

STATE OF VERMONT
DEPARTMENT OF PUBLIC SERVICE

RE: THE TWO RIVERS-OTTAUQUECHEE REGIONAL
COMMISSION'S REQUEST FOR A DETERMINATION OF ENERGY
COMPLIANCE PURSUANT TO 24 V.S.A. SECTION 4352

September 5, 2017
7:00 p.m.

Vermont Law School
South Royalton, Vermont

Public Hearing held before the Vermont Department
of Public Service, at the Vermont Law School Chase
Center, 164 Chelsea Street, South Royalton, Vermont, on
September 5, 2017, beginning at 7:00 p.m.

P R E S E N T

Deputy Commissioner: Riley Allen

DPS Staff: Ed McNamara, Director
Sheila Grace, Special Counsel
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1 MR. ALLEN: Okay. We're going to go ahead
2 and get started. I hope we get more people coming in
3 the room. Staff have prepared a little script, so I'll
4 just go through and make everybody aware of what the
5 event is about. My name is Riley Allen. I'm Deputy
6 Commissioner of the Department of Public Service. I
7 have several staff here with me, Dan Potter, Sheila
8 Grace, and Ed McNamara.

9 I'll start this by providing a little bit of
10 context on Act 174. 174 created a new energy planning
11 process in Vermont for regional planning commissions.
12 Pursuant to this process, the regional planning
13 commission has the option of submitting its duly
14 adopted plans to the Commissioner of the Department of
15 Public Service for an affirmative determination of
16 compliance with the statutory standards of 24 Vermont
17 Statutes, Section 4352.

18 When a regional plan has received an affirmative
19 compliance determination under that section, the
20 Vermont Public Utility Commission is required to afford
21 substantial deference in Section 248 proceedings to the
22 land conservation measures and specific policies
23 contained in such a plan when reviewing any proposed
24 electric generation facility in the region covered by
25 the plan.

1 So the purpose of this hearing is to gather input
2 from you, the public, regarding the Two
3 Rivers-Ottauquechee Regional Planning Commission's
4 request for a determination from the Vermont Public
5 Service Department that their implementation plan and
6 their regional plan comply with the energy planning
7 requirements set forth in Section 4352.

8 If the Department finds the plan complies, the
9 land conservation measures and specific policies
10 contained in the plan will receive substantial
11 deference during any Public Utility Commission siting
12 review of any proposed electric generation facility
13 within the planning commission, regional planning
14 commission's service area.

15 We've asked Kevin Geiger, a senior planner at the
16 Two Rivers-Ottauquechee Regional Planning Commission,
17 to begin this hearing with a 10- to 15-minute overview
18 of the plan after which we invite members of the public
19 to provide input. We have passed around a sign-up
20 sheet. If anybody else comes in and would like to
21 speak, we're prepared to add them to the list. I also
22 encourage you to submit written comments to the
23 Department via email at:
24 PSD.planning.standards@vermont.gov. If anyone needs
25 that email address again, please let us know.

1 MS. GRACE: And it's also on this contact
2 information if anyone needs that written down.

3 MR. ALLEN: So, just so everyone's aware, we
4 do have a court reporter with us. So, when you do
5 provide comments, please spell your name for the court
6 reporter. So, with that, I'll turn it over to you,
7 Kevin.

8 MR. GEIGER: Sure, great, thanks. Lest I get
9 behind that pillar, I'm going to stand over here if
10 that's okay. I'm Kevin Geiger. So this is Chris
11 Damiani from our office, and then we have Dee Gish from
12 our office as well, too, so either one of them may be
13 answering questions as well as me. I was just going to
14 start off very briefly with, What is the Regional
15 Planning Commission, because that's kind of a basic
16 thing, and get going down to, What's the regional plan,
17 and then, What's this piece of it?

18 So, again, for those of you who are not from this
19 particular area, we're one of eleven regional planning
20 commissions in the state. We do a variety of things
21 for our towns, largely helping them with planning and
22 zoning, a lot of that under contract, and so we do
23 stuff on the local level, and our board is made up of
24 representatives appointed by each of the towns, so our
25 board is our towns. You can think of it that way.

1 We're kind of on the southern end of the region
2 right now. We go from Granville up in Addison County
3 over to Newbury, down to Hartland, and over to
4 Plymouth. Got Pittsfield and the edge of Rutland
5 County in the region. So those 30 towns are our
6 region, and we have 9 staff, I think, now doing a bunch
7 of this stuff. Us three are the main energy people.
8 So that's what the Regional Planning Commission is.

9 Then what is the regional plan? The regional plan
10 is this really thick thing. This doesn't even include
11 the energy part of it. So we're trying to make it
12 thinner, but that's what it is right now. And so it
13 addresses many things, and one of the parts that the
14 Board has to look at is, How does the regional plan in
15 its totality address energy? And this time we focused,
16 just because we can't do that whole thing in one shot,
17 we focused on the energy section of the plan and what
18 we call the energy implementation plan, which is
19 actually an appendices stuck on that.

20 So those two parts are the most energy-relevant
21 pieces, however transportation and land use are the
22 next most relevant. Both of those will be under
23 revision in the next several months, finishing out
24 hopefully in less than a year from now. However, in
25 our submittal we do call out places where we believe

1 both the land use section and the transportation
2 section and a few other sections actually meet the
3 standards as well.

4 What's any of this mean to you as people? Why do
5 we write these things? So our towns, some of our towns
6 are in the process of going through this as well, but
7 until any of them do, if a project happens in our
8 region, it would be the regional plan that would get
9 that substantial deference, assuming we get the
10 enhanced energy compliance blessing, and then our
11 regional plan could have some voice because, right now,
12 the standard is due consideration, and so you can
13 imagine substantial deference is better than due
14 consideration out there.

15 Our plan is basically effective. Hi, Bushrod.
16 Come on in.

17 MR. POWERS: Thank you.

18 MR. GEIGER: We are just getting going,
19 Bushrod. I'm just going over what's Two Rivers, but
20 you know that part.

21 MR. POWERS: I do know that part.

22 MR. GEIGER: Bushrod is one of our
23 commissioners, so, and he's from Royalton. He just had
24 to pop over the hill. Our plan's effective in three or
25 four areas. It has essentially somewhat of a

1 quasi-regulatory effect. Mainly on Act 250 and
2 projects that trigger Act 250, they look for compliance
3 with the regional plan. Driveway permits, state
4 driveway permits, access permits, actually also comply
5 with the regional plan, and 248 projects, energy
6 projects that need a Section 248 blessing have to
7 comply, or have to get, now get due consideration, and
8 we want to go up to substantial deference to the plan.

9 What, what is the long and short of this? You
10 know, there's many pages in there. The long and short
11 of that is the State has set energy goals, and we've
12 said, Yes, we like those energy goals, and here's how
13 we want to meet those energy goals. So that's the nut
14 overall. Those energy goals are essentially driving
15 the use of fossil fuels down a lot by 2050 with some
16 steps along the way for a variety of reasons.

17 But so we're driving the use of fossil fuels down.
18 How are we going to do that, and what are the kind of
19 implications? One of the implications for that for us
20 is that we send less money out of state because we're
21 not buying fossil fuels because we don't make any
22 fossil fuels in the state. So we're keeping money
23 locally, which is also helping our economy.

24 MR. POWERS: That is not exactly true. We do
25 make fossil fuels. It's called firewood.

1 MR. GEIGER: Well, we make firewood, yeah,
2 and I'm going to talk about firewood in a little bit
3 too. Not usually considered a fossil fuel, except
4 really old firewood. But so, so we want to -- we want
5 to improve our economy. We want to improve the air and
6 the water, and we want to reduce greenhouse gas
7 emissions, and we want to improve health too. Because,
8 if we do certain things like use transit more than
9 drive alone, our health will actually improve, and we
10 want to lower long-term costs if we can. The cost
11 thing is going to be a tough nut.

12 So, in general, the way in which we propose doing
13 that, and there's guidance from the State that we
14 looked at as well, is kind of common sense stuff. The
15 first thing is don't use the energy in the first place.
16 Don't turn the light on if you don't have to turn the
17 light on. Second thing is have a better light bulb so,
18 when you turn the light on, it uses less energy out
19 there, and then, overall, the two other big energy
20 users are thermal heat for our buildings and fuel we
21 put in our vehicles. So those are the two massive
22 energy users that are driven off of fossil fuels,
23 mainly oil, coal, depending upon where you're getting
24 it, some gas.

25 So how do we take those things and convert them to

1 electric? So we're going to take our cars and convert
2 them to electric cars, and we're going to take our
3 buildings that are heated off of oil like my house and
4 heat them off of heat pumps which are electric driven.
5 So we have two things that are going to use a lot more
6 electricity out there than we're currently using.

7 But, on the wood side, the state modeling that we
8 use to try to figure out where our goals are does not
9 actually have firewood in there much at all, and then
10 it has some weird numbers that result in some negative
11 numbers that it spits out. Some of that reasoning is
12 around there are some unknowns around long-term use of
13 wood for heat in terms of forests over a very long
14 period of time. If you cut all the trees down right
15 now and burn them up, yes, eventually, those trees
16 would suck back the carbon that you emitted burning
17 them right now, but it would be a long time before you
18 became even-steven on that.

19 However, we produce about, if I remember right,
20 about 600,000 green cord or something in the region a
21 year. Right now, our foresters tell us we've got wood
22 piling up. A lot of people in current use would love
23 to log more. So we actually have more language, I
24 would say, in our regional plan about using wood for
25 thermal, not to generate electricity, necessarily, but

1 specifically for thermal, putting in wood stoves.

2 So, for example, one of the weedy little policies
3 is you'll see we do support a wood stove swap-out
4 program so that you can burn wood more efficiently if
5 you're currently burning wood now and we'd have less
6 pollution out there and we'd have heat which we need.
7 So that stuff.

8 How are we going to get all that electricity that
9 we have that we need out there, and what's it mean on
10 our energy profile? One of the things, if you look in
11 the plan, you'll see some graphs. We're trying to
12 drive total energy use down as well, and that somewhat
13 works when you drive cars with electricity. The same
14 amount of energy -- think, think energy in terms of
15 BTU's.

16 The energy it takes to drive a car with
17 electricity in BTU's versus the energy it takes to
18 drive a car in BTU's from gasoline is we can drive that
19 same car a lot further on the same amount of energy if
20 it's an electric car because electric cars are vastly
21 more efficient in turning the energy into movement.
22 So, even though we're moving a lot of stuff, we're
23 actually saving a bunch of energy by converting to
24 electric.

25 And Chris may have a -- do you have the little

1 chart with the, yeah, like the little thing? But,
2 roughly -- we have a chart there. An electric vehicle,
3 VW Golf, goes 120 miles on the same bit that gasoline
4 version of that same car goes 29 miles. So energy,
5 pound-for-pound we get much more, yes, by converting
6 the cars to electricity. So that's how we can drive
7 energy use down while ramping up electric use.

8 MS. HAMILTON: Anne Hamilton. In your plan,
9 does it qualify -- does it create space an explanation
10 for commercial transport use versus domestic use and
11 transitioning since they are the larger emitters versus
12 the domestic emitters?

13 MR. GEIGER: You mean large vehicles?

14 MS. HAMILTON: Yes, 18-wheelers.

15 MR. GEIGER: Not much. The state model
16 assumes in a somewhat strange way, in my view, that we
17 convert all of the diesel vehicles to run on biodiesel
18 with a roughly hundredfold increase in the production
19 of biodiesel that, as far as I can see, happens by
20 magic right now because that number, that increase is
21 not technologically there right now. Whereas, you
22 know, we know solar works, and we can do a bunch of
23 solar things right now.

24 MS. HAMILTON: So, when you're calculating
25 your transportation emissions, you are only discussing

1 domestic drivers, not commercial use?

2 MR. GEIGER: Actually, the model, I believe,
3 has heavy vehicles in it as well.

4 MS. HAMILTON: It does? Okay.

5 MR. GEIGER: Yeah. And that's one of the
6 reasons, I think, why it's still at 90 percent. So
7 there's 10 percent left over when we get to 2050. The
8 rough goal is, of course, to decrease fossil fuel use
9 by 90 percent, actually, nonrenewable energy use by 90
10 percent by 2050, and it's somewhat of a curve. We kind
11 of start gentle, and then we get more strict as time
12 goes on per the state model.

13 Another thing that we want to do is we want to
14 increase transit use. We're trying to try to get
15 stronger on transit. I don't buy the argument that
16 transit doesn't work in rural areas. It doesn't --
17 it's expensive. It's less expensive than owning cars,
18 and that's what we need to measure it against. It's
19 expensive when we look at transit and say, Well,
20 transit doesn't pay for itself. True, it doesn't pay
21 for itself. None of your cars pay for themselves
22 either, and so that's the dynamic we want to get into
23 around transit. Right now half our communities don't
24 have a transit line even going through them, so, of
25 course, nobody can get on the transit.

1 MR. POWERS: Could I quickly point out that
2 we have a very good internal transit system that serves
3 our rural areas very well? It's called the school bus,
4 and I've heard this before, and we will not allow
5 people to take the school bus.

6 MR. GEIGER: Right. As you may know, right
7 now, it's, it's kind of illegal to just put civilians
8 on a school bus without running them through background
9 checks. It's not illegal to put kids on transit buses,
10 though, and so that might be the way around some of
11 that, but, yes, we do have lots of buses driving by
12 houses and with lots of room on them, certainly, right
13 now. So that is a place where there is room for
14 improvement.

15 We do want to see what we can do about increasing
16 transit use, and through our land use policies, we want
17 to see what we can do about development going forward
18 being more in a dense corridor. So, if you live in
19 Royalton Village and you need to go to the store and
20 then you need to go to the dentist, then you need to go
21 to the health clinic, you don't actually have to do
22 anything except walk, which is, compared to even an
23 electric vehicle, energy pounds or pound walking is
24 amazingly efficient. It is because the energy, you go
25 on a treadmill, and you go, like, 15 calories, and you

1 went a mile or something, right? That's like a crumb
2 from a donut.

3 Okay. Treadmill things aside, how are we going to
4 get all that electricity? In our plan we basically
5 look at solar as a way to get all that electricity.
6 We've done the land use analysis. There are maps.
7 It's important when we talk about the maps that we say
8 this is not where the region says put solar. This is
9 where the maps say put solar because it's where the sun
10 shines, and there are not overriding environmental
11 factors in there like it faces north and that type of
12 thing.

13 We, we have not taken a stance against necessarily
14 putting solar in flood plains or in river corridors.
15 We do say, Don't put solar in floodways which are right
16 next to the streams and rivers, but sometimes in flood
17 plains and river corridors there may be an appropriate
18 place to actually put solar up high enough and it will
19 work there.

20 Overall, our entire energy budget could be
21 met if we put about 2,200 acres of solar in the region,
22 which is one-quarter of 1 percent of the region. So,
23 if you -- we have this little graphic, I think, which
24 shows all the land in the region, all the land that's
25 suitable for solar in the region, and then we have --

1 yes, that one right there.

2 So this, this big gray thing is all the land in
3 the region. This is solar, which we have about 50
4 times the amount of solar that we need in terms of
5 generation, and that little bit there is how much we
6 need. However, 2,200 acres as a percentage is very,
7 very small. That's 22 100-acre solar projects, of
8 course, which, if they land next to you, I'm sure you'd
9 be interested in. Roughly 2,200 acres, roughly
10 five-ish square miles of solar.

11 MR. ALLEN: Kevin, how much of your
12 electricity needs is being produced by that green dot
13 there?

14 MR. GEIGER: All of the target.

15 MR. ALLEN: All of the target? How much is
16 the target relative to your overall, overall
17 electricity consumption?

18 MR. GEIGER: Compared to right now? Or in
19 the future this is, for 2050, this is all of the
20 electricity needed. So this drives all of our cars,
21 heats all of our houses, you know, turns the lights on.

22 MS. HAMILTON: For the entire region?

23 MR. GEIGER: Yes. Now, there are other
24 issues which we mentioned but we don't address that are
25 more complicated around storage, around volatility.

1 Because you can imagine right now solar is not doing
2 anything.

3 MS. HAMILTON: Since we seem to be
4 free-flowing, have you addressed the quagmire of
5 renewable energy credits and how they negatively impact
6 the State's carbon footprint if all sold?

7 MR. GEIGER: No. We, we discussed that a
8 lot, RECs, Renewable Energy Credits, and because
9 there's pricing stuff around it, there's all sorts of
10 stuff around it which we don't get to make policies
11 around. The biggest issue that we looked at there is,
12 when we thought about it and thought, What do we want
13 to do? How can we deal with this, is, yes, there are
14 projects in the region where they sell essentially the,
15 the renewable energy credit outside the region, right?

16 MS. HAMILTON: Which negatively impacts
17 Vermont's overall carbon emissions because it's trading
18 that renewable energy for fossil fuel energy instead.

19 MR. GEIGER: Yes, assuming nobody ever does
20 it back to us, and so we thought we're buying
21 Hydro-Quebec power, we're getting their low-carbon
22 power. So we're selling somebody our low-carbon power.
23 We're buying somebody else's low-carbon power.

24 MS. HAMILTON: But it has a higher carbon
25 footprint than the solar.

1 MR. GEIGER: I don't know. And there's other
2 people's solar out there, and there's other
3 technologies out there. So there's kind of some things
4 going back and forth in the wash, and considering we
5 don't have a line on the grid, we said, Well, bigger
6 people than us have thought about this thing, and
7 they're, the rules right now are you can sell these
8 things --

9 MS. HAMILTON: I think the community --

10 MR. GEIGER: -- and that they expire.

11 MS. HAMILTON: I feel that the community
12 lacks information regarding those, though. So, like,
13 businesses falsely advertise as zero emissions or fully
14 renewable when they actually sell those RECs at the end
15 of the year, meaning they are falsely marketing their
16 selves.

17 MR. GEIGER: Well, I'm not sure if that's
18 falsely marketing. That's your position, but I'm not
19 sure we would actually have that position. Because it
20 may not matter where the RECs are sold. It may matter
21 what's coming out of the pipe when you're making the
22 power. And then, of course, we don't deal at all, and
23 neither does the state plan that much, deal with the
24 carbon content of the electric generation itself.

25 So you imagine you've got a solar panel out there.

1 A certain amount of carbon was made to make the solar
2 panel, and so the solar panel has to work a little
3 while to pay back for itself and to actually get to net
4 zero. We don't get into that. We don't get into grid
5 stability that much, which is going to become an issue
6 as solar becomes more and more, but we mentioned grid
7 stability a little bit out there, and so there are more
8 esoteric kind of fringe pieces of the power structure
9 that we don't talk about that much, and that's, I would
10 say, our own view of everything. So any more
11 questions?

12 MS. WILLHITE: Hi, Beth Willhite. We had a
13 solar company approach us, and they, one of the
14 questions that our commission had was whether or not,
15 if they did build an array at our municipal office
16 area, would they sell the credits, and what we were
17 told by the company is that it was too small of a
18 project, that they weren't allowed to sell unless the
19 array was a certain kilowatt hours or didn't produce a
20 certain wattage.

21 MS. HAMILTON: I believe it's 500 watts.

22 MR. GEIGER: There are certain projects
23 where, if you want to keep the RECs and not sell them,
24 you'll be losing a certain amount of money in terms of
25 generation right now.

1 MS. WILLHITE: Yeah. So this project that we
2 were looking at was a 500-kilowatt array, and it was
3 all going to stay in Vermont and, actually, then was
4 going to provide electricity to, theoretically, our
5 town offices, our school, and some other municipal
6 structures. It's, we're still negotiating it, but I
7 was just wondering if you factored that into your
8 siting. I don't know what that green dot would look
9 like if all of your arrays were at that threshold,
10 right? Does that make sense?

11 MR. GEIGER: I don't think it would affect
12 the siting map, per se, except around the issue of
13 preferred sites, and we don't, at the regional level,
14 we have not mapped any regionally preferred areas, and
15 the main reason power people want preferred is they get
16 more money if they make power in preferred sites than
17 not in preferred sites. We do have power producers
18 coming to us right now seeking preferred status from
19 us, and we pretty much rely on the towns to say, Yes,
20 that's where you want it, and then we run it through a
21 checklist of, you know, not putting it in idiotic
22 places before we talk about preferred.

23 But we don't have any regionally preferred. We
24 also don't have, with very few exceptions, floodways,
25 wilderness areas, a couple other things, unsuitable

1 areas where we've said, No, it's never a good idea to
2 put power.

3 MS. WILLHITE: Do you say anything in your
4 plan about sort of encouraging, if not forcing, array
5 builders to plant pollinating plants around the arrays
6 or any sort of, sort of --

7 MR. GEIGER: Yeah. No, I don't think any of
8 that. We touch very briefly on the potential for some
9 ag. uses within arrays.

10 MS. WILLHITE: Right, right.

11 MS. HAMILTON: What about ag. restoration
12 with the resting of the land with these solar farms?
13 Essentially, like, something that used to be big ag.
14 could be potentially rested through the 20-year process
15 of new life in a solar farm which could essentially be
16 a state-funded program instead of a regionally funded
17 program.

18 MR. GEIGER: Yeah. We don't talk about that.
19 We just very briefly mention that there are ag.
20 possibilities within land use solar arrays and that one
21 of the things that we're trying to do as a region is
22 we're trying to support farmers. Farmers have a lot of
23 land, sometimes marginal land. It's one way for
24 farmers to get some income off the farm, and then they
25 can keep farming and doing the other farming stuff that

1 they would like. And so we do mention that kind of
2 give-and-take.

3 MR. ALLEN: Thank you, Beth.

4 MR. RIKERT: You can do less than the
5 500-kilowatt installation, but you can't go bigger
6 unless you get to the real big ones. And, to my way of
7 thinking, I don't see why that makes sense. If you
8 have a site that can generate more than 500 kilowatt,
9 why is it not sensible if the site is already there and
10 makes sense to maximize it? Because your
11 infrastructure, I mean, you have to have the natural
12 resources come out. You have to check for Indian
13 heads. I mean, the whole process is so staggering,
14 and, when you get a site that gets approved, you have
15 to stop at 500 kilowatts instead of maximizing it.

16 So much of this seems to be practical on one hand
17 and so political on the other. It's unbelievable. And
18 then the site, and then it all boils down to money.
19 Nobody's going to do this unless they make money.
20 So, so either the farmer or the landowner has got to
21 make money and the developers are going to make money,
22 but they're so -- like, the amount of money that is
23 spent on site mitigation, to me, is just ridiculous,
24 and it doesn't amount to anything, but it just makes
25 somebody happy.

1 MR. GEIGER: Yeah. I mean, in terms of, I
2 mean, mitigation in terms of, like, blocking the view
3 of the thing?

4 MR. RIKERT: Theoretically, your plantings,
5 theoretically, they don't block things. They just cost
6 somebody a lot of money for nothing.

7 MR. GEIGER: Well, we address that issue
8 somewhat and not overly, because, if you can't see your
9 project, we don't particularly care. So there are
10 places where you can build a project that nobody would
11 see it from they public point of view. Other than
12 that, we have pretty, I would say, minimal bars on
13 visibility out there.

14 Your other issue about the 500 kW is just not us.
15 Somebody made a break point. Why they made that break
16 point --

17 MR. RIKERT: But that's the point. I think,
18 if it's not you, you're our entity, and if anybody can
19 get through to whoever dreamed up these rules, it would
20 have to be, I would think, you or our representatives,
21 and, I mean, it's easy to say, That's not me. Well,
22 man, that's important.

23 MR. GEIGER: Well, we can carry those
24 messages up. Part of it may be just they had to pick
25 some number for load stability purposes to go at some

1 size. This is going to involve a new transmission line
2 or new transformers or new something. Because I do
3 know some of the 500 kW projects are even hitting grid
4 stability limits and the power company is saying, No,
5 we can't take that load. So that may be some of the
6 reason why they had to have some cutoff and say, This
7 is a big thing versus a little thing.

8 But we can take that project up, and you're right.
9 If there was a project that was big and maybe nobody
10 cared where it was and it wouldn't make the grid into a
11 giant toaster, then, you know, maybe that's a good
12 place to go. The one place where we have, going back
13 to wood, where we have kind of, I would say, gone where
14 the state plan is not going is pushing wood more for
15 thermal right now.

16 MR. ALLEN: Can I just point out, when you're
17 raising your issues that we deal with commonly at the
18 Public Utility Commission level and these are issues
19 that we at the Department of Public Service confront,
20 what I would suggest for right now is we have staff
21 here and talk to Ed. He volunteered to have a
22 conversation with you afterwards and just kind of let
23 you kind of know what the process is, what the
24 boundaries are, where the rules are, and where they can
25 be adjusted, you know, by the Regional Planning

1 Commission plan.

2 MR. GEIGER: Same thing with RECs. You know,
3 we talked about them somewhat, but we don't make the
4 rules about RECs. Anything else?

5 MS. HAMILTON: But would the State make the,
6 not rules, but essentially making clarifications for
7 the public and the companies? Because I know most
8 public boards and, even on a higher level, our
9 representatives are not specialized in these
10 industries. Therefore, you have to make it as lay as
11 possible, or else no one is making an informed decision
12 or informed consent.

13 MR. ALLEN: Ed, can you respond to that at
14 all?

15 MR. MCNAMARA: Sure. So Ed McNamara, I'm
16 Director of Policy and Planning for the Department of
17 Public Service. First, we actually do, we spend a lot
18 of time during legislative session on different
19 committees working with all your representatives on the
20 different issues. With respect to RECs in particular,
21 there's an interesting issue in terms of, when somebody
22 enters into a contract with a service provider, it's a
23 question of, Do we assume that the person entering into
24 the contract with that solar provider needs the
25 education, or is it more of it's a contract between two

1 parties who are working on the energy side?

2 We have, at different times, actually worked,
3 reached out to some of the solar providers and said,
4 We're not so sure about your contracts. You need to
5 clean up the language here. We've talked to the AG's,
6 the Attorney General's, office at different times. Is
7 that where you're getting at in terms of that REC, or
8 are you talking about the overall society issues?

9 MS. HAMILTON: Oh, no, but it's an individual
10 and an industry issue. Like, a private company, so
11 Vermont Law School produces 60-some percent of its own
12 consumption, but they could sell -- they have waived
13 their RECs, but they could alternatively sell them for
14 an increase in value than keeping the RECs themselves,
15 and even the experts don't fully understand the state
16 language or the federal standard because they're --

17 It's almost been intentionally made into a, Oh,
18 well, it's interpretive, but it's literally you produce
19 clean energy and, if it stays within the state, then
20 the state's overall footprint remains clean. If it
21 does not remain in the state, then that is transferred
22 out for a lesser clean energy to come back in terms of
23 monetary value, and making that clarification, I feel
24 like, has yet to be made.

25 MR. ALLEN: I'm not sure exactly what the

1 clarification is. I can explain the REC market and how
2 it works, and, I mean, there's a renewable portfolio
3 standard, renewable energy standard in the state has to
4 be met through those tags, and any claims you make
5 about your renewableness has to be backed by the
6 Renewable Energy Credits that may exist either from the
7 production from your project or through purchases from,
8 from out-of-state resources, but they have to be backed
9 by those, those credits --

10 MS. HAMILTON: Standard.

11 MR. ALLEN: -- by the credits that are used
12 to meet the renewable portfolio standard. So those are
13 certificates on a megawatt denomination basis. So you
14 have to hold a megawatt, a sufficient quantity of those
15 megawatt hour determination or certificates to back up
16 any claims you make about your renewableness, and, if
17 you're a utility provider, you have to have those
18 certificates to back up your obligations that are
19 embedded in statute under a renewable portfolio or a
20 renewable energy standard.

21 But they can be bought and sold, and that, that's
22 a mechanism that is designed to help keep down the
23 costs of renewables so that renewables in one region of
24 New England or the state can be traded with other
25 regions to help reduce the overall costs of meeting

1 those standards.

2 MS. HAMILTON: Financial costs, but not
3 carbon costs. Like, like, so my understanding is that
4 Vermont has decreased its carbon footprint by 15
5 percent, like, renewable usage by, like, 15 percent.
6 However, the number of sold RECs has reversed the
7 intended impact.

8 MR. MCNAMARA: So I think that what we're
9 actually talking about is a couple different things.
10 There's the sort of marketing of, Are you green or not?
11 Did you keep your RECs? Did you retire your RECs?

12 MS. HAMILTON: Exactly.

13 MR. MCNAMARA: And that, if it's, for
14 example, Vermont Law School, that's up to Vermont Law
15 School whether they want to be green or not. If they
16 say they're green and then sell the RECs, then that's
17 potential fraud, and that's a problem, and that's
18 something that the Department of Public Service has
19 pretty limited authority because then that becomes,
20 actually, fraud is an Attorney General issue. So, you
21 know, this is not trying to say, This is somebody
22 else's problem. It's just that there's multiple
23 players that have to be involved.

24 What Riley was talking about more is just the
25 aspect of, for the state as a whole, we have a

1 renewable energy standard, and that's the only
2 requirement we have.

3 MS. HAMILTON: Right.

4 MR. MCNAMARA: Anything beyond that is up to
5 individuals of what we they want to do.

6 MS. HAMILTON: But the individuals from what
7 the people I have come across which are business owners
8 and individuals do not understand the impacts of
9 selling their RECs.

10 MR. ALLEN: I think that's a good issue. I
11 think it's a fair point to make, that there is an
12 education component that, that should somehow accompany
13 that. So we'll take that as --

14 MS. HAMILTON: It's a very small infographic
15 that I think would solve a lot of problems.

16 MR. MCNAMARA: We have tried that in lots of
17 different ways, and we're always looking for new ways
18 to do that.

19 MS. HAMILTON: Thank you.

20 MR. MCNAMARA: It can be a complicated thing,
21 but it's good to know that we're not doing it well so
22 we can try harder.

23 MR. GEIGER: Yeah, it is complicated. That
24 green thing there is our sidebar on Page 30 of our
25 energy implementation plan where we specifically tried

1 to talk about RECs in as cogent a way as we could
2 without making our heads explode. Because it does get
3 complicated quickly.

4 MS. HAMILTON: Thank you.

5 MR. ALLEN: Are there any more questions for
6 Kevin before we turn over to public comments? Okay.
7 Thank you very much, Kevin. That was great.

8 MR. GEIGER: Thank you.

9 MR. ALLEN: Okay. So we're turning the page
10 here, and we now want to hear beyond the questions
11 that, the valued questions that you have, the comments
12 that you have on the, on the plan, and we'll just start
13 at the top. Anne, do you want to start us off since
14 you were here first?

15 MS. HAMILTON: Sure, no, absolutely. I
16 appreciate these types of situations because of the
17 lack of simplified information for the public and the
18 companies. I mean, I've dealt with lots of C-Suites,
19 and the administrative job is to condense the
20 information so they can understand it in five
21 sentences, and I think we put a lot of expectation on
22 the public that is undue and unnecessary and not their
23 role, and, I guess, that's the whole coming into, like,
24 the REC situation. Like, that's really not that hard,
25 I don't believe, to get out there.

1 MR. ALLEN: Yeah, okay, good. Thank you,
2 Anne. So next on the list is Joshua Powers, Town
3 Planning Commissioner from South Royalton.

4 MR. POWERS: I only signed it because I was
5 asked to sign it. I do not have an important speech to
6 make. I might ask, if people are paying attention to
7 the end of the 20-year cycle where we're supposed to
8 remove the, the existing thing, and who pays for that?
9 Having been on the end of Act 250 commission, the bond
10 required would be most sensible if you were releasing
11 your land to somebody else to run it.

12 MR. MCNAMARA: Yeah. So, real quick response
13 to that. Anything over 1 megawatt, which is about 7
14 acres or so, 1 megawatt for solar, any, any renewable
15 project that's not built by a utility, you know, it's
16 one of these somebody coming just to build something
17 over 1 megawatt, they have to provide a decommissioning
18 fund. So they have to give basically a letter of
19 credit up front that we can ensure that, once the
20 project's done, we have enough money, even if they
21 don't take the responsibility to decommission it, that
22 it can get decommissioned. That's only 1 megawatt and
23 above.

24 Then, certainly, net metering in which case you've
25 got usually rooftop or some of the smaller fields or,

1 if it's utility, the Department of Public Service and
2 the Public Utility Commission have enough of a hook to
3 make sure that projects stay in that.

4 MR. POWERS: At this point. But 20 years
5 from now, who knows?

6 MR. MCNAMARA: Letters of credit are supposed
7 to be for the full 20-year projects. But you're right.
8 Things can change over 20 years.

9 MR. POWERS: They have lawyers.

10 MR. MCNAMARA: They do. A lot of them came
11 out of here like me.

12 MR. POWERS: All too much true.

13 MR. ALLEN: Okay, thank you, Joshua. I don't
14 know if anybody else has comments.

15 MR. RIKERT: As I understand it, the State
16 mandates how these solar panels themselves are taxed by
17 the town, but it's up to the individual towns to tax
18 the land under the solar panels, and that seems to be
19 up to the discretion of the local listers. Some don't
20 tax it very much. Others nail it for every nickel it's
21 worth. And I just wonder if any thought is given to,
22 in this plan, about how the underlying land should be
23 taxed.

24 MR. GEIGER: Nothing is in ours, and we have
25 no control over listers. Even select board has no

1 control over listers. Listers are their own statutory
2 creature in Vermont, and they can do what they want to
3 do, largely.

4 MR. RIKERT: What I'm suggesting is that --

5 MR. GEIGER: It would take a statutory fix.

6 MR. RIKERT: Again, somebody's got to make
7 money. So, if the listers significantly raise the
8 value of the underlying ground, it's either going to
9 have to come out of the solar developer's pocketbook or
10 the person who's renting the land, which, either way,
11 might be counterproductive to the goal of trying to get
12 as many of these installations in as we can. Because
13 it's significant. Over a 20-year thing on 8 acres is
14 \$60,000.

15 MR. MCNAMARA: Yeah. As Kevin said, that's,
16 at the moment, this isn't a statute. You have these
17 two different things, but definitely an issue we'll
18 take back.

19 MR. GEIGER: We did have some questions, and
20 I forget what the answer was, but there was a question
21 around current use and staying in current use and
22 putting solar on the land and --

23 MR. RIKERT: That was turned down. You can't
24 keep it in land use and have solar on it, even though,
25 technically, you can graze sheep on it, but --

1 MR. GEIGER: I think there's a kW limit,
2 again, on that where, below a certain kW limit, you
3 can, and above you can't.

4 MR. DAMIANI: I thought it was, if you used
5 less than -- if you kept, whatever, kept the majority
6 of the power on your farm, then you would have to take
7 it out of current use.

8 MR. GEIGER: Yeah, that's the case, yeah. So
9 there are some farms, we have some farms in the region
10 that could probably use even a 500 kW system and pull
11 the power.

12 MS. HAMILTON: Sorry. One more. Is the
13 State or the Regional Planning Commission doing any
14 research into the current wiring systems and their heat
15 waste versus is there a need for infrastructure?
16 Because energy capacity is lost as it transmits. So
17 has that been addressed in your regional plan?

18 MR. GEIGER: So you mean the transmission
19 system?

20 MS. HAMILTON: The infrastructure.

21 MR. GEIGER: I don't think we addressed that
22 at all. I mean, somewhat about decentralization to be
23 pushing power less distance.

24 MS. HAMILTON: So are you guys focusing on
25 microgrids?

1 MR. GEIGER: No. I mean, just from Canada to
2 here is a long ways compared to Newbury to here.

3 MS. HAMILTON: Right, but these new projects
4 need, like, a known transmission area and what
5 potential loss there would be in the transmission of
6 that versus keeping it in the community.

7 MR. GEIGER: Yeah. There is nothing. We
8 don't, I know we don't speak to whether, for example,
9 you know, a project in Royalton that serves Royalton is
10 better than a project in Newbury that serves Royalton.

11 MS. HAMILTON: There's a loss. I mean,
12 there's a physical physics loss if you get it from 20
13 miles away versus right here. Therefore, if the plan
14 is to create all these facilities that are going to
15 export, like, that is more loss than there is gain. So
16 has there been a focus on what the state or the region
17 can do to keep that in the locale versus exporting and
18 the RECs?

19 MR. GEIGER: Not -- well, I would say at the
20 regional level, no. The only thing being at the town
21 level for the town, the idea is each town has a target
22 just like the region has a target, and so there is a
23 theoretical generation that the town should meet, and
24 right now it isn't, Oh, we're going to just use all of
25 that town's power over in our town. It's town by town

1 by town. And so I guess that would lead to less
2 transmission loss, theoretically, because you're making
3 your own power.

4 MS. HAMILTON: Right.

5 MR. GEIGER: And we've worked with four
6 towns, and we're going to work with another four towns,
7 and but we have given every town their target given the
8 model.

9 MR. RIKERT: One other question. Is the
10 town's target, does that take into consideration
11 previous installations, or is it only from here on in?
12 So, if a town, as an example, like Sharon that's got 12
13 acres sitting down there, they don't get any credit for
14 it at all because they were first?

15 MR. DAMIANI: The date, I think, was
16 September 30, 2015. So I think everything that was
17 built before that was counted, not fully. It was still
18 counted because, the regional target that we got from
19 the statewide target, we then subtracted the number of
20 current renewables that were built before that
21 September 30th date. So it did get counted, just not,
22 I guess, fully to each individual town.

23 MR. GEIGER: Yeah. It's not the, the town.
24 The overall target is being met, but that doesn't go to
25 the town. Hartford, for example, they count 46

1 megawatts of hydro in Hartford. Much more power than
2 Hartford needs. So Hartford doesn't -- their target is
3 still a bunch of power they can't go.

4 With the wind towers, we don't have commercial
5 wind in the region, but with wind towers there's just
6 way more power than those towns could use. And that's
7 just one of those things we asked the question, and
8 that's the answer we got.

9 MR. ALLEN: Okay. Are there any more
10 comments or questions for either us or for Kevin?
11 Okay. I'll just point out that we do have contact
12 information for us if you want to follow up with any
13 questions or you want to send us emails or other
14 information with questions or comments. And, with
15 that, I'll just conclude the event, and thank you very
16 much for your comments and questions.

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22 (Whereupon at 7:53 p.m. the hearing was adjourned.)
23
24
25

C E R T I F I C A T E

1
2 I, Sunnie Donath, RPR, do hereby certify that
3 I recorded by stenographic means the Public Hearing Re:
4 The Two Rivers-Ottauquechee Regional Commission's
5 request for a determination of energy compliance
6 pursuant to 24 V.S.A. Section 4352, at the Vermont Law
7 School Chase Center, 164 Chelsea Street, South
8 Royalton, Vermont, on September 5, 2017 beginning at
9 7:00 p.m.

10 I further certify that the foregoing testimony was
11 taken by me stenographically and thereafter reduced to
12 typewriting and the foregoing 37 pages are a transcript
13 of the stenographic notes taken by me of the evidence
14 and the proceedings to the best of my ability.

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

18 Dated at Westminster, Vermont, this 10th day of
19 September, 2017.

20
21 // Sunnie Donath
22
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