

1 STATE OF VERMONT
2 DEPARTMENT OF PUBLIC SERVICE

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

6
7 September 29, 2020
8 7:00 p.m.
9 -----

10 Public hearing held before the Vermont
11 Department of Public Service via video conference on
12 September 29, 2020, beginning at 7:00 p.m.

13 P R E S E N T

14 Deputy Commissioner: Riley Allen

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16 Program Analyst
17 Anne Margolis, Deputy Director
18 Alex Wing, Special Counsel

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1 MR. ALLEN: Okay. So, just so everyone
2 that's attending knows where they are, this is a public
3 hearing regarding the Two Rivers-Ottawaquechee Regional
4 Planning Commission's request for a determination of
5 energy compliance pursuant to Title 24 of the Vermont
6 Statutes, Section 4352. My name is Riley Allen. I am
7 Deputy Commissioner of the Department of Public
8 Service. With me from the Department is Claire
9 McIlvennie, Alex Wing, and Anne Margolis. Claire is an
10 Energy Policy & Program Analyst, Alex is an attorney in
11 our Public Advocacy Division, and Anne Margolis is the
12 Deputy Director of the Regulated Utility Planning
13 Commission.

14 Typically, we hold these hearings live in the
15 venue that is relevant to these determinations, but, in
16 consideration of current circumstance related to
17 COVID-19, we're going to hold this over a virtual
18 platform. We're getting more familiar with these
19 platforms, but please bear with us. If there are any
20 technical difficulties, we have a couple of people on
21 hand to try to set us straight if there are any
22 problems. We welcome any feedback at the end of the
23 evening if you find that there are things that we could
24 improve in this process.

25 So, as Claire had indicated getting started -- or

1 I'm sorry. I forgot to mention that we have a few
2 people from the Two Rivers-Ottawaquechee Regional
3 Planning Commission that are here. I'll just mention
4 their names. There's Geoff Martin; there's Kevin
5 Geiger, who is a senior planner; and then Victoria
6 Littlefield, who goes by Tory, and she's going to be
7 giving the presentation, so she can say more about
8 herself when she's on.

9 So, as Claire had mentioned, put yourself on mute
10 just to reduce the background noise, and, if you're
11 calling in, you can speak by pressing the Star 6, and
12 that will open up your mic and allow you to provide
13 comment during the session. We do have some people
14 that are joining -- we expect some people that are
15 joining by audio, but I don't actually see anybody yet
16 in the room.

17 So I want to go into a little bit of the context
18 for this proceeding before we hand off the microphone
19 to Tory and the Two Rivers-Ottawaquechee Planning
20 Commission. Act 174 created a new planning, energy
21 planning process in Vermont for regional planning
22 commissions. Pursuant to this process, a regional
23 planning commission has the option of submitting its
24 duly adopted plan to the Commissioner of the Department
25 of Public Service for an affirmative determination of

1 compliance with the statutory standards that I referred
2 to earlier in Title 24.

3 When a regional planning commission has received
4 an affirmative compliance determination under that
5 section, the Public Utility Commission is required to
6 afford substantial deference in Section 248 proceedings
7 to the land conservation measures and specific policies
8 contained in such a plan when reviewing any proposed
9 electric generation facility in the region that is
10 covered by the plan.

11 In 2017 the Two Rivers-Ottawaquechee Regional
12 Planning Commission submitted a request and received an
13 affirmative compliance determination. Since then, they
14 have adopted a new regional plan and recently submitted
15 this plan for an affirmative determination of
16 compliance with the statutory standards of the section
17 that I've referred to.

18 The purpose of this hearing is to gather input
19 from the public and from you regarding the current
20 request for a determination from the Department of
21 Public Service and that the plan complies with the
22 energy planning requirements set forth in Title 24,
23 Section 4352. If the Department finds the plan
24 complies, the land conservation measures and specific
25 policies contained in the plan will receive substantial

1 deference during any Public Utility Commission siting
2 review of any proposed electric generation facility
3 within the service area.

4 So, as I mentioned earlier, we have Tory
5 Littlefield. Tory's a regional planner. She expects
6 to be on for about 15 to 20 minutes. She'll be
7 providing an overview. I think Kevin Geiger's here,
8 and he will probably help with responses to, to
9 questions. If you could, we're asking you to hold
10 questions until the end. You're also encouraged to
11 provide written comments to the Department of Public
12 Service via -- there's an email address here. We'll,
13 we'll list that at the end, but that is
14 psdplanning.standards@vermont.gov, but, again, you
15 don't have to rush to write that down right now.

16 Comments are due by October 13th. And let's see.
17 As Claire mentioned, tonight's hearing is being
18 transcribed. So, please, if you do provide comments,
19 please spell your name before providing the comments.
20 So, with that, I think I'll hand it over to Tory.

21 MS. McILVENNIE: I'll stop sharing, Tory, so
22 you can put your slides up.

23 MS. LITTLEFIELD: Great. Okay. Do you see
24 my PowerPoint?

25 MS. McILVENNIE: Yes. Looks good.

1 MS. LITTLEFIELD: All right. Awesome. So,
2 once again, I'm Tory Littlefield. I'm a regional
3 planner with the Two Rivers-Ottawaquechee Regional
4 Commission. This presentation is going over a little
5 bit of the history of the energy planning and Act 174
6 and how it applies to our regional plan. So, just for
7 a geographic reference on Slide 2 here, this is our
8 region. We encompass 30 towns in East Central Vermont.
9 Our office is based out of Woodstock.

10 So reasoning for why we are seeking this
11 determination. So we originally received a
12 determination for energy compliance in 2017 when we
13 adopted our regional plan then. We were actually one
14 of the first three regional planning commissions in the
15 state to get a determination of energy compliance, but,
16 since then, we've had to do a complete overhaul of a
17 majority of the other sections of our regional plan,
18 which we've worked over the past three years, and part
19 of this was incorporating our previously separate
20 energy implementation plan, which was adopted by
21 reference in 2017, into this 2020 regional plan so it's
22 one document right now to make it a little easier to
23 read.

24 And, because we readopted our regional plan -- it
25 was adopted on July 15th 2020 -- we are required to

1 seek the determination again.

2 A little bit of history of energy planning in
3 Vermont. So it was driven primarily by a desire to
4 reduce greenhouse gases. Vermont established a
5 Comprehensive Energy Plan in 2011, which was updated
6 again in 2016, and the plan included some very lofty
7 goals.

8 Three of them are, one, to reduce total energy
9 consumption per capita by 15 percent by the year 2025
10 and then by one-third, or 33 percent, by 2050. The
11 second one is to meet 25 percent of remaining energy
12 need from renewables by the year 2025, 40 percent by
13 2035, and 90 percent by 2050. Renewable end-use sector
14 goals for 2025 are 10 percent of all transportation
15 must be renewable, 30 percent of buildings must be
16 renewable, and 67 percent of electric power must come
17 from renewable resources by the year 2025.

18 So integrating energy and planning, Energy
19 Generation Siting Policy Commission established in 2013
20 and the Solar Siting Task Force in 2015 called for
21 energy planning to be integrated with land use
22 planning. Many of the components of municipal and
23 regional planning are intertwined with energy issues,
24 such as transportation, housing, natural resources,
25 land use, and economic development.

1 And then a short summary of Act 174. So Act 174
2 and 24 V.S.A. 4352 establishes a set of municipal and
3 regional energy planning standards, and enhanced energy
4 planning, which is what the process is called, by
5 incorporating the energy planning standards into your
6 plan is, is a completely volunteer process, and
7 participation is not required.

8 Plans in communities and regions, if they do call
9 for enhanced energy planning, the opt-in will be
10 reviewed using the standards developed as part of Act
11 174. Those communities and regions as that meet the
12 standards will receive a determination of energy
13 compliance. The municipal plans of communities and
14 regional plans of RPCs with a determination of energy
15 compliance will receive what's called substantial
16 deference, which is under Section 248.

17 So a couple of definitions. So "due
18 consideration" is a term that is not defined by
19 statute. Case law indicates that the Public Utility
20 Commission need only give due consideration to the
21 recommendations of the municipal and regional planning
22 commissions in deciding if the project will not unduly
23 interfere with the orderly development of the region.

24 And this is, also, that means, without a
25 determination of energy compliance, your plan is

1 considered due consideration, and, with a determination
2 of energy compliance, you gain what is called
3 substantial deference, which is defined in statute as,
4 "That a land conservation measure or specific policy
5 shall be applied in accordance with its terms unless
6 there is a clear and convincing demonstration that
7 other factors affecting the general good of the State
8 outweigh the application of the measure or policy".

9 So I refer to a project, because we were part of
10 one of three regional planning commissions in 2017 that
11 was part of a project to kind of incorporate the
12 standards into regional plans before the other regional
13 planning commissions did the same. So modeling for
14 this project was done by the Vermont Energy Investment
15 Corp, or VEIC. Their model was informed by the 2013
16 Total Energy Study, which proposed three possible
17 models for reaching the 90 percent renewable by 2050
18 target: business as usual, the carbon tax shift, or
19 the Total Renewable and Energy Efficiency Standards, or
20 TREES, for short, and VEIC decided that the TREES
21 scenario was the best one for this project.

22 So data and assumptions. Historic information was
23 primarily drawn from the Public Service Department's
24 Utility Facts 2013 and an Energy Information
25 Administration, EIA, data. Projections came from the

1 Total Energy Study, the utilities' Committed Supply,
2 and stakeholder input. Assumptions include that the
3 population is assumed to grow at 0.35 percent per year
4 and people per house are assumed to decrease from 2.4
5 in 2010 to 2.17 people in 2050.

6 More assumptions, the commercial demand driver was
7 area of commercial buildings. Commercial building data
8 and projections were extracted from inputs in the TES.
9 Industrial energy use was entered as the actual totals
10 for each energy type, without a driver specified in the
11 model. Transportation energy use is based on
12 projections of vehicle miles traveled, or VMT. VMT
13 peaked in 2006 and has since declined slightly. VMT is
14 assumed in the model to remain flat, while population
15 and economic activity grow slightly. And, finally,
16 there will be reductions in energy use due to changes
17 in technology, including building shell and device
18 efficiency improvements.

19 So model results. So, based on the LEAP model
20 provided for the Two Rivers Region, we will go from
21 consuming 10.874 million million BTUs of energy to
22 6.537 million million BTUs, which is nearly a 40
23 percent decrease in total energy consumption by 2050.
24 The use of fossil fuels will dramatically decrease
25 while use of electricity and renewable energy sources

1 will increase. The overall increase in electricity use
2 will be primarily due to the utilization of electric
3 vehicles and heat pumps.

4 How do we achieve these goals? So the Two Rivers
5 Regional Plan focuses on the following as part of this
6 pathway to implementing the goals. So, thermal,
7 improving building stock, changing and improving
8 heating systems and fuels; transportation, by reducing
9 the amount of driving and transforming the vehicle
10 fleet; and, electricity, continuing efforts at
11 conservation and opportunities for new generation in
12 the region.

13 So the LEAP model provided Two Rivers with targets
14 for renewable energy generation capacity. These
15 targets represent new renewable capacity after the year
16 2015 if the path developed through the LEAP model is
17 chosen, and we did decide to go with the LEAP model.
18 So, as you can see in the graph here, by the year 2050
19 we're modeling that 139 new solar megawatts is going to
20 be developed in the Two Rivers region.

21 So identifying renewable potential. So we must
22 identify all resource potentials, no matter the current
23 status at the political level. As you know, wind has
24 kind of taken a step back, but we still must identify
25 the potentials for wind and still plan for it as the

1 political climate changes.

2 So, solar, we look at the topography of land based
3 on slope and the direction conducted in GIS for
4 ground-mounted solar, and direction means south-facing.
5 For wind that is digitally modeled wind speed based on
6 topography analyzed at three hub heights or three
7 heights of wind turbines. Hydro, existing dams are
8 analyzed for potential capacity based on the community
9 hydro report. No new dams were considered. And
10 biomass or wood, land coverage was used to determine
11 the amount of harvestable wood throughout the region.

12 There are constraints with this mapping exercise.
13 There's Level 1 constraints and Level 2 constraints.
14 So Level 1 constraints are conditions which would
15 likely make development unfeasible. So these were
16 removed entirely from the maps. That would include
17 floodways and river corridors, federal wilderness
18 areas, rare and irreplaceable natural areas, vernal
19 pools, and Class 1 and 2 wetlands.

20 And then Level 2 constraints are conditions which
21 could impact development but which would not
22 necessarily prevent it. These are shown on maps in
23 color where they overlap, and these areas include
24 agricultural soils, which are all ag-rated soils,
25 habitat blocks, hydric soils, conserved lands, special

1 flood hazard areas, deer-wintering areas, and Class 3
2 wetlands.

3 So this is just an example of the mapping for
4 solar. So the map on the left of your screen are
5 potential areas where solar could be developed that
6 show Level 2 constraints in there. So, as you're
7 looking at the orange block, there could potentially be
8 things like Class 3 wetlands or habitat blocks in
9 there, but we always say it always takes a site visit
10 to really determine what's on the property and if that
11 project is feasible to develop.

12 And then you can remove these constraints. As you
13 can see on the right, these are prime potential areas
14 for solar development, which means there are no
15 identified constraints through the mapping exercise in
16 this area. So, as you can see from the comparison,
17 there are a lot of differences between the two. There
18 are a lot of Level 2 constraints in the mapping and not
19 as much prime location without supposed constraints due
20 to the mapping exercise. And then, as communities do
21 use these maps, which we do automatically generate for
22 all of our 30 towns, they can move and add constraints
23 as they want.

24 Regional action, so this is just an example of
25 many of our action items in our regional plan. So

1 we've focused on things like providing outreach and
2 education, encouraging continued development of state
3 policy that will help reach the targets, modifying the
4 regional plan as the data changes, supporting existing
5 initiatives through outreach or policy, work with
6 stakeholders and municipalities to communicate with
7 those who need energy-related services, participating
8 in Act 250 and Section 248 proceedings, and helping
9 communities draft strong energy plans.

10 What will we do with the plan? First, it will
11 serve as a guide for the regional commission as we move
12 forward toward the State's energy goals, and, once we
13 receive a determination of energy compliance, the Two
14 Rivers board will be able to grant the same status to
15 town plans that meet the standards. It will serve as a
16 tool and a starting point for municipalities drafting
17 their own energy plans, and the regional plan also
18 serves as a tool in Section 248 proceedings and in Act
19 250 applications.

20 What will we do with the maps? So it is a tool
21 for municipalities. The primary purpose of the maps in
22 this plan are to provide communities with a tool that
23 will help them identify potential areas for the siting
24 of renewable energy resources, and it also serves as a
25 component of enhanced energy planning. Under Act 174,

1 if a regional commission seeks a determination of
2 energy compliance for the regional plan, the plan will
3 need to include the identification of potential areas
4 for the development and siting of renewable energy
5 resources and areas that are unsuitable for siting of
6 those resources or particular categories or sizes of
7 those resources. So we have five maps. We have a map
8 that shows existing energy generation in the region, a
9 map that shows biomass, hydro, solar, and wind energy
10 potential.

11 And then components added by Act 174 in 2016 to
12 the energy chapter for regional plans. So, for your
13 reference, it's in Section 5 of Title 24. V.S.A.
14 Section 4348a(a)(3) was amended to read the following:
15 "An energy element, which may include an analysis of
16 resources, needs, scarcities, costs, and problems
17 within the region, across all energy sectors, including
18 electric, thermal, and transportation; a statement of
19 policy on the conservation and efficient use of energy
20 and the development and siting of renewable energy
21 resources, a statement of policy on patterns and
22 density of land use likely to result in conservation of
23 energy; and an identification of potential areas for
24 the development and siting of renewable energy
25 resources and areas that are unsuitable for siting

1 those resources or particular categories or sizes of
2 those resources". And communities seeking enhanced
3 energy planning certification, such as what we're doing
4 tonight, are subject to these same requirements.

5 And consistency with state goals. So plans must
6 be consistent with Vermont's greenhouse gas reduction
7 goals under 10 V.S.A. Section 578(a), Vermont's 25 by
8 25 goal for renewable energy under 10 V.S.A. Section
9 580, Vermont's building efficiency goals under 10
10 V.S.A. 581, state energy policy under 30 V.S.A. Section
11 202a, and the recommendations for regional and
12 municipal energy planning pertaining to the efficient
13 use of energy and the siting and development of
14 renewable energy resources contained in the state
15 energy plans adopted pursuant to 30 V.S.A. Section 202
16 and 202b and the distributed renewable generation and
17 energy transformation categories of resources to meet
18 the requirements of the Renewable Energy Standard under
19 30 V.S.A. Sections 8004 and 8005. And, finally, meet
20 the standards for issuing a determination of energy
21 compliance included in the State energy plans.

22 And that actually is my last slide. So I guess
23 we'll take it up for questions.

24 MR. ALLEN: So we'll open it up for
25 questions. I think the plan is to recognize that we

1 have different platforms here. So those that would
2 like to essentially ask a question verbally, if they
3 could just kind of put themselves in the queue by
4 raising your hand, and Claire McIlvennie will just kind
5 of take down names, if there are more than one. I'm
6 not aware of anyone calling in, so I'm not sure that
7 that's an issue, but, if, if you do want to say
8 something and you're on the line, then please hit Star
9 6 and give us your name. And you can also use the chat
10 function if you'd like. So I'll just pause for a
11 moment. I have a couple questions, but I want to give
12 others a chance to ask questions first.

13 (Brief pause.)

14 MS. McILVENNIE: Brooke, go ahead and ask
15 your question.

16 MR. ALLEN: So, Brooke, can you unmute
17 yourself?

18 MS. DINGLEDINE: Thank you. Can you hear me
19 all right?

20 MR. ALLEN: Yes.

21 MS. DINGLEDINE: My name is Brooke
22 Dingledine. I live in Randolph, and I happen to be a
23 land use attorney. I've been practicing in Vermont for
24 25 years. And I don't know. Is this the right time to
25 make a comment, or is this only the opportunity for

1 questions about the presentation?

2 MR. ALLEN: I think we're fine. We're fairly
3 flexible here, and it's, it's not a lot of competition,
4 I don't think, for other questions. So go ahead and
5 provide comment.

6 MS. DINGLELINE: Sure. My comment really
7 goes to my experience with the Public Utility
8 Commission and also prior many, many years of Act 250
9 involvement in litigation. And what I am interested in
10 is this is the certification of the regional plan to
11 utilize in those two arenas or, really, in the Public
12 Utility Commission for the enhanced substantial
13 deference standard, but as, but, as I read through the,
14 the plan -- sorry if you hear my dog in the background
15 -- I don't see any language that would be interpreted,
16 at least from the Supreme Court precedent that I'm
17 familiar with, the mandatory protection types of
18 language, "shall", that would in any way be interpreted
19 to be a conservation measure that is designed to
20 protect anything.

21 And so I'm really curious as to -- I understand
22 that we're doing certification in the plan, but what
23 exactly is in the plan other than -- I understand the
24 constraints and how that kind of disqualifies you for
25 preferred status and that kind of thing, but I see no

1 protections whatsoever that say, you know, we don't
2 want ridgelines, protect, or we want to protect
3 ridgelines here.

4 Because, basically, while I understand the
5 approaches to leave most of this planning to the
6 municipalities, and in Vermont that's a very strong
7 tradition, the specific concern that I have has to do
8 with wind. Because, as we have learned the hard way,
9 municipalities really aren't in control of the impacts
10 regionally to wind power.

11 And so my concern is the way that -- and this is
12 more of a philosophical conversation, and it may have
13 nothing to do with which boxes that the PUC checks to
14 certify this plan, but I had to raise it, because is
15 this really sort of an absurdity that we're certifying
16 a plan that really, in fact, doesn't have any role to
17 play if you give it substantial deference, because
18 there's no language that one can rely on and point to?

19 MR. ALLEN: Okay. So I'll, we'll take that
20 as a comment. I'll open that up to the representatives
21 of the regional planning commission if they would like
22 to provide a comment.

23 MR. GEIGER: Sure, sure. This is Kevin
24 Geiger. I'm the senior planner at Two
25 Rivers-Ottawaquechee Regional Commission. Can you hear

1 me, Riley?

2 MR. ALLEN: Yes, I can.

3 MR. GEIGER: Okay, great. I would just, two
4 things. First off, I don't know if Tory mentioned it ,
5 but, just for the record and for the recording and all,
6 our regional plan is available at TRORC.org under the
7 library. You can look at the regional plan there, and
8 you can find individual chapters and the maps down
9 lower on our website.

10 And so, right now, I'm looking at the plan, and,
11 in particular, I'm looking at Page 245 of the plan, and
12 in terms of something that is a mandatory clear
13 standard, Policy 3, which says, "The following
14 locations shall be considered regionally unsuitable for
15 renewable energy generation facilities", and then we
16 have a list, floodways, and we, we use floodways have a
17 couple different definitions, and we use floodways as
18 shown on the FEMA floodway insurance maps. Class 1
19 wetlands is identified by the State, wilderness areas,
20 including national wilderness areas, and we say, "And
21 any unsuitable areas as identified in a duly adopted
22 municipal plan that has received energy compliance from
23 us".

24 So, if a town were to say, Don't go there, in a
25 mandatory and specific way, that also becomes a

1 regional policy, Don't go there. So those, those are a
2 couple of specific policies. We have some other stuff,
3 but I did want to point that particular one out.

4 MR. ALLEN: Thank you. Okay. Did we have
5 anything else from you, Brooke?

6 MS. DINGLELINE: So and I did read that, and,
7 and my question really, though, is, Is that then
8 interpreted as to say it's an unsuitable area is sort
9 of guidance, but it certainly, it certainly could be
10 argued that it is not a mandatory standard or any
11 protection. Again, though, in the future, just in
12 terms of that notion of regional impacts to, for
13 example, really the wind energy ridgeline issue,
14 leaving that to municipalities who will benefit from
15 having, hosting one of those projects versus then the
16 surrounding municipalities who have no voice or power,
17 it really is a regional issue that really can only be
18 reached by the regional plan. So that was my only
19 other comment.

20 MR. ALLEN: Okay.

21 MS. DINGLELINE: And thank you folks for
22 doing -- you folks do excellent work. It's not a
23 criticism. It's more a philosophical approach to try
24 to help municipalities and neighbors and developers
25 figure out how to find predictability and consistency

1 with regional and town plans. So I really thank you
2 all for your hard work on this. I know it's arduous
3 and difficult work. So thank you.

4 MR. ALLEN: Okay. I'm going to take that
5 compliment as being directed at Tory and Kevin. Thank
6 you, Brooke. Any other comments or questions? Anyone
7 on the phone? So I did have one question, Kevin, and
8 I, I don't know if it's for you or for Tory, but, I
9 mean, just, can you help me to understand how much of
10 your energy needs you think kind of over time you can
11 actually meet locally?

12 MR. GEIGER: Sure, I can take that a little
13 bit. The, the whole construct of the state
14 comprehensive energy plan basically assumes that we're
15 electrifying energy. So, just for the kind of --
16 Brooke's the only public person here, but, just for the
17 recording and all, a lot of people don't think of --
18 they think of electricity as energy. They don't think
19 of gasoline as energy or wood thrown in the stove as
20 energy or, you know, sunlight or all those things, but
21 all those things are energy, and the idea is that,
22 right now, we have a bunch of renewables going into the
23 electric grid. If you're in the Washington Electric
24 Co-op area, which is part of our region, you're 100
25 percent renewable, and, if you're Green Mountain Power,

1 you're 70 percent or something and getting up there
2 pretty fast.

3 The transportation side, of course, is a very
4 teeny little bit renewable based on electricity, and
5 the idea there is that we move those cars to pretty
6 much all become electric vehicles and we move the
7 trucks to sustainable biodiesel.

8 On the thermal side, the idea is we remove the
9 houses that are heated with propane and oil and natural
10 gas and we start heating them with electric heat pumps
11 and that we burn a certain amount of wood, although
12 probably the amount of wood stays roughly flat as we
13 better insulate the houses so we're not just venting
14 our heat outside out there.

15 So, to me, I would say, when we look at that
16 picture and then we look at the total amount of
17 electricity needed, which really is a decrease in the
18 total energy compared to now, but it's a lot more
19 electricity. I would say our plan has plenty of room,
20 assuming it all goes out in solar. And so the solar
21 maps are kind of -- I say they're agnostic. They don't
22 say, Put solar here, put solar here. They say, Here's
23 where solar could go, and here are some areas where
24 you'd have more problems than others, and here's where
25 it's south-facing, and here's where the prime

1 utilities.

2 One of the things we did not do, while we do
3 understand is a constraint is, right now, the grid is
4 somewhat limited as to the amount of solar it can take
5 if someone were to build a large facility, but there is
6 many multiples of available land that is not
7 constrained by our plan that you could put solar on.
8 It roughly comes down to about 3 percent of the region,
9 if we were to put solar on, we would satisfy all the
10 planned electrical demand out there. So we think it's
11 plenty doable. Will it actually get done is a
12 different question, but, certainly, we're in favor of
13 moving forward as quickly as we can on that.

14 MR. ALLEN: And just a point of
15 clarification. That 3 percent corresponds to
16 essentially the increment of load that would be used to
17 drive the electrification of transportation and
18 buildings, but not necessarily the, essentially, the
19 shares that are, you alluded to from Green Mountain
20 Power and WEC that are already renewable, or is it the
21 whole thing?

22 MR. GEIGER: That 3 percent is a land surface
23 area. So 3 percent of the land in the region would
24 satisfy all of the projected electrical demand to meet
25 transportation and thermal. Because, really, we're

1 already meeting pretty much the electrical demand.
2 And, again, all of that stuff is driven by the models,
3 assuming the models are correct.

4 MR. ALLEN: And, in terms of the
5 electrification, this, I just, I wanted to probe a
6 little bit on kind of how you how you get there. Is it
7 -- I mean, it sounds like education and relatively soft
8 avenues, probably leveraging state initiatives, state
9 and federal initiatives on those two fronts. Do I have
10 that right, or is there something else in the plan?

11 MR. GEIGER: Well, one of the things that's
12 actually taking place right now, the regional plan did
13 put in a recommendation that we work to get a regional
14 energy coordinator in place, and so we do have such a
15 person now, Geoff, who may be virtually here with us.
16 He was working for the Town of Hartford, and now he is
17 working for six towns in the region. We would love to
18 continue to duplicate that, but that is literally
19 working with those towns to get them to physically do
20 stuff from their vehicle fleets to their municipal
21 buildings to their energy policy and their purchasing
22 policies and that type of stuff.

23 We work with, directly with energy committees on
24 towns and their town plans to help this along, and then
25 both in other chapters besides the energy chapter of

1 the regional plan as well as our work on town plans and
2 zoning, there's a lot of stuff about, basically, don't
3 build way out there; build in close. Because a lot of
4 way out there right now is reflected in transportation
5 energy use, and so the more you can not drive from A to
6 B, the more you can save on total energy use.

7 We have a pretty strong proposal on broadband as
8 well, and, as we're seeing right now, none of us had to
9 drive anywhere tonight. We're still using some energy,
10 but a lot less to get this thing done. And I would say
11 that, Tory, are there energy things? I know Geoff is
12 also working with the what we call the SEMP, which is
13 the State Energy Management -- I forget exactly what it
14 stands for, but it is a program, very good, and they
15 are, they are basically the state folks within the
16 buildings and general services that, that works with
17 the State, getting more things done, and so we will be
18 partnering with them to utilize their expertise.

19 So, if a town is going to build a new building, I
20 think Geoff is working, for example, with Woodstock on
21 their new emergency services building. So those new
22 buildings going out that are under town control will be
23 as energy efficient as they can be, hopefully going
24 towards net zero.

25 MR. ALLEN: Great. And is there -- I mean,

1 just listening to the comments about, you know, solar
2 and whatnot, it strikes me that there is potentially
3 need for kind of improvements to the infrastructure or
4 perhaps ways to kind of leverage existing
5 infrastructure through load management and the like.
6 Is there any, any focus on either of those two topics?

7 MR. GEIGER: I don't think in the plan that
8 we have specifically talked about that. I do know in,
9 just in our general work in talking with Green Mountain
10 Power or talking with Washington Electric, we support
11 the idea of grid-level storage and microgridding and
12 their works to, like, reconnect to grids so that, you
13 know, great connectivity can move power around for a
14 variety of reasons, in outages as well as making the
15 grid more able to take load.

16 MR. ALLEN: Is there any discussion of public
17 charging stations for electric vehicles to help address
18 the range anxiety issues?

19 MR. GEIGER: Yes. I can't say exactly where
20 that is, but --

21 MR. ALLEN: That's okay. It's in there?

22 MR. GEIGER: Yes. On, on vehicles there's
23 many things on vehicles. One is we've been a strong
24 proponent and have worked a lot to build and increase
25 park-and-ride lots out there. So, even if they're gas,

1 there's less gas being used out there and about. We're
2 also working with our transit providers, and then we
3 actually do have -- oh, and I was able to find it.

4 So now I'm on Page 233 of the regional plan, and
5 this says, this is Policy 3. No, Policy -- hang on.
6 Policy 8, and that says, "The development subject to
7 Act 250 should demonstrate that they have taken or will
8 take reasonable steps to incorporate EV charging". So
9 that's a "should"; that's not a mandatory "shall", but
10 there are steps like that in the plan, yes, and we have
11 a charging station at the office.

12 MR. ALLEN: Excellent. So is there anybody
13 else from the Department that would like to ask any
14 questions?

15 MR. GEIGER: And, Geoff, I don't know if
16 you're on, but if you had anything else to add.

17 MR. MARTIN: Sorry. I was with my
18 one-year-old, and she just -- I kind of lost the
19 conversation for a little bit. I apologize.

20 MR. GEIGER: If you had any -- I talked a
21 little bit about your work, but, if you had any more
22 instances of where we're actually moving the needle in
23 terms of shifting over to electric or, you know,
24 reducing energy use in terms of, you know, buttoning up
25 or town buildings or maybe even EV charging stuff.

1 MR. MARTIN: Yeah. No. I think, like you
2 were saying, Kevin, that, actually working with the
3 towns to, to weatherize their buildings and partnering
4 with, with organizations like Efficiency Vermont, Green
5 Mountain Power. Like, I'm working with Efficiency
6 Vermont on a regular basis to help plan out the
7 retrofits of municipal buildings and utilize funding
8 from Efficiency Vermont to help get those projects
9 done.

10 Green Mountain Power, I know that there's funding
11 coming for charging stations through Green Mountain
12 Power. So it's, it's taking advantage of those
13 opportunities. And, yes, I, I think that we're, by
14 working directly with these towns, we're going to have
15 a bigger impact on actually implementing the
16 recommendations of the bill.

17 MR. ALLEN: Okay. Thanks, Geoff. Anything
18 else you want to say, Kevin, before I turn it back to
19 Claire to put up her last slide?

20 MR. GEIGER: No, all set.

21 MR. ALLEN: Okay. So thanks to Tory and
22 Kevin and Geoff. Claire, if you can just put up that
23 last slide, because I had promised it, and it seems
24 like the right thing to do.

25 MS. McILVENNIE: Can everyone see my slide?

1 MR. ALLEN: Okay. And, importantly, there's
2 an email address that you can send comments to. Send
3 your comments no later than Tuesday, October 13th so we
4 can proceed at an appropriate pace. And, unless there
5 are any last comments, I'll pause for a moment to see
6 if anybody else wants to jump in, and then I'm going to
7 close the meeting.

8 (Brief pause.)

9 Okay. Hearing and seeing nothing, I want to thank
10 everyone for attending and for allowing this proceeding
11 to run smoothly, and special thanks to the Two
12 Rivers-Ottawaquechee Regional Planning Group in helping
13 us with both the presentation and the
14 question-and-answers. Thank you, too, Claire.

15 MS. McILVENNIE: Thanks, Riley.

16 MR. ALLEN: Okay. Bye-bye, everyone.

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20 (Whereupon at 7:50 p.m. the hearing was adjourned.)

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