fall in that no
2 forest conversion category decreases. Right. And
3 the share that involves clearing in various
4 categories increases. So that's not a big surprise,
5 but what I think is worth noting is that you still
6 even in your 500-KW project you have close to 40
7 percent of projects can be constructed without
8 converting forest land.

9 Also worth noting that even some of
10 these smaller capacity projects 50 KW and under and
11 then 50 to 149, we do have some examples of clearing
12 over 3 acres for those projects. I know that at
13 least two of those are wind projects.

14 And then a final way I'll kind of
15 present on this data is to break it down by preferred
16 site type. So half, exactly half of the applications
17 in our data set were for preferred site 7 projects.
18 That is by far and away the most popular preferred
19 site category we see in the net-metering rule. And
20 those projects combined have cleared, we estimate, or
21 would clear about 143 acres. That's about 70 percent
22 of all the forest conversion that we are seeing in
23 this data set.

24 That's followed by the next most
25 popular preferred site category or preferred site 9,

1 near customer load category, at 32 acres which is
2 about 15 percent of the total forest conversion. And
3 then you also see it at some other preferred site
4 types like gravel pits, brownfields, and landfills.

5 So I think the take home I would leave
6 for you is that forest conversion tends to occur at
7 certain preferred sites. Those preferred sites are
8 also the most popular ones. But it can also be
9 associated with projects that conceptually you would
10 think would be redevelopment projects like a
11 brownfield or gravel pit. But for whatever reason
12 some forest conversion was associated with those
13 projects perhaps for interconnection or access.

14 So that's the data we have. I'm happy
15 to share the spreadsheet we have pulled together if
16 folks are interested in that. Why do we care about
17 this? In short, because forests provide a lot of
18 values to us. They are perhaps the best land cover
19 type when it comes to water supply and quality
20 protection. They provide important flood control and
21 protection functions. They are habitat for wildlife,
22 a source of biodiversity. They clean the air, and
23 importantly, they sequester and store carbon. They
24 are a natural climate solution in that sense.

25 They're valued for their scenic beauty,

1 they underpin our forest products economy in the
2 state. In recognition of those values, we have in
3 the State of Vermont adopted a number of policies to
4 conserve forest lands. These are just highlights
5 here. We have a use value appraisal program. We
6 have land conservation programs administered by our
7 various departments and the Vermont Housing and
8 Conservation Board. We have a working lands
9 enterprise initiative which targets public
10 investments in certain forestry, forest products
11 industries, to help sustain and promote those
12 industries and sustain the working forest landscape.

13 In 2016 there were some amendments made
14 to Title 24 that require municipalities and regions
15 to plan for what are called forest blocks and habitat
16 connectors. And I think we will see some policy out
17 of the climate action plan on sequestration values of
18 forest.

19 Some of the draft recommendations from
20 the Climate Council have addressed this -- sort of
21 the value of forests as a tool to sequester carbon.
22 And I think you could argue that the net-metering
23 rule insofar as it does try to steer development to,
24 you know, previously developed areas, is a
25 complementary policy. But we at ANR think it -- in

1 terms of forest conservation can better align with
2 some of these policies that I've just mentioned.

3 So I know -- as I said, a small group
4 of us at ANR have put some thought into this, how
5 could we revise the net-metering rule to reduce
6 forest conversion. And I know the commission at some
7 point will want, you know, a specific written
8 proposal, preferred proposal, from ANR and other
9 parties on this question.

10 I think at this point we thought it
11 would be most helpful to the commission, to the
12 participants, to share kind of some of our ideas and
13 solicit feedback on them.

14 So the first and perhaps simplest
15 option that we have come up with would be basically
16 to prohibit preferred site development at forested
17 sites. You would modify the definition of preferred
18 site to exclude forested sites. And then you would
19 define in the rule what a forested site is. And the
20 definition I have here is the definition of forest
21 block from statute. This would apply only to your
22 category II and III systems. So the system that
23 either must be on a preferred site or that receives a
24 beneficial siting adjustor for being on a preferred
25 site.

1 And if the commission desired it, it
2 could be kind of targeted to specific preferred
3 sites. For example, if it were important to retain
4 the ability to clear forests at preferred site 9, the
5 near customer load category, rather than to apply
6 this across the board, it could be targeted to
7 specific preferred sites.

8 Option 2, a little more complicated.
9 Rather than a sort of across-the-board prohibition,
10 it would establish a threshold in the rule past which
11 a project can't clear forest. So what we have called
12 that here for the time being is excessive forest
13 conversion. Again, you would revise the definition
14 of preferred site to prohibit excessive forest
15 conversion, and then define what that means in the
16 rule.

17 So one way to do it would be just set
18 it at a specific acreage per project. That has some
19 advantage. It's straight forward. Easy to
20 administer. However, it is kind of size agnostic in
21 terms of systems.

22 Another way to do it would be to link
23 it to the footprint of the project itself. And so
24 what we have done here is -- and there may be a more
25 elegant way to state it -- would be to say forest

1 clearing for the project in an amount greater than X
2 times, for example, one times the area occupied by
3 the energy generation component of the project.

4 That term, energy generation component,
5 does appear in the draft revisions to the rule that
6 went out with the order opening this rulemaking. So
7 basically, in the case of a solar project, you can't
8 -- one couldn't clear more than the area needed to
9 accommodate the area of the array. So a lot of 500-
10 KW projects are let's say 3 acres in size in terms of
11 the physical footprint. You couldn't clear more than
12 3 acres. It could be set at .5 instead of one, in
13 which case that project couldn't clear more than an
14 acre and-a-half. So that's another kind of variant
15 on this option.

16 And then the third would link it to the
17 actual capacity of the project rather than the
18 footprint of the project. And in this case, again,
19 maybe there is a more elegant way to state it, but
20 forest clearing for the project, it would not result
21 in a ratio of capacity in kilowatts to acres of
22 forest cleared that is lower than, for example, 200
23 to one. So in that example your 500-KW project
24 couldn't clear more than 2 and-a-half acres.

25 So again, like the last option, it

1 would apply to category II and III systems and could
2 be targeted to specific preferred sites.

3 And then the final option we have come
4 up with for now is really based on some work that was
5 started by the commission in the initial draft of the
6 rule revisions that went out with the order opening
7 the rulemaking.

8 The commission proposed to repeal the
9 joint letter option of preferred site 7. And as I
10 said previously, that preferred site type accounts
11 for about 60 percent of the acres converted, forested
12 acres converted. I think there are not only our data
13 set maybe, I don't know, three to five projects --
14 preferred site projects, that have come in with a
15 municipal plan designation. So the vast majority are
16 the joint letter of support projects.

17 So we do think, like, if the commission
18 went forward with that repeal, that we would see a
19 lot less forest conversion associated with net
20 metering. However, we know that that joint letter
21 option is desired by some towns and regions, and
22 certainly, I think, from some developers as well.
23 And I know the commission in the very first initial
24 information request that they put out in this
25 rulemaking asked whether standards, criteria should

1 apply to towns and regions when they designate a site
2 as preferred with the joint letter.

3 I think the answer to that is yes. And
4 to get at this forest impact question, we could put
5 the same sort of standards, options one and two, for
6 example, on to the municipalities and regions. Or we
7 could take a more deferential approach that just
8 ensures the municipalities and regions before they
9 are signing that joint letter of support have
10 consulted their plans, made sure that the projects
11 are consistent with their policies regarding forest
12 conservation.

13 For example, that forest block analysis
14 that they are all supposed to do in connection with
15 their municipal and regional plans. And I think,
16 could be wrong on this, but I think the life of a
17 plan is like 8 years, like a -- need to be amended,
18 updated every 7 years.

19 If we have some local planners on, they
20 can perhaps correct me here, but all that is to say
21 that I think the forest block mapping requirements
22 from that what's called Act 171 in 2016 are just now
23 kicking in. So we are seeing more attention given to
24 those issues in town and regional plans.

25 So that's -- those are our three

1 options. I think I'm like right on time in terms of
2 what I was allotted. I'm happy to take questions
3 now, or perhaps let others present on this topic.
4 I'll leave that up to you, Mr. Marren.

5 MR. MARREN: Thanks, Kevin. That was a
6 very helpful presentation. And like the data set,
7 that was great. If you want to post the spreadsheets
8 in ePUC, feel free to do that. That would be very
9 helpful.

10 MR. K. ANDERSON: Okay.

11 MR. MARREN: Let's hold off on
12 questions right now, because I know we have one more
13 presenter on this topic. We will sort of treat this
14 like a panel.

15 ANR has had its turn to present. We
16 are going to hear from Renewable Energy Vermont now.
17 And then after they have presented we can kick off a
18 group discussion. And folks can feel free to ask
19 questions of Kevin or REV about their presentations.

20 Ms. Staskus, are you going to be
21 presenting for REV or is another person? Ms.
22 Staskus, unfortunately no one can hear you. Can you
23 see if your audio is turned on?

24 MS. SCHILLING: If folks are having
25 problems with audio, they can always call in

1 separately.

2 MR. MARREN: The other thing you can do
3 is you'll see there is a gear icon at the top
4 right-hand side of your screen. If you click on
5 that, it will take you to your audio and camera
6 settings. And you should check to make sure that
7 your external microphone is either hooked up, or if
8 you're using, like, a headset with an external
9 microphone, make sure you've got that one selected.
10 That's a problem that I notice some people run into.

11 So we will just wait a second while we
12 try to resolve this issue for Ms. Staskus. Thanks
13 for everyone's patience.

14 MR. PHANEUF: If you continue to have
15 trouble and you want me to jump in, just wave your
16 hand and let me know.

17 (A discussion was held off the record.)

18 MS. STASKUS: Hi. This is Martha
19 Staskus.

20 MR. MARREN: All right. So Martha,
21 I've made you presenter. You should be able to share
22 your screen now if you have any presentation
23 materials. Do you have any slides or anything like
24 that?

25 MS. STASKUS: No. I'm going to make a

1 couple of comments, and then actually I'm going to
2 turn it over -- we would like to yield some of our
3 time to VHB and Tim Upton, an expert in this field.

4 So while I'm here, I'm Vice Chair of
5 Renewable Energy Vermont, and I'm Chief Development
6 Officer at Norwich Technologies. I'm here
7 representing REV, comments and thoughts and
8 introduction for Tim Upton.

9 I think that I want to thank Mr.
10 Anderson for his presentation. I think it's helpful
11 for all of us to have an opportunity to communicate
12 together and to share these ideas.

13 Our concern -- one of our concerns is
14 that this process really should be much more
15 comprehensive review process and include a much
16 broader view -- much broader representation of
17 stakeholders as well as addressing the net impacts,
18 negative impacts and positive impacts. Because --
19 and there should be -- this process should really be
20 -- any environmental decision-making process should
21 be administered through a thorough scientific peer
22 review panel process similar to what that U.S. Fish
23 and Wildlife biological opinions go through.

24 So we are concerned with this being a
25 very narrow conversation.

1 Just a couple things that I heard from
2 Mr. Anderson. In particular, you know, the comment
3 that said this is happening at a slim minority of
4 projects. That's a little bit of what we are coming
5 from, is what are we talking about.

6 I also would take a bit of issue with
7 the term forest conversion. You know, similar to
8 AvCam, where they are looking at these projects are
9 actually preserving agricultural soils when they are
10 in an ag field, because all the equipment will come
11 back out.

12 And then a couple of other items are
13 the fact that, you know, this 203 acres over a 4 year
14 period. You know, Vermont has over 4 and-a-half
15 million acres of forest. And we are a little
16 concerned that the percentage of what we are talking
17 about, maybe 50 acres a year, which the data set
18 looks at all of the projects, yet the impacts would
19 only happen to two categories of projects. By my
20 calculator 4 digits doesn't even register the
21 percentage of impact that we are talking about here.

22 And to my point on the larger
23 conversation, you know, 2017 Harvard Wildlife -- Wild
24 Lands and Woodlands Study identified 1,500 acres a
25 year in Vermont lost to residential and commercial

1 development, so it was an insignificant activity in
2 that.

3 And those are permanent developments.
4 We really -- I just don't think it's quite fair to be
5 talking about forest conversion when the U.S. EPA
6 looks at solar being able to sequester carbon at the
7 rate of what would be over -- 500 kilowatt array
8 projects could be sequestering what's comparable to
9 over 700 acres of forest.

10 So I think we just want to be careful
11 about taking this review in such a small isolated
12 perspective, you know. I mean Vermont Digger is
13 talking about the loss of Bicknell Thrush habitat on
14 the top of our forests here, and we are talking about
15 200 acres over five years. So I think we just need
16 to be looking at this as a larger threat from --
17 climate change is a larger threat to our forest and
18 our planet and us.

19 And I'll leave it at that. I would
20 like to introduce Tim Upton who can really address
21 this in a more comprehensive way and respond to
22 specific questions of ANR's presentation.

23 (A discussion was held off the record.)

24 MS. SCHILLING: Tim, if you need to
25 call in, the numbers are in the chat.

1 MR. UPTON: Can you hear me now? Okay,
2 turn off my -- is that better? Sorry for the echo.
3 I'm not sure how to make that go away without -- I
4 turned down my speaker all the way.

5 MR. MARREN: Kim, also if you could
6 mute yourself. Sometimes having multiple microphones
7 on will do that.

8 MR. UPTON: I did mute. I think I
9 needed to turn off my speaker too. Sorry about that.

10 Thank you very much. So I'm Tim Upton.
11 And I am with VHB, and we provide assistance with
12 project planning, site assessments, potential natural
13 resource impact assessments for a wide variety of
14 different projects under Section 248, including
15 net-metering projects.

16 And I think I can be pretty brief. And
17 let me start out by saying, you know, whatever I'm
18 saying is without discounting the value of impact of
19 forest blocks. I think we all agree on that and that
20 part of Kevin's presentation. But basically to echo
21 something Martha said, we are just not seeing
22 evidence of what we see as a concerning loss of
23 forest cover or ecological function specific to
24 net-metering projects. Nothing that warrants any
25 stricter or different treatment under Section 248 and

1 other types of development and certainly nothing
2 indicating the need for prescriptive standards and
3 prohibitions that are taking into account particular
4 site conditions on a case-by-case basis.

5 And we are not seeing anything that the
6 existing rule and statute are incapable of
7 addressing. The scale of clearing that we just heard
8 about associated with net-metering projects really
9 seems also to us to be quite small. Both
10 individually, especially when you consider that a lot
11 of the clearing is happening at the margins of
12 cleared sites, and collectively, and just in terms of
13 the nature of the clearing itself. It's really no
14 different than tree cutting for other types of
15 development that Martha mentioned, except to the
16 extent that it's associated with the development that
17 may have other benefits.

18 And it really shouldn't be reviewed or
19 judged prescriptively any differently than anything
20 else. And if there were a real significant issue
21 with forest conversion, loss of ecological function
22 for any given project, then we think that Section
23 248, in general, the commission, petitioners, ANR,
24 everybody involved are already very well equipped to
25 identify those issues and address them under review

1 criteria as they exist.

2 Seen in the context of, you know, the
3 amount of forest cover we have in Vermont, the amount
4 of forest cover that we as a state are collectively
5 conserving every year, it just doesn't seem to be a
6 problem that needs this type of solution.

7 So in our view, the best course of
8 action with regard to forest clearing isn't to make
9 any changes at all. And review tree clearing for a
10 project on its own merits in the context of the
11 project, the site, and all the other surrounding land
12 and natural resources and ecological functions just
13 like we do with every other issue under all of the
14 relevant criteria.

15 Thank you.

16 MR. MARREN: All right. Thank you, Mr.
17 Upton. And Mr. Upton, just to be clear, you were
18 speaking on behalf of VHB?

19 MR. UPTON: That's correct. Yes.

20 MR. MARREN: Okay. Great. So I guess
21 at this point I'll just open it up to folks to ask
22 some questions of either ANR or Mr. Upton or Ms.
23 Staskus. You can do so either -- probably the best
24 way to do this is to just put a note in the chat, and
25 Elizabeth will monitor that and try to call you in

1 order as we get them.

2 I'll start just with one quick question
3 for Ms. Staskus. She mentioned that she thought this
4 process should be broader and engage some more
5 stakeholders. And I was just wondering if you could
6 tell us who the stakeholders you believe should be
7 involved in this process are. That way we could get
8 in touch with them if they needed to.

9 MS. STASKUS: Sure. Thank you. The
10 logging community, the climate change community, the
11 land use community. I just -- it's not just an
12 isolated issue for this rule 5.100. And I'm sure
13 there are others.

14 MR. MARREN: All right. Elizabeth, do
15 we have --

16 MS. SCHILLING: David Mullett would
17 like to ask a question. David?

18 MR. MULLETT: Yes. Thank you very
19 much. Appreciate it. David Mullett, General Counsel
20 of AllEarth Renewables.

21 Mr. Anderson, thank you for your
22 presentation this morning. Just a couple of
23 questions, if I may. First is whether there is a
24 technical definition of what a conversion is. I
25 think as a layperson I have a -- some sense of that.

1 And the second, on the continuum of
2 conversions that occur within, you know, a given
3 period of time, can you give some examples of other
4 events, you know, housing development? I'm really
5 not even sure how to make that comparison. But, you
6 know, where is this on a scale of things if ANR were
7 ranking things that result in conversions? Thank
8 you.

9 MR. K. ANDERSON: Sure. That's a great
10 question, and I realize I didn't really parse out
11 clearing versus conversion. We do consider solar
12 development conversion of forest; right? So, for
13 example, in silviculture clearing is sometimes an
14 acceptable management treatment. But we don't
15 consider clearing in that context to be conversion,
16 because as soon as that treatment is implemented, we
17 have just kind of reset conditions in the forest, and
18 it's back to growing and sequestering carbon as
19 before. So that's the distinction there.

20 I don't have at the ready examples of
21 the impact of converting land for solar versus for
22 other forms of commercial or residential development.
23 I would have to gather that information and share it
24 with you.

25 But as I -- hopefully the explanation

1 around clearing versus conversion makes sense here.

2 MR. MULLETT: Thank you.

3 MR. K. ANDERSON: Since -- if I may
4 just quickly respond to a couple of the points raised
5 by Ms. Staskus and Mr. Upton. May I do that right
6 now since I've got the mic?

7 MS. SCHILLING: Certainly.

8 MR. K. ANDERSON: Thank you. So just a
9 quick note. Ms. Staskus mentioned slim minority. I
10 may have misspoke. Really we are talking about 45
11 percent of the projects. Slightly less than a
12 majority that had involved forest conversion. And I
13 would agree. So 204 or, excuse me, 8 acres over a 5,
14 4-year period, excuse me, means we are talking about
15 50 to 60 acres of forest conversion each year.
16 Depending on the data source, you know, we are
17 converting 2,000 to 4,000 acres of forest every year.
18 So at 50, 60 acres, that represents, you know, just
19 one to three percent of the annual forest conversion.

20 So net metering's share of annual
21 conversion is small. The numbers speaks for
22 themselves. But I don't think that that makes the
23 clearing or conversion, excuse me, insignificant,
24 right? So for every acre of forest we are converting
25 that's an acre loss in terms of the, you know, forest

1 sequestration and storage. You know, at the rate
2 that forests provide it. Not to mention the loss of
3 that 50 acres every year of other forest value.

4 So I think it's not insignificant, and
5 again, I question whether, you know, the State of
6 Vermont should be signaling that development of those
7 forested sites is in fact preferred under the
8 net-metering rule. We haven't suggested that it's,
9 you know, that we are prohibiting forest clearing
10 across the board. It's only for those projects that
11 are being conferred that preferred status for
12 development.

13 And then to Mr. Upton's point about,
14 you know, using the 248 process to raise this concern
15 on a case-by-case basis. I think we at ANR certainly
16 have the ability to advocate for the denial of a CPG
17 for a project that has a lot of clearing associated
18 with it; 9 acres, 10 acres, whatever. But I think
19 one of the -- and we may have to do that depending on
20 where we go with the rule.

21 I think one of the challenges there are
22 sort of the cumulative impact question. Can you
23 advocate for the denial of a single project because
24 of its impacts in combination with others, you know,
25 the other 80 projects that involve forest conversion.

1 There -- I'm not an attorney, but there may be -- it
2 may make the argument challenging to make.

3 But again, I think that cumulative
4 impact question is why we think this sort of
5 restriction should apply across the board in the
6 rule, especially if one of the purposes of the
7 net-metering rule is to encourage the environmentally
8 beneficial siting of net-metering projects.

9 You know, if it doesn't come to pass,
10 and we have to litigate it, it's something that we
11 will explore and may do. Having to do that will put,
12 you know, will drain -- will be kind of a drain on
13 some of the participants as those processes can be
14 very drawn out, as people on this call, I'm sure,
15 know.

16 So thank you for letting me respond to
17 those comments.

18 MS. SCHILLING: Sure. Thanks. So the
19 next person who asked to ask a question looks like
20 Annette Smith. Annette?

21 MS. SMITH: Can you hear me? This is
22 Annette Smith with Vermonters for a Clean
23 Environment.

24 Kevin, I'm wondering if the agency has
25 gathered statistics for forest clearing for all solar

1 projects. Because I'm finding this discussion is
2 kind of being done in a vacuum.

3 I mean we have seen, I think, 40 acres
4 of forest cleared for a 20-megawatt solar project.
5 We have seen 30 acres cleared for a standard offer
6 project. So this is a big topic of discussion in
7 Massachusetts. And Massachusetts is working on
8 standards or maybe has adopted some. And I'm not
9 sure they are size specific.

10 So could you speak to the larger issue
11 of clearing forest for solar, please?

12 MR. K. ANDERSON: Yes. We have
13 collected data on all categories of projects. I
14 haven't sort of sifted through it and summarized it,
15 but it's definitely something we can do, and we have
16 been tracking at the agency.

17 You know, for today's discussion we
18 were focused on the net-metering rule, and, you know,
19 as I said, the fact that we are conferring preferred
20 site status to these forested sites is what we are
21 trying to focus on today.

22 But I would be happy to provide you,
23 you know, after we kind of review what we have pulled
24 together and sort of clean it, data for forest
25 clearing, in connection with projects at all scales.

1 The only ones you wouldn't see in that data set are
2 your registrations which we are not generally looking
3 at unless there is a particular issue that's been
4 brought to our attention. It's not -- those aren't
5 projects that are sort of distributed agency wide for
6 comment.

7 MR. MARREN: Elizabeth, I'm going to
8 jump on the line because I have a private message
9 here from the chair.

10 MS. SCHILLING: Go ahead.

11 MR. MARREN: If you would like to get a
12 question in. So thank you.

13 CHAIRMAN ROISMAN: Thank you, Mr.
14 Marren. I had a question for Mr. Upton. Mr. Upton,
15 if I understood your statements, it was that the
16 issues associated with the pros and cons of forest
17 conversion of these projects would be best dealt with
18 in the 248 process on a case-by-case basis.
19 Currently the commission does not have a rule that
20 would require an applicant to evaluate alternative
21 sites to the proposed site.

22 It seems to me that to fully do the 248
23 process, we might need to require that an applicant
24 come in with a variety of sites. Not an unlimited
25 number obviously, but, you know, several alternative

1 sites, some of which would involve forest clearing,
2 some of which might not. And each one would have its
3 own pros and cons that would allow us under 248 to
4 make the judgment as to what is the best potential
5 location for a proposed project.

6 Would you be supportive of us expanding
7 our current rule to require that there be such an
8 evaluation of alternative sites, at least keeping it
9 on the topic of today, at least in those cases where
10 there was going to be a kind of forest conversion
11 that Mr. Anderson is concerned with.

12 MR. UPTON: I should first say that the
13 impacts of that kind of rule to site selection, I
14 think, are really very serious and are better
15 addressed by solar developers who can speak to that
16 much better and more comprehensively than I can.

17 I'll say it just -- from the standpoint
18 of what we are seeing here in the initial
19 presentation. I still don't think that we are
20 seeing, with regard to net-metering projects, the
21 types of impacts either individually or collectively,
22 on forest resources in the state, that should cause
23 us to think we need something that would add more --
24 add more delay and complication and cost to the site
25 selection process, if that makes sense.

1 And again, I think that's true even for
2 cumulative impacts. Forest clearing isn't different
3 fundamentally than something like stream impacts, or
4 wetland impacts, or habitat -- other types of habitat
5 impacts. And we are just not seeing this as the type
6 or scale of impact that rises to the level of needing
7 that type of solution.

8 MS. SCHILLING: All right. I think the
9 next person had a question was Thomas Hand.

10 MR. T. HAND: Yeah. Mr. Anderson, I
11 had two questions that should be both fairly quick to
12 answer. So the first was how many megawatts does
13 this approximately 200 project represent? And then
14 second, you said that this data was based on -- it
15 sounded like applications.

16 Do you have data on actual clearing or
17 specifically on projects that have gone fully through
18 the process and received CPGs?

19 MR. K. ANDERSON: To your first
20 question, I'm pulling up my spreadsheet now. I'll
21 have an answer on that in a minute. No. We don't
22 have the resources to actually go back and evaluate
23 of those -- of the applications that have been
24 applied for, what has resulted in forest conversion.
25 So there is some lag.

1 I know some projects that are
2 certificated, right? Don't end up getting built. So
3 we don't account for that in our data set. And if
4 you bear with me one second, I will total up the
5 capacity for all -- you wanted all the projects
6 involving forest conversion, is that --

7 MR. T. HAND: Yes.

8 MR. K. ANDERSON: -- what you were
9 asking for?

10 MR. T. HAND: Yes, please.

11 MR. K. ANDERSON: Okay. So I have --
12 let's see. Got it in kilowatts. Sorry. It is 3,500
13 -- excuse me, 35,611 kilowatts.

14 MR. T. HAND: Okay. So we have just to
15 summarize, we have approximately 35,000 KW, 35
16 megawatts of proposed solar projects, and 200 acres
17 of proposed clearing, but we do not have data on
18 what's actually occurred.

19 And so ANR is making recommendations
20 based upon data that we don't know whether it's
21 accurate or not as far as what has transpired.

22 MR. K. ANDERSON: I mean I would say
23 this is based on information proposed by the
24 development community. So.

25 MR. T. HAND: But not actually built

1 necessarily.

2 MR. K. ANDERSON: Correct. Yeah. I
3 don't have a good sense for what share of projects
4 don't end up being built. I suppose we could get at
5 that. I -- you know, there is the compliance forms
6 the developers would have to file. And we could try
7 and, like, track which have been filed so we know
8 which have been built. There may be other ways to
9 get at that question, but it's not something we have
10 had the resources to look into at this point.

11 MR. T. HAND: Okay. I guess just my
12 opinion, I feel like we should try to get some real
13 data on this before we propose solutions to a problem
14 that may or may not exist.

15 MR. K. ANDERSON: Yeah. I mean I think
16 the commission has information on the proposed forest
17 conversion associated with all these projects, so
18 they are making decisions based on what's been
19 presented to developers. And I don't know. Is it
20 not fair to assume that a project that's seeking a
21 Certificate of Public Good after going through that
22 process, that the intent is to build those? Or are
23 we seeing like a lot of projects actually not
24 constructed though they have been authorized?

25 MR. T. HAND: I don't know. That's why

1 I was asking about the data. I mean are these
2 projects that have received CPGs, or applied for
3 CPGs, or been built? It's just not clear, or I'm not
4 clear at least on what the data represents.

5 MR. K. ANDERSON: To be clear, it's
6 applied for. Not built. Because we haven't done
7 that follow up. But we are kind of assuming that
8 these are projects that will be built since they were
9 authorized. We have reviewed them for those impacts.
10 But your point is well taken.

11 MR. T. HAND: Applied for, though, or
12 CPGs received?

13 MR. K. ANDERSON: Applied for. Because
14 we have some that are -- you know, we have data up
15 through July 31 of this year. So those have not
16 finished the permitting process.

17 MR. T. HAND: Okay. And conceivably
18 some of those applications were withdrawn or didn't
19 receive CPGs.

20 MR. K. ANDERSON: Yes. There could be
21 some denials in there. There could have been some
22 withdrawals as well. We could try to go back and
23 tease those out.

24 Again, I'm not -- just based on kind of
25 my practice in this space, you know, that's a pretty

1 small number of projects. Now -- but I don't know
2 the universe of those that are permitted but don't
3 get built. I don't have a good grip on that.

4 MR. T. HAND: Okay. I guess that's
5 just my request is I think it would be really helpful
6 to work from actual verified data as opposed to just
7 applications.

8 I mean if there are projects that are
9 denied based on your comments in the process because
10 of forest clearing, it would be good to count those
11 as not forest clearing versus forest clearing.

12 MR. K. ANDERSON: Sure. And to my
13 knowledge we haven't advocated for the denial of a
14 project based on its amount of forest clearing if
15 other kind of alarm bells haven't rung for the agency
16 on those issues, like necessarily wildlife habitat or
17 rare and irreplaceable natural area or something like
18 that. We haven't made the argument in the net-
19 metering case that projects shouldn't go forward just
20 because of the volume of acres converted.

21 If there's been a request for
22 modifications or very seldomly request that a project
23 be denied, that would -- up to this point it would
24 have been for other reasons. Not just this straight
25 volume associated -- forest conversion volume

1 associated with the project.

2 MS. SCHILLING: Okay. I think --
3 sorry.

4 MR. T. HAND: Thank you.

5 MS. SCHILLING: Great. Commissioner
6 Allen, I believe you're next.

7 COMMISSIONER ALLEN: Yeah. I have just
8 -- I think it's a straightforward question, but it's
9 easy to ask, but probably challenging to answer.

10 It's just the value streams that Mr.
11 Anderson had identified in one of his slides. I was
12 wondering if there is kind of a, you know, a rule of
13 thumb or some, you know, way of kind of converting
14 acreage to those, you know, those value streams. It
15 seems to me that this is an issue of kind of
16 proportionate value versus cost, and having
17 something, or a place to, you know, gain some context
18 might be helpful there.

19 That's to Mr. Anderson and Mr. Upton if
20 they have answers.

21 MR. K. ANDERSON: I would say there is
22 definitely a way to value acres lost of forest in
23 terms of the various values that we have presented
24 there. I don't have the number off the top of my
25 head, but for example, I know we have, you know,

1 average, you know, sequestration and storage values
2 associated with every, you know, of your average acre
3 of forest land in Vermont. So I believe it's
4 possible to assign kind of monetary values to those
5 values that I mentioned. Would take some work, but
6 it's something we could definitely do.

7 And I don't have, you know, I know
8 there are other examples out there. I don't have
9 them off the top of my head, but it's a good
10 question. Something that I think we are capable of
11 doing.

12 COMMISSIONER ALLEN: Thank you.

13 MR. UPTON: Did you want me -- this is
14 Tim Upton -- to respond to that as well?

15 COMMISSIONER ALLEN: If you have a
16 response, I would appreciate it.

17 MR. UPTON: I think that Martha
18 articulated one of those values -- one of those value
19 calculations in her initial comments. But I would
20 also just repeat that I think what should be
21 happening is that these projects should be evaluated
22 kind of on their own merits. I don't think that
23 every -- every acre of tree cutting is equal in terms
24 of value when viewed in the context of its type and
25 its surroundings.

1 COMMISSIONER ALLEN: No. I gathered
2 that. It was really just getting a sense of
3 proportion that I was looking for. Thanks.

4 MS. SCHILLING: Next Taylor Newton.

5 MR. NEWTON: Thanks. Taylor Newton
6 with Chittenden County Regional Planning Commission.
7 I'm going to pose a question. I don't expect anyone
8 to answer it, but I think folks should think about,
9 and that's has anyone thought about why the joint
10 letter option has resulted in the -- being the main
11 culprit behind conversion of forest? Sorry for the
12 F35 flying over if you hear that.

13 I think it's a really important
14 question to answer to get to the bottom of. Why is
15 the joint letter resulting in conversion. My thought
16 is that it really goes back to the Act 174 standards.
17 The enhanced regional municipal energy plan
18 standards, particularly in regards to siting. And
19 the known constraints and the possible constraints
20 that go into the mapping and siting work that RPCs
21 and municipalities are using when they are assessing
22 a preferred site request, you know, in terms of known
23 constraints, rare, threatened and endangered species
24 are considered. National wilderness and other
25 regional or locally-identified critical resources.

1 So those no constraints are places where
2 municipalities and RPCs are going to say it's not
3 appropriate to site any renewable in that area.

4 Possible constraints. Those areas
5 where an RPC or a municipality may say that, you
6 know, a site may be okay as long as the impact of the
7 resource is mitigated. You know, the list there from
8 the Department's Act 174 standards include deer
9 wintering areas. ANR is Vermont conservation design
10 highest priority forest habitat blocks which really
11 with are the biggest and most important forest
12 habitat blocks in the state, and other regionally and
13 locally-identified resources.

14 Municipalities and RPCs aren't, you
15 know, judging these joint letters, you know, against
16 you know, any standards that they have within their
17 municipal plan about forest clearing typically.
18 Typically municipalities don't have standards about
19 forest clearing. There are exceptions. We saw that
20 in Bennington a few years ago. And that's generally
21 because municipalities don't have regulatory
22 authority over forest clearing with some very rare
23 exceptions around shoreland protection, with
24 maintaining wildlife habitat.

25 In general municipalities can't

1 regulate through zoning, which is really -- they use
2 the plan as the basis for their zoning. They can't
3 regulate the removal of trees ever.

4 So I just think we need to think more
5 about, you know, this particular option and sort of
6 the flow of a municipality or RPC receiving a
7 request. How it's being processed there at the local
8 level, and how much resulting in conversion or not
9 resulting in conversion. You know, those resources
10 the municipalities are using in terms of their
11 mapping and siting, we really need to think about.

12 So thanks for the time. Appreciate it.

13 MR. MARREN: Thank you. Before we get
14 to the next question I just want to point out that a
15 few people have posted links in the chat. We don't
16 have a good way of preserving the chat function in
17 this platform right now as a record. So I would just
18 ask, first of all, just note here on the record that
19 Ms. Smith and Ms. Staskus have posted links. I would
20 ask them that when we submit -- when you submit
21 written comments after this workshop, which you're
22 free to submit a written comment in the rulemaking
23 case at any time, you could provide those links there
24 so that they are in the record of this rulemaking.

25 While people can see them in the chat

1 right now, there is not going to be any record
2 preserved in the chat, I don't think. So just making
3 that note right now.

4 And then Elizabeth, who is next? Is it
5 just Ms. Smith has a question I believe?

6 MS. SCHILLING: Yes. That's right.

7 MR. MARREN: Okay.

8 MS. SMITH: And yes, to what I posted
9 in the chat, there were some questions about
10 comparing to housing and parcelization. So I did
11 find that VNRC report that has a lot of data in it.

12 I wanted to first follow up on Taylor
13 Newton's comments, and Kim, this is Annette Smith
14 with Vermonters for a Clean Environment.

15 I am seeing these preferred sites
16 letters done by municipalities on kind of the friends
17 and family basis. It's more about who knows people,
18 and know we can keep our land, and the revenue we get
19 will enable us to keep it in the family. And so I'm
20 not sure how much evaluation actually goes into the
21 sites.

22 But on the Act 174 planning I have been
23 making presentations to towns, and one of the things
24 I do is, for instance, I take the solar resource map,
25 and I overlay it on Google Earth. Then you can turn

1 the transparency down and see what's below it. And
2 in one town the regional planning commission actually
3 suggested to the town that they just incorporate all
4 of the solar resources that were unconstrained as
5 their preferred sites.

6 And when I dialed back the transparency
7 I found that more than 90 percent of them were
8 forested. So I do think those maps are a problem.
9 And I now in many -- when I make presentations
10 actually I give them the overlay. And I suggest that
11 they use those transparencies to take a look at what
12 is being shown as a solar resource and therefore,
13 they can then adjust their plan to be useful to the
14 Public Utility Commission.

15 Because the big problem with the Act
16 174 guidance from the Department of Public Service is
17 that it contains virtually nothing of use to the
18 Public Utility Commission which requires very
19 site-specific special policies and criteria.

20 The question I was going to ask is of
21 the solar developers and as with Kevin's comment, I'm
22 not sure that I'm really looking for an answer from
23 them right now. But what I would like to know is why
24 is it necessary to convert forest for solar? I can
25 understand when it is a relatively open site or a

1 gravel pit that has trees around it you -- and you
2 need to clear for shading. I mean I do that with my
3 own solar panels. I had to go chop down a whole lot
4 of trees the other day just because they were
5 blocking the sun.

6 But we are seeing this -- we have seen
7 a lot of virtual net metering not built close to
8 load. And I guess the trend I would like to see us
9 go in with net metering is that we build next to
10 load. And that cuts down on the transmission costs
11 and all sorts of problems that are presented by the
12 grid.

13 So it would seem to me that in many of
14 these cases, and I don't know if Kevin and ANR could
15 evaluate it, how many of these projects that are
16 being -- seeing forest conversion are really not
17 serving local load anyway. And, you know, I think
18 that's a problem.

19 So that's my comment. Thank you.

20 MR. MARREN: All right. Well we have
21 run through all the folks who volunteered in the chat
22 to ask questions. I'll open it up one last time
23 before we move on.

24 MS. STASKUS: Mr. Marren, this is
25 Martha Staskus. I would just like to respond a

1 little bit to what Ms. Smith said.

2 MR. MARREN: Okay. Please go ahead.
3 And then Tom Garden, you can follow right up. Okay?

4 MS. STASKUS: Thank you. Good
5 questions. You know, from my experience, a number of
6 the locations that we look to develop are driven by
7 landowner inquiries, landowners that are looking to
8 pay their taxes, landowners that are looking for
9 multiple uses on their land to be able to keep their
10 land in ownership.

11 The other item that I would say is I
12 think that we should be looking at, I think that if
13 the analysis from ANR were to also look at the
14 location of the proposals, how close they are to
15 distribution, existing distribution, the constraints
16 that are on the system right now are definitely
17 impacting the location. I don't think we are seeing
18 -- I would wager to guess, and I don't have this data
19 as Kevin does, but these aren't being developed in
20 the heart of a forest. They are being developed or
21 identified and evaluated near transmission, near
22 roads, existing infrastructure.

23 You know, of course, there is an
24 economic factor here that weighs whether the projects
25 are feasible. And all of these elements are --

1 factor into the cost of it. So I think that there is
2 more detail that could be considered in the
3 evaluation of the forest areas that are -- in other
4 words, just saying that it's cleared might need more
5 scrutiny. Thank you.

6 MR. GARDEN: Hi. This is Tom Garden.
7 May I speak now?

8 MS. SCHILLING: Yes. Please. Go
9 ahead.

10 MR. GARDEN: So my company is Triland
11 Partners. We are an active solar developer in the
12 State of Vermont. Would like to think that we are a
13 very conscientious developer.

14 In the process of developing solar
15 projects in Vermont, we are very often confronted
16 with concerns, some of which have been expressed
17 today, and some which have not. But a fact that we
18 are, quote unquote, industrializing the landscape.
19 That is to say that there are some people who are
20 actively involved in opposing solar in the state.
21 Like to say that we are taking greenfields that
22 provide such a pretty environment that contributes to
23 a tourist industry, and by placing a 3-acre or a 10-
24 acre solar project, we have industrialized the
25 landscape and have done irreparable long-term harm to

1 the economy and other things.

2 So that's forced some developers to
3 say, well I'll look for something that's not going to
4 have that sort of confrontation. And that's what
5 has led to the development of some treed parcels.
6 And sometimes that's older forest, perhaps, I don't
7 know because I don't particularly like the idea of
8 developing treed sites. But it is more and more
9 difficult to find greenfield sites that don't
10 alienate some of the folks who oppose us.

11 So what I would say is that I think
12 there should be merit given to the fact that when a
13 forested site is used for solar, in many respects
14 that site was probably former farm land and for
15 various reasons, converted to woodlands when the
16 farmer just didn't see the merit of farming it any
17 longer for whatever reason.

18 And the long-term outlook should be of
19 this group that, in fact, maybe it's time you
20 increase the amount of greenfield sites. And I think
21 solar does that. I think it does it in a very small
22 way because not that much forested land gets used for
23 solar, quite frankly. But when it does, it's
24 creating -- it's probably bringing back a farm land
25 that 20 years or 25 years hence will again be a

1 beautiful greenfield site. And I wish that merit
2 would be given to that.

3 I'd just also like to briefly address
4 the concern that some people have that all these
5 sites are virtual solar projects that aren't even
6 being developed close to load. Well the fact is,
7 very often they are relatively close to load because
8 otherwise you won't have the infrastructure, in other
9 words, the three-phase lines perhaps, that allow you
10 to build in a remote site. That's one. So it must
11 be close to load in some respects.

12 The other problem is, as a solar
13 developer who is sensitive to what's happening around
14 the site, and whoever might have a view of that site,
15 the closer we get to load, the more the people come
16 out, some of the people on this call, and say that's
17 not a good site. That should never be allowed.
18 That's too close to this house or that house. When
19 in fact, it is being planned or proposed for that
20 location because it is just that, close to load.

21 So people who say, hey, I want that
22 close to load sort of have to take into consideration
23 that the only way that happens is if it's in
24 somebody's side yard, backyard, across the street or
25 somewhere close by. And I would just like people to

1 be a little more open minded to that.

2 I think that's all my comments. I
3 appreciate your time, and I think this has been a
4 great process. Thank you.

5 MR. MARREN: All right. Thank you, Mr.
6 Garden. I think at this point we are going to -- we
7 will pivot to our next topic which is just a more
8 general discussion of the CPG application process.
9 And sort of what we were looking for here was, you
10 know, are there ways we can simplify or streamline
11 our application process. How can we make it more
12 effective and better for all of the people involved.

13 So REV had asked to make a presentation
14 during this time, so I'll turn it over to whoever
15 from REV wants to speak. And then we can open it up
16 for a group discussion.

17 MR. PFANEUF: This is Eric, E-R-I-C.
18 Phaneuf. P-H-A-N-E-U-F. I'm the Vice President of
19 Business Development at Aegis Renewable Energy.

20 We just have three things to address in
21 the application process. Mostly under 107. One
22 point specifically, a sub-part of 107. And then just
23 two general ideas.

24 We would like -- we think it would be
25 helpful from an efficiency perspective to introduce a

1 requirement that the 30-day comment period not only
2 apply to third parties but also to the PUC itself.
3 So that any questions, comments or concerns that the
4 public has they raise them during that same comment
5 period that everybody is commenting. So, you know,
6 we can respond to everybody sort of within the same
7 window.

8 And then in the event there are no
9 adverse comments or questions filed by anybody, we
10 would like to see the PUC have to issue the CPG
11 within 10 days or 14 days, some sort of reasonable
12 time, you know. As part of our application process
13 we have drafted a proposed order if there aren't any
14 comments, and basically the discussion is sort of
15 done, it would be good to have the CPGs issue more
16 quickly.

17 That comes from a concern generally of
18 what we are facing in the environment in general. We
19 just don't have a lot of time for things to take so
20 long. So the more projects we can get done when
21 there is not a controversy or all the questions have
22 been answered, it would be helpful to have those
23 issued more quickly.

24 Second comment. Some of the folks in
25 REV have expressed a concern with -- I guess I would

1 call it -- lack adherence to deadline or extension
2 requests. And I know back in July, I think it was
3 July 14, 2017, there was a procedural order issued by
4 the commission. And we would like to see that order,
5 maybe just folded in more formally into 107.

6 And that order basically requires that
7 extension requests that are made within three days of
8 the expiration, of the time frame, actually show
9 cause to get that extension even if it's unopposed.
10 We just think that would sort of enhance the
11 predictability of the process. And then last, 5.107
12 (b) (4) deals with a time frame after filing advance
13 notice. If the completed application is not filed
14 within 180 days, you have to go back and refile the
15 advance notice. And it just seems it causes
16 confusion when this happens. It elongates things for
17 no reason. It's duplicative. So we are thinking if
18 we extended that to one year, it would probably catch
19 the projects that have had to deal with that issue.
20 And that's it.

21 MR. MARREN: All right. Thanks. I'll
22 just open it up at this point. If anyone wants to
23 pop into the chat and raise their hand, figuratively
24 speaking, they can.

25 All right. Ms. Smith.

1 MS. SMITH: I'm not sure if this is the
2 right time to make this comment, but it seems to be.
3 So regarding the small, under 50 kilowatt, the only
4 things that ever come to my organization are
5 problems. We have not seen a single problem with
6 anything under 50 kilowatts in solar. We have -- I
7 think -- I was trying to think if we had ever seen,
8 heard from anyone with problems with solar that is
9 below 150. And I don't think so. So we deal with
10 very, very few projects.

11 But I do see now a need to do something
12 about small wind. Because we keep getting contacted,
13 and it's been over the last five years. That seems
14 like almost every small wind project, and it can be
15 under -- it can be a hundred kilowatts. It can be
16 under a hundred kilowatts. It can be under 50
17 kilowatts.

18 The application materials with no
19 prefilled testimony, with no site plans, they are very
20 kind of sketchy. And it is very hard for the
21 potential interveners and people whose interests are
22 affected to get the details that they need. And so I
23 think that there needs to be a much more specific
24 standard of requirements for the wind projects.

25 And I don't see that it's a one-size-

1 fits all. And as I said, I have seen no problems
2 with small solar of any of those sizes. So but the
3 wind projects, they need a more substantive
4 application, I think. Thank you.

5 MR. MARREN: Mr. Anderson?

6 MR. K. ANDERSON: Yes. To Ms. Smith's,
7 you know, question I'll just add that of the 202
8 projects that we talked about earlier in our data
9 set, I think 5 were wind projects. So we just don't
10 see very much wind in net metering. You know, some
11 of the projects, you know, forest conversion, some
12 being sited on a forested hilltop do involve quite a
13 bit. So I think Ms. Smith's comment does speak to,
14 you know, some of the level of information we are
15 getting with 5.106 category projects versus 5.107.
16 So the 5.106 category, you know, sworn testimony
17 isn't required. We may get more kind of conclusory
18 statements about impacts to certain resources with
19 those applications.

20 So there is -- there may be
21 opportunities to strengthen, for example, the
22 application form associated with those projects. And
23 we at ANR, we have got a list of suggested site plan
24 requirements, for example, to attach to both 5.106
25 and 5.107. That wouldn't be anything new to

1 applicants because it's information we are going to
2 ask. We are going to request that they add to the
3 site plan in order to complete our analysis. But
4 getting some of that information up front in the
5 rule, I think it would help, you know, put folks on
6 notice as to what we are looking for and what other
7 participants in the process may be looking for.

8 And if that's done, it might lighten
9 the load on us in terms of commenting on both advance
10 notices and applications, if we can provide, you
11 know, we have already asked for some site plans,
12 updates and written comments in this rule. We can
13 provide some additional ones in follow up. But we
14 are, you know, I'll say we're the commission to
15 decide to make --

16 (Audio interruption)

17 MR. K. ANDERSON: I don't think that's
18 me. Sorry. I'm not echoing now. Were the
19 commission to make the 5.107 process more like 5.106,
20 I think we could -- we wouldn't object to that.
21 Provided we have a really kind of robust application
22 form and site plan requirements and so forth. So
23 I'll leave it there for now. Thank you.

24 MR. MARREN: Kevin definitely raised
25 what I think is an intriguing idea that could be

1 explored, if people wanted to, which is right now the
2 5.107 application process, you know, it's still
3 really heavy on some of the more legalistic
4 components that a normal 248 case would have.
5 Principally I'm talking about the prefiled testimony.
6 And I've always been intrigued by the idea of instead
7 of requiring testimony, actually just requiring
8 specific pieces of information.

9 You know, there are certain questions
10 that people get asked in prefiled testimony over and
11 over again, and instead of having it presented in
12 that format, it might just be easier if we had a form
13 that asks the questions, and people provided the
14 answers to those questions on the form. And it would
15 make things a little bit more standardized.

16 That said, you know, the commission
17 relies a lot on all of the state agencies that are
18 involved, not just ANR, but also the Division of
19 Historic Preservation, the Department of Public
20 Service, you know, we would really need to know -- we
21 would need to hear from those agencies what
22 information are you looking for that normally came in
23 prefiled testimony, what format do you want to see it
24 in. And, you know, what information do you want to
25 collect.

1 And then we could try to build more
2 comprehensive application form. Which I think would
3 ideally be easier for applicants to fill out and
4 submit, and also to -- maybe a little easier for lay
5 people to approach than wading into prefiled
6 testimony.

7 So if anyone has any reaction to that,
8 feel free to toss it out. If you think it's a
9 terrible idea, let us know.

10 I see Ms. Smith has also asked if now
11 is the time to talk about advance notice. Yeah.
12 Advanced notices are part of the CPG application
13 process. So yes, bring up any issues about the
14 advance notices you would like.

15 MS. SMITH: First I respond to say that
16 I like the idea that you suggested asking the basic
17 questions in it. I think it would help the public if
18 there is some sort of narrative to read, if there is
19 a description of the project, is it going to involve
20 a new road. If so, where. You know, how long. What
21 elevation. You know, just basics that are currently
22 -- you have to hunt for them. Rather chaotic.

23 So I will acknowledge I'm probably the
24 only one here who is speaking on behalf of the
25 public, so I'm sorry I keep speaking, but there are

1 things that I think need to be said from that
2 perspective.

3 I'm encountering a fair amount of
4 confusion in the practice of having separate case
5 numbers for the advance notice that are then closed
6 at 180 days. And people send me emails, like, what's
7 going on. And they are really quite upset about
8 that, they don't understand at all the reason that
9 the case is being closed.

10 I went to the clerk and asked. And I
11 said is this just standard to close it after a
12 certain period of time. And yes. After 180 days.
13 But I don't feel like I should have to be answering
14 those questions regularly. So if it keeps coming up,
15 then I think there is something that needs to be
16 addressed at the PUC.

17 I recently had a situation where
18 someone thought that there were actually two cases,
19 and that they were really upset that they were left
20 out of the advance notice case. And now I have to
21 deal with two cases.

22 And then, I guess, my other comment is,
23 are all of the advance notice documents incorporated
24 into the petition case. And if not, then people have
25 to go look at two pages, and I'm not sure what the

1 solution is, except to keep the same case number.
2 And have the advance notice then become the case,
3 with the way PUC is set up, maybe there could be just
4 a tab for advance notice.

5 So I am seeing a problem here. When
6 things keep coming to me on issues, I appreciate the
7 opportunity to bring them to your attention.

8 MS. SCHILLING: Thanks. Thanks for
9 that, and that's something we can raise with the
10 person who works on ePUC at the commission. That
11 might be something we could work on internally.

12 Let's see. It looks like Thomas Hand
13 had a question.

14 MR. T. HAND: Yes. Thank you. In
15 response to Mr. Marren's question that was posed to
16 the group, I think it's an idea that has some merit.
17 Obviously haven't thought through it in a lot of
18 detail yet, but the idea of simplifying the
19 application process and moving away from testimony to
20 more of a form to be filled out to provide specific
21 pieces of information, I think that has some merit to
22 it.

23 The caution that I would provide is
24 that we appear to be in an environment where net-
25 metering applications and net metering as a whole is

1 declining. And as you know, on September 1 rates
2 will step down again. My expectation, speaking
3 purely for myself as MHG Solar, I don't expect that
4 we will propose many more net-metering projects. If
5 any, beyond September 1.

6 And so my caution is that maybe give it
7 180 days and see if there is actually any net-
8 metering activity that makes it worth the effort to
9 revamp the system. And I could be wrong. You know,
10 everyone else might think that net metering will
11 continue at its current pace or even grow. But I
12 would just caution that before the PUC expends the
13 efforts to change the application system, let's see
14 if there is much net metering to even discuss.

15 MS. SCHILLING: Thanks. It looks like,
16 Martha Staskus, do you have a question or comment?

17 MS. STASKUS: Yeah. Thank you for
18 that. I'm intrigued by a couple of things that have
19 just been said both from Annette and Thomas.

20 The standardized form is definitely, I
21 think, an interesting conversation, and I would agree
22 with Thomas that, you know, maybe the timing of that
23 is just to be cautious about with the September date.
24 On the case number and advance notice numbering,
25 absolutely support what Annette has said. And I

1 would also add that to filing for, in the rare case,
2 well if an amendment is filed for, it seems to get
3 another number. If there is an amendment or
4 municipal filing form or all -- any compliance
5 filings, it would be extremely helpful to, I think,
6 for the general public as well as us, to be able to
7 maintain the same case number from start to finish
8 regardless of what the activity is. Because it does
9 get confusing in how to keep the information
10 altogether under one proposal.

11 So I guess those are my two comments on
12 that. Thank you.

13 MS. SCHILLING: I see a comment from
14 Taylor Newton. Taylor, if you want to speak up so
15 any comments are on the record. You're welcome to
16 do so.

17 MR. NEWTON: Sure. Just I want to
18 agree with Martha and Annette regarding case numbers.
19 It would just be so much -- it would just be very
20 helpful for regional and municipal governments to
21 track cases from start to finish under one case
22 number in ePUC. Thanks.

23 MS. SCHILLING: Thank you. I'm not
24 seeing any more folks in the chat who have questions.
25 Last opportunity for questions, comments on this

1 topic area. Kevin Anderson.

2 MR. K. ANDERSON: Just that I don't
3 think that we at ANR would object to a standardized
4 process there on assignment of docket numbers to
5 advance notices and applications.

6 We have managed to find a way to track
7 them, but that's with administrative help. So we
8 know it's confusing, and we wouldn't mind making them
9 all the same number, if that were possible. That's
10 all.

11 MR. MARREN: All right. Great
12 feedback. So it looks like we have wrapped up our --
13 this topic. It's 11:00. I propose we take a quick
14 5-minute break. Everyone should stand up, go get a
15 drink of water. And then we will try to come back
16 and push through as many topics as we can before the
17 lunch hour.

18 So how about maybe we will make it a
19 round number. Let's meet back at 11:10. So 7
20 minutes.

21 (Recess was taken.)

22 MR. MARREN: All right. It's 11:10.
23 Hopefully everybody has come back to their computers.
24 At this point, we are going to get the Department of
25 Public Service up to give us a -- what looks to be a

1 great presentation about some of the issues on the
2 interplay of Rule 5.500 and Rule 5.100.

3 Mr. Wing, who from your shop is going
4 to be presenting today? Mr. Jordan, I assume. All
5 right. Bill, let me get you made as presenter here.

6 Bill, you should be able to share your
7 screen now if you want.

8 MR. JORDAN: Okay, I'll try. Okay.
9 Hopefully everybody can see my screen now.

10 MR. MARREN: Yup.

11 MR. JORDAN: So I just have a very
12 brief presentation on the interaction of the time
13 lines between Rule 5.100 the net-metering rule and
14 Rule 5.500 the interconnection rule. And actually I
15 just realized I didn't introduce myself.

16 I'm Bill Jordan from the Department of
17 Public Service. I'm the Director of Engineering at
18 the department. And so I'll move to the first slide.
19 If I can figure out how to advance the slides.

20 MR. MARREN: Bill, I think you'll need
21 to put yourself into presentation mode there.

22 MR. JORDAN: Sure.

23 MR. MARREN: Start slide show. It
24 should be up at the top. Yeah. Once you do that,
25 you should be able to click through. Perfect.

1 MR. JORDAN: All right. Thank you. So
2 we found that there is a discrepancy between time
3 lines in Rule 5.100 the net-metering rule and Rule
4 5.500, the interconnection rule. And to use a, what
5 I'll consider a worst case scenario, with 5.105(c)(2)
6 that specifies a 31-calendar-day comment period for
7 roof-mounted projects of up to 500 kilowatts. And
8 5.105(e) requires the utility to raise an issue
9 within that 31-day-comment period, if there is an
10 issue.

11 And the process for a 500-kilowatt
12 project that the utility would use would be the 5.500
13 process. The fast track time line is up to 25
14 business days total, which is 35 calendar days. So
15 that slightly exceeds the 31 calendar days in the
16 net-metering rule. It's probably doable, but if the
17 utility needed to take the full time, they would
18 exceed that 31 days.

19 And then moving down to the fourth
20 bullet. The time lines for the feasibility study and
21 the system impact studies are much longer. And I'll
22 go through those on the next couple slides. And as I
23 think we all know, most of the projects these days
24 are failing fast track criteria on 3, which is the 15
25 percent of peak load. And so most projects that do

1 go through the 5.500 process end up in some sort of
2 study beyond the fast track, either a feasibility or
3 a system impact study.

4 And the last bullet is just to let the
5 commission know that the department has worked with
6 some developers and utilities informally over the
7 past few years to resolve some of these issues. And
8 I just noted that because the commission hasn't seen
9 those in formal processes that we have gone through.

10 So this is for the feasibility study.
11 It just goes through the time lines. So at the top I
12 have rule 5.105 has a 31-calendar-day comment period.
13 And then the 5.500 interconnection process has
14 several steps. And Rule 5.500 specifies business
15 days in all cases. And so what I've done is convert
16 those to calendar days. What this doesn't include
17 are any holidays that might fall within these
18 periods. All I've done is add weekends to arrive at
19 the calendar day totals.

20 And as you can see, for conducting a
21 feasibility study if the utility did need to take the
22 full time allowed by the rule, that is 119 days for
23 the 5.500 process to play out to the end. Whereas
24 the net-metering rule has the 31-day-comment period.

25 So that would force the utility to

1 write a letter during the net-metering comment period
2 and say we are still studying the project for each
3 one of those.

4 And then this next slide here is the
5 same thing but for the system impact study. And you
6 can see that if the utility needed the full time
7 allowed by the interconnection rule, that comes out
8 to 161 calendar days not including any holidays that
9 might fall within that process.

10 And so the Rule 5.500 is up for
11 revision, and so the point of my comments here today
12 is to suggest changes to Rule 5.100 that may help the
13 rules work better together.

14 And so the department proposes two
15 possible solutions for the registration projects, the
16 5.100 projects. But I will note that the 5.106 up to
17 50 kilowatts, and the 5.107 projects as well, do have
18 31-day-comment periods for up to 150 kilowatts. And
19 so I've used the worst case example here. Up to 500
20 in 5.105. But this presentation could equally apply
21 to the other sections of the net-metering rule 5.106
22 and 107.

23 So the two possible solutions the
24 department's proposing are to use separate
25 application forms for both rules. And what that

1 would require is that the 5.500 application is
2 submitted first to the utility and all studies are
3 completed. And then the net-metering application is
4 submitted with all of the Rule 5.500 studies
5 completed. And then the 31-day-comment period that's
6 now in the net-metering rule could apply.

7 This would be the department's
8 preferred option. But a second option that we are
9 proposing here today is the bottom of the slide which
10 would be to use the same application form for both
11 rules which we have previously discussed doing. And
12 all the technical data from the existing
13 interconnection application, the Rule 5.500
14 application, would need to be combined on to the Rule
15 5.100 application form if we were just going to use
16 one form.

17 That would then serve as both the net-
18 metering and the interconnection application form.
19 And then the net-metering rule would need to be
20 changed for the 31-day-comment period to trigger off
21 the applicant submitting the 5.500 interconnection
22 study results.

23 And these two processes from the
24 standpoint of the developer receiving a CPG probably
25 would take the same amount of time. There are just

1 two administrative paths to get there.

2 And those are all the slides I had.
3 Others from the department have some different topics
4 to present upon, but I can pause here if there are
5 any questions.

6 MR. MARREN: Thanks, Bill. Yeah. I
7 think now is a good time just for us to have a
8 discussion about how we can try to harmonize these
9 two processes. And I definitely am interested to
10 hear from folks about any reactions they have to the
11 two proposals that you've put out there.

12 Maybe a couple other ingredients for
13 the discussion here, I just wanted to say that to me
14 it seems like a lot of the times in a CPG case,
15 particularly a registration case, the utility
16 sometimes will file something that it calls an
17 objection where it raises interconnection issues.

18 But I wonder if it's really appropriate
19 to think of those as issues. I mean the utility has
20 said, oh, we need to replace a transformer. We need
21 to do something. And almost uniformly the applicant
22 has said, yes, we understand, we will do that.

23 It doesn't seem like there is any real
24 disputes or issues that the commission needs to
25 resolve. And so I was wondering if it's more

1 appropriate for the rule somehow to say part of
2 filing for a net-metering CPG is an understanding
3 that the net-metering customer is obligated to
4 complete the 5.500 process. However long that takes.
5 But the CPG, you know, we don't need to wait for that
6 process necessarily to conclude for the commission to
7 finish its CPG case, especially in the registration
8 process.

9 Maybe that's a different consideration
10 in a large project where the interconnection results
11 might change the configuration of the project or the
12 location of certain infrastructure. And that would
13 be relevant to the CPG review case. But in the case
14 of registration, I'm just not sure we need to
15 basically wait around for the 5.500 process to
16 conclude before we issue the CPG or have it deemed
17 issued as it is in the case of registrations.

18 So if anyone wants to pipe -- chime in
19 now, I see Thomas Hand has a question. Free to go.

20 MR. T. HAND: Yes. Thank you. Mr.
21 Jordan, perhaps I missed this. But could you explain
22 or expand on what is the issue or concern that you're
23 trying to resolve with these two possible solutions?
24 I just didn't quite follow.

25 MR. JORDAN: I'll break it into two

1 parts. First of all, the net-metering rule requires
2 the utility to explain what the problems and the
3 solutions are to the interconnection. And it may be
4 that the utility does not have time within the 31
5 days to identify, to complete the studies, identify
6 the issues, and also be able to speak about the
7 solutions to those issues within that time frame.

8 The second part of it is to -- for the
9 department, and also we thought the commission, to be
10 able to -- be able to finalize whether 248(b)(3),
11 which are the effects upon system stability and
12 reliability, to be able to make a positive finding
13 with respect to (b)(3) before a CPG was issued.

14 It sounds like the commission is
15 thinking differently on that. But the department's
16 thoughts were to be able to make a final finding or
17 decision on 248(b)(3) prior to the CPG being issued.

18 MR. MARREN: And just to clarify, I'm
19 certainly not speaking as the commissioners in this
20 point, that's just my impression of the issue. And I
21 guess the way that I conceived of it is that if we
22 had a rule that said a net-metering customer is going
23 to comply with Rule 5.500, is it possible for us to
24 say that's good enough for us to conclude that (b)(3)
25 will be satisfied. Basically that the Rule 5.500

1 process is sufficiently protective of system
2 stability, you know, and so as long as we are
3 following that rule as required, we are satisfied.

4 But again, that's just me. Not the
5 commission. And if that thinking is wrong, you know,
6 we certainly would love to hear about it.

7 MR. T. HAND: Just a follow-up question
8 then. And perhaps forgive my ignorance. But in the
9 event that the utility cannot complete its review in
10 the prescribed time, does it not have the opportunity
11 to simply ask for additional time? Is that not a
12 solution?

13 MR. JORDAN: The utility could file an
14 objection letter during that 31-day process. Yes.

15 MR. MARREN: In my experience that is
16 what happens. You know, we have seen some utilities
17 filing objections, and the substance of the objection
18 is simply we haven't had time to review this project,
19 and so we don't feel comfortable with the CPG being
20 issued at this point.

21 MR. T. HAND: Got it. So --

22 MR. MARREN: Go ahead. I didn't mean
23 to speak over you.

24 MR. T. HAND: Sorry. I guess, you
25 know, I'm not sure about these two possible

1 solutions. I mean I guess they both could work. But
2 from my perspective as a REV member and a developer,
3 I feel like the interconnection process actually
4 works pretty smoothly in Vermont. It's one of the
5 few items where I would say I don't have a large
6 number of concerns. To me, I'm not sure we need a
7 new solution here. I feel like the current process
8 works pretty well.

9 MS. SCHILLING: It looks like Alexander
10 Wing has some comments or question.

11 MR. WING: Yes. Thanks. I'm Alex
12 Wing. I am also appearing on behalf of the
13 Department of Public Service.

14 One thing I would like to do is
15 backtrack before the break and state that we would
16 also support either maintaining a case number per a
17 system or otherwise referencing the associated case
18 numbers with a given petition.

19 I want to reiterate what my colleague
20 Bill Jordan said. This does work well most of the
21 time. And I think Mr. Marren's perspective is
22 generally correct. But there is a large extent to
23 which we do see interconnection issues arise after
24 the comment period or before the comment period that
25 did not make it before the commission.

1 So at least to that extent, you
2 wouldn't have perspective for that. And then I also
3 wanted to ask questions for both utilities and
4 developers. I know this tends to present itself more
5 with larger systems. But especially when a rate
6 change or something like that is approaching, a lot
7 of utilities sometimes have overburdened
8 interconnection queues, and a lot of cases are held
9 in a stay until that study is performed.

10 I think there are different approaches
11 to address this. And we put forward two. For really
12 what is more the exception than the rule. But I
13 think there needs to be a pathway, for example, if we
14 go the way that Jake proposed, where the
15 interconnection and CPG would be more untethered for
16 an interconnection dispute to be addressed or at
17 least acknowledged because system stability and
18 reliability under (b)(3) doesn't always get addressed
19 fluidly particularly with 105s in this process.

20 So that's kind of my questions and
21 comments for now. So I would be interested to hear
22 what other participants and stakeholders have to say.

23 MS. SCHILLING: I guess the next person
24 that had a comment is Martha Staskus.

25 MS. STASKUS: Thank you. Yeah, I think

1 Mr. Marren's comments are intriguing. To separate
2 them as well, we, as Thomas said, we don't see too
3 many of those issues with the utilities -- the
4 utilities have been fairly good to work with. And
5 communicating that opportunity early is a prudent
6 thing to do.

7 The other item -- shoot -- I just had a
8 brain cramp. Oh, the other way to do it if we were
9 thinking about decoupling it a little bit, to use
10 someone else's term, is when we were speaking earlier
11 about the administrative process, and requesting that
12 comments all be filed within the 30-day period, it
13 would seem to me that decoupling the process and then
14 still having the utility have an opportunity to
15 provide that comment within 30 days would be a way to
16 say we have an issue.

17 The project -- the net-metering
18 projects are paying for these improvements and, you
19 know, there could be some that look at this as a
20 benefit to improving our system from the solar -- on
21 the back of the solar projects. But what I think
22 that talking -- seeing the process moving forward in
23 a positive way but allowing an opportunity for issues
24 like this, if they are there, to come up and be dealt
25 with outside of the venue of the PUC, unless -- the

1 utilities are highly regulated and required to meet
2 heavy regulated rules. They know what they need to
3 do. And we can work with them.

4 So I just put that out there.

5 MR. MARREN: All right. Any other
6 comments?

7 MR. T. HAND: Can I ask one additional
8 question?

9 MR. MARREN: Of course, Mr. Hand.

10 MR. T. HAND: Mr. Wing, you indicated
11 that there were concerns -- potentially some concerns
12 around reliability. Could you -- perhaps I
13 misunderstood that. Could you expand on that a
14 little bit? I'm not sure I understood what you were
15 saying there.

16 MR. WING: If anything, I was saying
17 that the interconnection process would typically fall
18 under 30 V.S.A. 248(b)(3) which is ensuring that the
19 system remains reliable and stable. So insofar as an
20 interconnection study relates to that issue, I think
21 there needs to be a way for that to be processed.

22 For example, I could think of at least
23 one phone call I had where a CPG holder effectively
24 said the interconnection has been resolved by virtue
25 of them having a CPG, but the utility had identified

1 an issue subsequent to the CPG being issued.

2 And I think the department's comments
3 are at least hoping to work out a solution for when
4 issues like that arise, which again, are typically
5 with smaller systems. I hope that clarifies it.

6 MR. T. HAND: I think I understand what
7 you're saying. If I get to summarize, you're saying
8 there are a couple of isolated incidents where the
9 current process has not adequately covered system
10 reliability at least from the perspective of the
11 developer. Perhaps also from the utility? Is that
12 fair?

13 MR. WING: I'm sorry. Could you repeat
14 that last part?

15 MR. T. HAND: So what you're saying is
16 there's been one or perhaps a handful of cases where
17 the current system has not procured reliability? Or
18 are you saying that just the developer didn't like
19 the outcome?

20 MR. WING: I think it was more of an
21 issue where the comment time frames did not line up
22 with the technical review time frames for, again,
23 more of these smaller systems or roof-mounted
24 systems. Generally I think they are resolved in the
25 long term. I'm aware of at least one that has gone

1 before the commission. But I guess it is just trying
2 -- the department would like to harmonize the process
3 and the time lines between how interconnection is
4 done safely, how any upgrades are allocated in a way
5 that makes all the parties happy. That sort of
6 thing.

7 MR. T. HAND: Okay. Thank you for
8 that.

9 MR. WING: I think everyone would
10 hopefully like the system to be reliable and stable.
11 And I'm not aware of an instance where that has not
12 happened. It's just the rule doesn't necessarily
13 accommodate that outcome in a fluid way consistently.

14 MR. T. HAND: Understood. Thank you.
15 I guess from a REV perspective, we feel that the
16 utilities are in the best position to evaluate system
17 reliability. And we feel like the interconnection
18 process at present functions pretty efficiently. I
19 mean certainly compared to many other states with
20 high penetrations of DG, the interconnection process
21 in Vermont works quite well.

22 So I think the REV perspective is that
23 the current system works well interfacing directly
24 with the utilities for interconnection, is an
25 efficient process. And I don't believe that the CPG

1 and the interconnection need to be merged into one
2 process.

3 MS. SCHILLING: Are there any utilities
4 on the call today that would care to speak to this
5 issue? I'll put that out there. All right. So I'm
6 not seeing any more comments or questions in the
7 chat. Jake.

8 MR. MARREN: Yeah. Well this is, I
9 think, a good conversation. I appreciate the
10 feedback that we are hearing here. It's good hear
11 that some things are working well. And, you know, I
12 think we do want to just make sure there are -- there
13 is some language in our interconnection rule that is
14 just going to need to change because there is a part
15 of the interconnection rule that says if you want to
16 deal with interconnection of net-metering systems
17 look at Rule 5.100. And then Rule 5.100 says if you
18 deal with interconnection, look at Rule 5.500. So we
19 need to resolve that cross finger pointing and sort
20 of make it exactly clear what the process is.

21 And so even if, you know, we hear
22 things are working well, and we certainly don't want
23 to mess anything up, but we do want the rules to talk
24 to each other in a clear way. So we are going to be
25 looking into that, and you know, feel free to write

1 in after this workshop if you have specific
2 suggestions on how to do that best.

3 So I think we will turn back to the DPS
4 now to hear about the other administrative issues
5 that we had teed up for this workshop which are
6 amendments, transfers, and the abandonment and
7 expiration of CPGs.

8 Who from the department should I make a
9 presenter?

10 MR. WING: Would you make me the
11 presenter, please? And then my colleague, Anne
12 Margolis, and I will probably share the conversation
13 on those points.

14 MR. MARREN: Okay. Alex, I've made you
15 a presenter.

16 MR. WING: That's -- okay. So to
17 continue with our comments on the issues, I think we
18 are in agreement -- the department's in agreement
19 with the PUC that the major/minor distinction should
20 be streamlined a bit and brought closer into line
21 with how amendments are reviewed in typical larger
22 248 petitions.

23 The current guidance offered by the
24 commission largely does not discuss the 50-foot
25 limits of disturbance rule. But that is something

1 that the department has routinely seen subjectively
2 either development -- developer hesitance over --
3 because technically a major amendment needs to be
4 withdrawn and refiled. And sometimes there are
5 beneficial amendments made for an agency or a
6 neighbor, an interconnecting utility, that
7 technically move the original project proposal
8 outside of the 50-foot limit of disturbance criteria.

9 The department's also interested in
10 perhaps bringing certain aspects of the guidance into
11 the rule. Though the department also feels that it
12 would be useful, perhaps, for the PUC to expressly
13 point to a guidance document, especially because
14 certain technological and rate system issues are so
15 quickly changing relative to the rulemaking process.
16 Perhaps it could be a biennial update issue.

17 We have also heard some feedback from
18 developers of various sizes that certain minor
19 changes, especially swapping like components,
20 different panels, maybe inverters would have the same
21 technical capabilities, and having the 10-day minor
22 amendment period can be meddlesome. So perhaps a de
23 minimis filing or a minor change could be something
24 like an as-built filing.

25 The department does believe it's

1 important to know what hardware is on the system in
2 case there is an issue. But it doesn't necessarily
3 need to hold up the CPG process.

4 And then there is the question of what
5 rates amendments should be compensated at, if it's a
6 preexisting system at a different rate and is
7 expanded to an additional size. Perhaps there should
8 be a particular multiplier after which capacity
9 increases, should not disallow -- it should not allow
10 the previous existing rate. And perhaps we should
11 visit how much the preexisting system rates apply to
12 a larger amendment is effectively what we are saying.

13 For example, the 15-kilowatt array
14 added 150 kilowatts of capacity. Is it still the
15 same system?

16 Another issue that related to this that
17 the department has come across a few times, is the
18 issue of bypassable charges which are not permitted
19 under net metering 2.0 and beyond and are set to
20 become obsolete after a period of time for net
21 metering 1.0. But it does seem that there is some
22 inconsistency on approaches here.

23 The department is aware of at least one
24 utility that interprets their tariff to not permit
25 charges to be bypassed when a net-metering 1.0 system

1 is admitted to add additional capacity.

2 Much like de minimis or minor amendment
3 changes, the department recommends that transfers
4 should be tracked to maintain at least the data base
5 for the utilities of who is responsible for what
6 net-metered system.

7 Another issue is CPG abandonment or
8 expiration. This is more nitpicking than substance,
9 but currently the rule regarding the term of the CPG
10 prior to expiration is just entitled "Abandonment"
11 which causes some confusion because they are not all
12 proactively abandoned. Perhaps including the
13 expiration of the title would also be useful.

14 The department had some curiosity about
15 the two-year CPG term prior to extension. It has
16 some potential benefits such as the review of good
17 cause extension requests such as those that come
18 across unexpectedly when remediating a brownfield.
19 But there is also a lot of potential cons that we
20 would like to investigate in terms of suboptimal
21 construction time lines and potential negative rate
22 effects. Effectively technology cost to build, all
23 sorts of things could be changed over a two-year
24 biennial update term. So a two-year CPG term could
25 be problematic.

1 And that way -- we are also curious to
2 hear from utilities what a two-year CPG would do in
3 terms of the interconnection queue and
4 interconnection studies. For example, if an
5 interconnection study was done two years prior to
6 actual energization of the system, is the study even
7 effective anymore?

8 And then this issue kind of dovetails
9 into the next workshop about compensation. But the
10 department believes that simultaneous net metering
11 and wholesale market participation should not be
12 allowed. The net-metering projects effectively
13 transfer all products and benefits related to the
14 generation through capacity and energy and RECs to
15 the interconnecting utility. At least RECs are an
16 option.

17 But that could effectively result in
18 sort of a double dipping or double compensation to
19 both retail rates in net metering and the wholesale
20 markets. And that's the end of the slide -- and I'm
21 not quite sure how to end it.

22 But the department is open to questions
23 and comments on that.

24 MR. MARREN: Thanks. Mr. Wing, that
25 was some good topics to discuss. We certainly spend

1 a fair amount of time at the commission processing
2 amendments. And prior to COVID we certainly spent a
3 lot of time dealing with requests for extensions of
4 commissioning milestones.

5 The COVID pandemic has led to some
6 blanket commissioning milestone extensions which kind
7 of reduced our case load in that area. But I would
8 expect it to come back as we move out of the pandemic
9 area -- time.

10 So we are really interested in hearing
11 about how could we make those processes smoother and
12 easier for everyone involved.

13 I have one question for the department
14 about transfers. Which is sort of what is the --
15 what is the public good or regulatory value we are
16 trying to protect here with the transfers? Is it
17 that the commission needs to know who is responsible
18 for every CPG or every, you know, project that we
19 have approved? I think that's what it is. But maybe
20 there are other values out there that I'm not
21 thinking of.

22 And so then I would -- I would divide
23 projects in a sort of two buckets. You've got what I
24 call big projects or complicated projects that have
25 lots of post-certification requirements. May have --

1 maybe they have filings they owe us. Maybe they have
2 obligations going on in the future to monitor certain
3 resources or things like that.

4 And certainly there I see the case for
5 the commission having much more sort of a direct
6 contact with that entity.

7 And then there are the other projects
8 like the registration-type projects where it's like
9 you're approved. We are probably never going to hear
10 from you again. You don't owe us any filings. And
11 so I'm wondering how much of an interest does the
12 commission have in maintaining a close contact with
13 that person. And if we still do have an interest,
14 can we accomplish that in some way other than
15 requiring homeowners to file a form with us.

16 Could it be done by simply us issuing
17 an information request to the utility saying please
18 provide us all of your customers who have generation
19 accounts or something like that. You know, maybe
20 that's not allowed because the utilities can't share
21 customer information. But just want to make sure we
22 are not collecting pieces of paper that aren't going
23 to have a purpose going forward.

24 So do you have any thoughts about that,
25 Mr. Wing, about sort of whether and why we should be

1 collecting transfer forms at least from the really
2 small projects?

3 MR. WING: So first, I would like to
4 clarify my earlier comment about case numbers on
5 ePUC. I got a private message to that effect. I do
6 note that the PUC currently tracks the advance filing
7 associated with the actual petition case. I was
8 speaking more to amendments and things like that when
9 there are multiple case numbers associated with a
10 given system.

11 As for your question about transfers, I
12 think your perspective is largely correct. It's
13 mainly just so the PUC knows what's out there. Also
14 ensuring that the utilities know what's out there.
15 And in the event of some unforeseen reason why we
16 need to know what happens, that information could be
17 tracked in terms of accountability and what's on the
18 system.

19 MR. MARREN: Your comment maybe raises
20 a question. Maybe we will need to put it out to the
21 utilities. But I guess are the utilities relying on
22 the commission's records to know what's connected to
23 the system? Or do they keep that information
24 themselves? And that might inform how we -- what
25 information we collect and how we keep it.

1 So unless there is a utility
2 representative here who can speak to that, maybe we
3 will -- I'll leave that issue aside for now.

4 All right. I see some folks have piped
5 up in the chat. So maybe let's turn to Mr. Hand.
6 You had a question.

7 MR. T. HAND: Yes. Thank you. My
8 question is on this question of wholesale
9 participation. Would GMP's Tesla power wall program
10 count as wholesale participation? And would you be
11 seeking to block GMP from running that program?

12 MR. WING: I'm sorry. Was the question
13 targeted at GMP or the department?

14 MR. T. HAND: The department.

15 MR. WING: I'm not sure I actually have
16 an answer to that. I think batteries and how they
17 might be aggregated are a burgeoning system -- are a
18 burgeoning issue.

19 Perhaps one of my colleagues online
20 would have a clear view about that. I think our main
21 comments about wholesale market participation to date
22 are targeted more at hydroelectric facilities which
23 already have obligations to participate in a
24 wholesale market that then wish to net meter before
25 their obligations have lapsed.

1 There are definitely some larger
2 battery storage projects or utility aggregations of
3 batteries that are an issue. And I do believe the
4 FERC has recently issued some guidance and thoughts
5 about that.

6 But I would view that more of an
7 emerging issue.

8 MR. T. HAND: Okay. So maybe follow-up
9 request then. Would it be possible for you to, when
10 we say wholesale, could you provide some clarity on
11 what the actual issue is that you're trying to either
12 prevent or resolve? Because it's just not entirely
13 clear to me what we are talking about.

14 MR. WING: Well, for example, say a
15 hydroelectric facility had a contractual obligation
16 to participate in the ISO New England capacity
17 markets, and then simultaneously wished to net meter,
18 it would be being paid twice for the capacity in both
19 the retail rate and its bids into the market.

20 MR. T. HAND: Okay. So I guess is that
21 different than what GMP is doing with their Tesla
22 power wall program?

23 MS. SCHILLING: Anne Margolis, do you
24 want to go ahead?

25 MS. MARGOLIS: Anne Margolis,

1 Department of Public Service. I guess I would ask us
2 to focus on the particular issue at hand which is the
3 simultaneous participation of a net-metering resource
4 in a wholesale market as well. We are not talking
5 about the GMP power wall program, the tariff. I
6 think that could be explored, and the issue of dual
7 compensation and what products are being paid for in
8 other settings, in a different workshop. But here we
9 are talking about net-metering resources in
10 particular, and the issue is that a net-metered
11 resource is being paid a retail rate-based value.
12 And that retail rate is comprised of a number of
13 products; that's energy, capacity, transmission,
14 RECs.

15 In the current net-metering rule, RECs
16 are the only product that is explicitly being
17 compensated for. And one of the issues that we are
18 raising here is that it should be more explicit that
19 the products that the utilities are purchasing when
20 they are paying customers a net-metering rate, are
21 all of those bundled projects that go into the retail
22 rate. So it is the energy capacity, the RNS as well
23 as the renewable energy credits.

24 And therefore, by making it explicit
25 what products are being paid for, then there could be

1 a clarification in the rule that those products
2 cannot be sold twice by the customer, both the
3 utility, when they are acting as a load reducer, as
4 well as in the wholesale market where that would be a
5 market facing product.

6 That's the issue we are trying to get
7 at here. FERC did offer some clarification or some
8 commentary on this issue in the context of order
9 2222. Specifically in 2222A which was a follow-up
10 order. Just going to quote them here. They are
11 clarifying.

12 That a commenter is correct that when
13 FERC stated that if a distributed energy resource is
14 offered into an RTO ISO market and is not added back
15 to a utility's or other load-serving entity's load
16 profile, then that resource will be double counted as
17 both load reduction and a supply resource.

18 So if a customer would like to sell
19 their products in a wholesale market, their energy or
20 capacity in particular, then that should be a choice
21 they can make, but they can't also get compensated
22 for that through their net-metering retail rate base
23 compensation. It should be an either or. Otherwise
24 there is the double counting issue.

25 MR. T. HAND: Okay. Thank you. I was

1 -- the questions I was asking was not because I
2 necessarily disagree with the department's position,
3 but I just didn't understand what you were aiming at.
4 And I guess I still have the question of whether a
5 residential customer with a PV system and a Tesla
6 power wall that's participating in the GMP program
7 would be caught up in the potential change that
8 you're proposing.

9 MS. MARGOLIS: I think we would want to
10 think about that a little bit further. But right now
11 what the customer is actually getting paid for
12 through their net-metering compensation is the
13 production from their PV system. They are
14 compensated in a different mechanism for -- or there
15 is a shared value. There is a tariff that is
16 separate from the net-metering tariff that deals with
17 specifically the products and the costs and benefits
18 of that battery system.

19 So I think if this particular change is
20 made in the net-metering tariff context it would
21 apply specifically just to the net-metering
22 compensation for the PV.

23 I think there is a bigger, broader
24 conversation to be had about battery storage and the
25 role of combined storage plus solar projects in the

1 net-metering rule going forward. But I think that's
2 probably better suited, as is this particular topic,
3 in the next workshop, in the compensation workshop.

4 MR. MARREN: Thank you for pointing
5 that out, we do have the workshop next week. And
6 also the commission, I believe, is opening a separate
7 proceeding to look at storage specifically as
8 required by statute.

9 I think we have to have a storage rule
10 in place within the next year. So that's going to be
11 coming down the pike. And to speak to Mr. Hand's
12 concern about GMP customers potentially being caught
13 up in this issue, I'm not sure I would -- I see that
14 concern just because the department is concerned
15 about the customer participating in a wholesale
16 market. Here, or in the GMP case, it's GMP who is
17 participating in the wholesale market.

18 Basically they have, through their
19 tariff, paid for whatever products the customer is
20 providing, and maybe reselling some of them in a
21 wholesale market. That is, you know, doesn't raise
22 any flags for me the way that a customer who is
23 basically selling the same product twice would.

24 So but yeah, definitely we can revisit
25 this topic in September if folks want to get more in

1 depth about it.

2 MS. C. ANDERSON: This is Carolyn
3 Anderson.

4 MR. T. HAND: I just wanted to
5 understand it in more detail.

6 MR. MARREN: Ms. Anderson from GMP.
7 How apropos.

8 MS. C. ANDERSON: Yes. I'll chime in
9 and actually we agree with both you, and we do see
10 those as two separate issues.

11 The battery is not part of net-metering
12 project. And so it's not what the department is
13 presenting here. So I think that those are separate
14 issues. And the department's proposal wouldn't
15 impact the Tesla power wall battery customers because
16 they are not participating in the wholesale market.
17 And the battery is not a part of the net-metering
18 CPG.

19 But we would be happy to speak more to
20 that in the next workshop as well.

21 MS. SCHILLING: Okay. I just wanted to
22 clarify the next workshop is September 16. And it
23 looks like the next person who had a comment is Eric
24 Phaneuf.

25 MR. PHANEUF: Hi. Thanks. Just

1 getting back to the one year versus two years from
2 REV's perspective. Just from a purely practical
3 standpoint, oftentimes -- first of all, Vermont has a
4 construction season that isn't super long. So when
5 you're connecting little wires together in the cold,
6 it's pretty difficult. So you're limited, you know,
7 to about 8 months of the year effectively, or 9
8 months, when you can actually put projects in.

9 Secondly, oftentimes our CPGs have
10 conditions that make it so we can't actually work in
11 certain of those beneficial months. So you just run
12 into problems actually trying to get your project
13 built. And a two-year time frame would basically
14 give you a better chance of getting a project
15 complete. And it's not, you know, -- difficulties
16 you run into are not often due to your own making.
17 It's just the nature of the season cycle and when
18 that CPG actually issues, what month of the year it
19 issues.

20 So I just wanted to lodge our
21 preference.

22 MS. SCHILLING: All right. Looks like
23 Kevin Anderson next.

24 MR. K. ANDERSON: Yup. Just I guess to
25 piggyback on Mr. Phaneuf, you know, I think we at the

1 agency are supportive of moving from a one- to two-
2 year expiration date on CPGs apart from the reasons
3 Mr. Phaneuf cited. There may be certain conditions
4 put around those CPGs. In addition to just sort of
5 the limited construction window, there may be
6 conditions related to habitat protection and the like
7 that make it a little difficult for applicants to
8 squeeze the project in within a year, within a year's
9 time.

10 And then I wanted to -- Mr. Marren,
11 raised kind of the question or the value of the
12 transfer form. And we do think that for some of the
13 projects that we review and participate in, and
14 condition, it's really valuable for the transferee to
15 have kind of signed off on that form. I think we
16 would take it a step further and suggest there be
17 some kind of certification in there that demonstrates
18 that the transferee has like read the CPG, knows what
19 the conditions are. So we do see some value there.

20 And then appreciate Mr. Wing's comments
21 on amendment. We do support the draft proposed
22 changes to the amendment process because it would
23 remove that disincentive to move a project 51 feet,
24 you know, for example, to avoid an agency concern.
25 So we are in support of that concept.

1 That's all. Thank you.

2 MS. SCHILLING: Looks like Martha
3 Staskus had a comment.

4 MS. STASKUS: Yeah. I was just
5 suggesting that the transfer information, is there
6 not, and I honestly don't know the answer to that,
7 but it seems to me that transfer of ownership that
8 information may already be available in different
9 agencies like the Department of Taxes. And so for
10 efficiency sake, being able to utilize existing data
11 across agencies rather than adding potential more
12 exposure, and quite honestly detail, to managing the
13 project, I think there is some advantages to using
14 existing information. That was all.

15 MS. SCHILLING: All right. I'm not
16 seeing anything more in the chat. Does anyone else
17 have any questions or comments on the topics
18 presented by the department?

19 (No response).

20 MR. MARREN: The magic of noon. The
21 siren song of sandwiches has silenced everyone.

22 All right. Well we have exhausted our
23 topics on the agenda, I think, and it's also close to
24 the time that we had scheduled the end of this
25 meeting, so probably time to start wrapping things

1 up.

2 I assume that we will ask for a round
3 of filings for people to follow up on topics that
4 have been discussed today. I would just assume give
5 everyone 30 days or so to make such a filing, but if
6 folks have particular constraints around, you know,
7 the fourth week of September, sometime around
8 September 20th to 24th, you know, let us know now and
9 we can put the date somewhere else.

10 And also just this is a rulemaking so,
11 you know, there is no sort of reason why people can't
12 make additional comments after the time has passed
13 or, you know, sooner. So, you know, unless there is
14 some pressing concern that we are not aware of, let's
15 just say that we will request that folks submit any
16 follow-up comments in writing by the 24th of
17 September.

18 Does that sound good, Elizabeth? I want
19 to make sure I'm not unilaterally choosing these
20 things.

21 MS. SCHILLING: I think that sounds
22 good.

23 MR. MARREN: Good. Okay. I also know
24 that I've got several commissioners who have been
25 listening in today. Is there anything that the

1 commissioners who are participating today want to say
2 or hear about before we adjourn? You're on mute.
3 Sorry.

4 COMMISSIONER CHENEY: I was muted. No
5 thank you. I thought it was a really useful
6 workshop, and I thank -- and we all thank all the
7 participants and look forward to the next one.

8 COMMISSIONER ALLEN: I'm fine as well,
9 Jake. Thanks.

10 CHAIRMAN ROISMAN: Me too, Jake. That
11 was very helpful.

12 MR. MARREN: All right. Well thank you
13 everyone. And enjoy your afternoons. We are
14 adjourned.

15 (Whereupon, the proceeding was
16 adjourned at 12:05 p.m.)
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C E R T I F I C A T E

I, Kim U. Sears, do hereby certify that I recorded by stenographic means the Workshop re: Case number 19-0855-RULE , via videoconference, on August 24, 2021, beginning at 9:30 a.m.

I further certify that the foregoing testimony was taken by me stenographically and thereafter reduced to typewriting and the foregoing 96 pages are a transcript of the stenograph notes taken by me of the evidence and the proceedings to the best of my ability.

I further certify that I am not related to any of the parties thereto or their counsel, and I am in no way interested in the outcome of said cause.

Dated at Williston, Vermont, this 2th day of August, 2021.

A rectangular box containing a handwritten signature in cursive script that reads "Kim U. Sears".

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