

CCRPC Long Range Planning Energy Sub -Committee

AGENDA

*=attached to agenda in the meeting packet

DATE: Tuesday, November 15, 2016

TIME: 5:00 p.m. to 7:00 pm

PLACE: CCRPC Office, 110 West Canal Street, Suite 202, Winooski, VT.

1. <u>Welcome + Introductions</u>* (5 minutes)

Bios of committee members are attached. Please read these to get to know who is on the committee and which areas of expertise are represented.

- 2. <u>Review Minutes from the October 18, 2016 meeting*</u> (5 Minutes)
- **3.** <u>Brief update on Department of Public Service's Energy Compliance Standards (5 minutes) *</u> Attached is a memo of CCRPC's comments to the DPS submitted on 10/20/2016

4. <u>Review DRAFT FAQ* (10 minutes)</u>

Staff has developed a FAQ for this project based on the questions that have come up at planning commission meetings. The committee will review the FAQs and assist with answering some of the unanswered questions, if possible.

- 5. Presentation on Mapping Energy Resource Areas (20 minutes)
- 6. Update on municipal planning commission meetings and feedback on local constraints to date* Staff will update the committee on which Planning Commissions have received a presentation on the Regional Energy Plan. Staff will also provide an update on the local constraints received from municipalities. Contained within this meeting packet are comments we have received from municipalities to date. Staff has categorized the comments to guide the committee's discussion on next steps. Please attached.

7. Next Steps (5 minutes)

Draft Energy Resource Maps are due December 15th

CCRPC Energy Sub Committee Bios

Irene Wrenner, Essex

Irene Wrenner's passion for local government likely stems from positive "public good" experiences in the hometown of her youth. Irene and her siblings benefited from town library services and rec programs, parks, and lessons.

Her interest in land use took root in the realization that if the rolling farms of her childhood could morph into housing developments, then any area is vulnerable to losing its uniqueness without constant vigilance and careful planning.

Irene represented Essex on the Regional Planning Commission from June 2007 until July 2011, when it merged with the Metropolitan Planning Organization, and she became Essex Alternate. She served on the ECOS Project Steering Committee – which used a \$1 million federal grant to help develop sustainable communities in our county – then traveled to Texas in 2012 to speak on a panel of grant-winners.

Irene helped the Heart & Soul of Essex team win a \$100,000 planning grant in 2011 from the Orton Family Foundation, then served two years on its H&S Community Advisory Team. She was appointed to the Thoughtful Growth in Action Working Group in 2015, which recommended transitioning to a Joint Planning Commission and two DRBs from the current Town and Village PCs and ZBAs.

Irene is a ten-year member of the Essex Selectboard and Energy Committee. Her focus as a public servant is on improving communication and transparency with the aim of leveling the playing field between insiders and outsiders, helping taxpayers to easily obtain accurate info on multiple sides of an issue.

Karen Purinton, Colchester

Karen Purinton is the Planner for the Town of Colchester, Vermont, where she participates in long range and economic development planning for the community, acts as the coordinator for the Town's involvement with FEMA's CRS program, and assists applicants with their development proposals and the review process. Karen graduated from the University of Maine with a B.S. in Environmental Policy, and holds a Master's Degree from the University of Southern Maine in Planning and Development. She is certified by the State of Vermont in Natural Shoreland Erosion Control Practices and is also a Certified Floodplain Manager with the Association of State Floodplain Managers, Inc.

Keith Epstein, South Burlington

Keith Epstein has been a volunteer member of the South Burlington Energy Committee since it was formed in 2008. He is currently serving as committee chair and the co-coordinator of the South Burlington Energy Prize, South Burlington's entry in the Georgetown University Energy Prize. South Burlington is one of 50 semifinal communities in this national energy efficiency competition with a \$5 million prize.

Keith's day job is mechanical design engineer at AllEarth Renewables, where he designs, develops, builds, tests, operates, and improves dual-axis solar trackers and other renewable energy equipment

including wind turbines, meteorological towers, and wind tunnels. He is an avid bicycle commuter, riding 7 miles each way year-round, thanks to the fantastic network of bicycle/pedestrian facilities in South Burlington.

Prior to AllEarth Renewables, Keith designed micro accelerometers to measure motion and vibration for Kionix in Ithaca, NY. He has a bachelors degree in mechanical engineering from Cornell University, where his interest in energy efficiency and renewable energy was sparked by a single renewable energy class in the college of agriculture. That one class inspired Keith to seek out a career in the renewable energy field and devote countless hours to improving the energy efficiency of his community.

He lives in South Burlington with his wife and two daughters

Robin Pierce, Essex Junction

Worked for large developers as designer/project manager/client representative, and as a small developer myself for historic tax credit projects in Philadelphia. Worked for an affordable housing organization with an holistic approach to design that was inclusive for disabled people in all aspects of the design interior and exterior. Worked for a national (ecological) museum that was developed on the Skansen Model which originated in Sweden, in charge of the Open Air portion of the museum. I have written on energy issues, one attached, which focuses on how person mindfulness can reduce energy consumption and be the bridge to a renewable energy future. I have degrees in planning, landscape and urban design: I tried work once, didn't see any future in it, hence back to University

Kate Desrochers , VEIC

Kate Desrochers is a Senior Analyst on the energy planning team at VEIC. She has conducted modeling, analysis and potential studies for clients including the Department of Energy, the US Forest Service, and the state of Rhode Island. Her other projects include program review of state energy efficiency programs in Maryland and Rhode Island, development of Technical Reference Manuals, and research on innovative efficiency financing mechanisms.

Mathew Burke, Charlotte

Sharon Murray, Bolton

Jim Donovan, Charlotte

Jeff Forward, Richmond

Jeff Forward is a renewable energy and energy efficiency specialist with 25 years of experience. Forward Thinking develops and implements energy efficiency and renewable energy programs by working with state and federal agencies as well as local and regional organizations throughout the country. Prior to becoming a consultant, he worked as an Energy Efficiency Specialist for the Vermont Public Service Department. More recently, he was a consultant to the Department for the Total Energy Study that was completed in 2014. Over the past ten years, Jeff has completed over 150 biomass pre-feasibility assessments for schools, hospitals, and other institutional facilities. He built the state's 2nd group net metered solar project on his and his wife's 200 year old farm in Richmond. Currently, in addition to his consulting business, he is the Facilities Coordinator for the Chittenden East School District.

Jeff has a community planning degree from Woodbury College and is a LEED[®] Accredited Professional with the US Green Building Council. He was a founding member of the Richmond Land Trust and served on that board for 15 years. He also served on the Mount Mansfield School Union School Board for over ten years. Jeff is currently the chair of the Renewable Energy Vermont Board of Directors. He and his wife Patty have lived on their farm since 1980. They have 2 grown sons and one delightful granddaughter, all who live in Burlington.

Catherine McMains, Jericho



DRAFT

CCRPC Long Range Planning Energy Sub -Committee

Meeting Summary

Tuesday, October 18, TIME: 5:00 p.m. to 7:00 pm 2016

CCRPC Office, 110 West Canal Street, Suite 202, Winooski,

Attendance:

Keith Epstein, South Burlington Matt Burke, Charlotte Dave Roberts, VEIC Melanie Needle, VEIC Irene Wrenner, Essex Sharon Murray, Bolton Kate Desrochers, VEIC Catherine McMains, Chair, Jericho Jeff Forward, Richmond Regina Mahony, CCRPC

- 1. The meeting started at 5 pm.
- <u>Vote on Committee Chair</u> The LRCP Energy Sub-Committee voted Catherine, McMains as Chair.
- 3. <u>Review Minutes from the September 19, 2016 meeting</u> The meeting minutes were accepted.
- 4. Brief update on municipal planning commission meetings and feedback on local constraints Staff updated the committee on which Planning Commissions have received a presentation on the Regional Energy Plan. To date, Staff has presented on the Regional Energy Plan to Jericho, Milton, Colchester, Huntington, St. George, Bolton, Essex Junction, Essex, South Burlington, Richmond, and Shelburne. Staff has received comments from Colchester, Shelburne, and Milton informing CCRPC of the local land use policies that should be considered in the development of the energy resource maps. Over the next few weeks, staff will revise the energy resource maps showing prime and base areas for renewable energy generation with these constraints. The Committee will discuss these maps at their next meeting.
- 5. Draft Comments on the Department of Public Service's Act 174 Energy Compliance Standards Staff reviewed the attached memo that had already been sent to the CCRPC board which details the comments on the draft energy compliance standards based on staff review and a discussion with the CCRPC Planning Advisory Committee. The Committee will discuss these comments and identify any needed additions. Staff will bring these additions to the CCRPC board meeting on October 19,2016 for them to approve.

The Energy Sub Committee agreed to add the following comments:

- Clarification on the process by which a municipality would need to undergo if it chooses to adopt a supporting energy plan for the municipality to be given substantial deference in the section 248 process.
- Consider making an addition to the consistency standard whereby an applicant would need to explain that not attaining to a part of the checklist would not prevent a town or region from achieving its renewable energy target.

- Clarification on the role solar CSAs play in a town or region achieving its renewable energy target.
- Consider removing the "or" in all references to "policy and/or implementation" measures.

6. VEIC Staff Presentation on total energy consumption by fuel type and sector

Kate Desrochers, VEIC Senior Analyst and David Roberts VEIC Senior Consultant, presented the initial LEAP results on future energy demand by sector and fuel type. Please see the attached presentation.

During the presentation, several questions came up that will need follow up- These are

- a. Natural gas revisit future natural gas assumptions with VEIC/PSD and then potentially with Vermont Gas. Consider renewable natural gas opportunities. Also, understand that NG Advantage trucking may be skewing Chittenden County usage numbers as they truck across the region (including out of state).
- b. Residential housing
 - i. How are University dorms accounted for?
 - State has wood goal of 30% by 2030 which came after the Total Energy Study.
 Look into whether a high biomass scenario could be constructed for CCRPC which would be more in line with this
- c. Industrial is it worth taking into consideration CCRPC data on sq ft from Dun & Bradstreet?
- d. Transportation Does the jet fuel include military and passenger jets? Should this "count" as non-renewable for Chittenden County since the county doesn't have any control over this?

6. Review DRAFT FAQ

Staff has developed a FAQ for this project based on the questions that have come up at planning commission meetings. The committee will review to FAQ and assist with answering some of the unanswered questions, if possible. This item was tabled for a future meeting.

7. <u>Next Steps</u>

The next meeting will be the third Tuesday of November from 5 to 7 pm. Staff will confirm with the members that were not in attendance on whether this time works for them.



TO: Department of Public Service

FROM: Chittenden County Regional Planning Commission Board Members

DATE: October 20, 2016

RE: Comments on the Draft Energy Compliance Standards

The Chittenden County Regional Planning Commission (CCRPC) appreciates the opportunity to comment on the Department of Public Service's DRAFT Determination Standards for Energy Compliance. CCRPC's comments are responding to the draft standards with a particular focus on asking for further clarification on the components of the standards to ensure that the way in which a region or town can attain an affirmative energy compliance determination is flexible and achievable. Below is a list of items that reflect the comments of CCRPC's Planning Advisory Committee, Energy Sub-Committee, and the Board.

1. In Part II item 1 of the energy compliance standards on page 2, it is stated that: Act 174 requires regional and municipal plans be adopted/approved in order to qualify for a determination of energy compliance.

 CCRPC feels that the timing of seeking energy compliance determination after a plan is adopted makes it very difficult for a region or town to address any necessary changes in their plan if a negative determination is received. CCRPC requests that an optional preapplication process be put in place to assure that the Department of Public Service can identify deficiencies prior to plan adoption. In developing this process, CCRPC asks that the process be simple as to not introduce a lengthy time of review.

2. Part II also describes that towns and regions are required to undergo "enhanced energy planning" through an enhanced energy chapter, town plan amendment or a supporting plan.

• Please clarify the process for towns choosing to adopt a supporting energy plan. Does it need to be referenced in the town plan in order for the town to be given substantial deference in the section 248 process?

3. In Part II and Part III, the energy compliance standards state that if the requirement is not met, the checklist must satisfactorily explain and justify why it does not, and refers to the consistency standard.

 CCRPC appreciates incorporation of the consistency standard that we currently use for all state goals in regional and municipal planning. However, we ask for further clarification on the ultimate threshold for standards that are not relevant or attainable. In other words, is there a maximum number of standards that a region or municipality can mark as not relevant or attainable before they receive a negative determination? Additionally, if an applicant cannot meet a particular standard part of the justification for why it does not should ask the applicant to include an explanation on how the entity is still able to reach the target. This type of explanation is required in the Pathways section. Consider adding this to all components of the standard.

4. Part II describes the components of a town/regional energy element of a plan as required in 24 V.S.A. § 4348a(a)(3).

 CCRPC feels that the checklist can be greatly simplified by combining Part II and Part III. It appears that these are separate sections based on separate sections of statute, however they are asking for the same language in the Plans so it should be combined. This would also help clarify that the consistency standard will be applied throughout. For example, Part II item 2 is asking for the same type of analysis as the Analysis & Target standards in Part III and the questions from Part II that apply to analysis should be integrated into Part III where appropriate.

5. The description in Part III on page 5 under that Analysis & Target heading refers to a Regional Plan breaking out the analysis for their municipalities.

- CCRPC asks whether a region is required to also break out the targets discussed in item 2 on page 6. If so, please clearly state that this is a requirement.
- CCRPC asks for clarification on whether community Solar Arrays (CSA) count towards a towns or regions renewable energy target even if the facility is not within its boundary.

6. In Part III Analysis & Targets, the standards say municipalities may choose to rely on a regional plan that has received an affirmative energy determination and is also presumed to meet the energy compliance standards.

- CCRPC asks for guidance on how a municipality would rely on the Regional Plan to serve as its energy element in the section 248 process. Also, could a municipality rely on the Regional Plan for the analysis and supplement the pathways and/or mapping components with their own local plan? We presume the municipality would need to either have everything in their local plan, or rely completely on the regional plan if the method for this is 24 VSA § 4349(a), but would appreciate the clarification. We anticipate that there may be a level of specificity in the local plans that we won't be able to fully incorporate in the Regional Plan.
- Additionally, if a municipality chooses to do its own analysis prior to the Regional Energy Plan receiving a positive energy determination, CCRPC asks whether data available on the Energy Action Network's Community Energy Dashboard is sufficient to meet this analysis and target standards. If so, please include that this is resource for towns to comply with Act 174 and provide guidance on its proper use for achieving energy compliance. If not, we find the analysis too onerous for a municipality to do this work on their own before the RPC completes their planning process.

7. Part III Analysis and Targets item 2 on page 6, asks if a plan establishes targets for energy conservation, efficiency, fuel-switching, and use of renewable energy for transportation, heating, and electricity?

• CCRPC asks if a target range is acceptable to meet this part of the standard and if renewable generation targets from wind, solar, biomass, and hydro-electric energy are also required.

8. Part III Pathways includes an "other" category under each sector (an example is Part III, Item 6.a.vi. on page 8).

- CCRPC asks can the pathways/implementation actions that a region or municipality lists under "other" replace all of the previous pathways (in this example it would be Part III, Item 6.a.i to 6.a.v.)?
- 9. Throughout the standards the terminology, "policy and/or implementation measures" are used.
 - Consider changing all instances of this terminology to "policy and implementation measures", by removing "or". This change is important because a plan could have a policy that is in support of something, but no implementation measures that support it. The lack of implementation measures means that the policy will likely never actually be implemented, so having only the policy should not be considered strong enough to gain a certificate of determination.
- 10. On page 10 item C.i. refers to "existing electric load".
 - Consider improving the title of item C. to reflect that both load and generation components are needed to satisfy this part of the standard.

11. On page 5. Part III item 1. the question requires the applicant to check "Yes" if the plan includes an analysis of "current energy use..." and if "items a-c is checked below"

- Consider removing the part "(a-c checked, below)" as question 1 is general in nature and the questions below are more specific.
- 12. On Page 13, wetlands and transportation infrastructure are identified as known constraints.
 - Consider further defining the types of wetlands that prohibit development of renewable energy facilities entirely and consider moving transportation infrastructure to a potential constraint.

FREQUENTLY ASKED QUESTIONS REGIONAL ENERGY PLAN October 14, 2016

> If a municipality chooses NOT to pursue the path towards 'substantial deference' would the enhanced Regional Energy Plan be sufficient to represent the municipalities concerns in Section 248 proceedings?

> > As we are just beginning our planning process, we cannot guarantee the Regional Energy Plan will be sufficient to reflect each and every town's concerns in the PSB process. We do know if a municipality is not pursuing 'substantial deference' and they choose to intervene in the Section 248 process their concerns will only be given 'due consideration'. However, there is a provision in Chapter 117 that allows a municipality to adopt a section of the Regional Plan as their own. If a municipality wanted to, they could do this for their energy plan. Unsure whether substantial deference is automatic or CCRPC has to request party status for the regional plan to be granted this. ACT 174 is silent on procedural items.

- 2. How does the future total energy demand in the State's Total Energy Study compare to the future energy demand produced by LEAP? Need to ask DPS staff
- 3. What is the connection between the Tier 1-3 requirements for utilities and the Regional Energy Plan?

The Regional Energy Plan ensures that local and regional policies are considered when utilities are siting new renewable energy generation facilities.

4. Will RPCs and Towns still have to intervene in a Certificate of Public Good petition process in order for their plans to be given substantial deference?

We cannot say how the PSB is going to operate in practice. Act 174 did change the definition in order to give the Plan greater weight. The towns/RPCS may still need to proactively intervene in order to get their interests addressed.

5. If a town receives certificate of energy compliance from DPS before 2018 do they need to recertify once the RPC finalizes and receives their certification?

No. The determination of energy compliance from the Department of Public Service is in effect for five years. The Department of Public Service will cease reviewing town plans July, 1 2018. When a town needs to re-certify it will be with the RPC.

6. Are towns required to produce renewable energy generation targets?

We will not know until the standards are finalized on November 1.

7. Are regions required to produce renewable energy generation targets in order to received energy certification?

We don't know yet. However CCRPC is obligated to do this because it's a requirement of the DPS's regional energy project contract.

Commented [EN1]: Will there be more connections than this?

FREQUENTLY ASKED QUESTIONS REGIONAL ENERGY PLAN October 14, 2016

8. What type of local constraints will the RPC reflect in the regional energy map?

The regional energy plan map will likely reflect local constraints as requested by a municipality so long as protection of the local constraint is a clearly stated goal or policy in an adopted Town Plan or Zoning bylaw. The Regional Plan at a minimum will include the Public Service Board/Agency of Natural Resources list of constraints.

- 9. Is there a public fund for decommissioning renewable energy projects once they reach their useful life?
- 10. How are community solar agreements counted? If one community is buying solar energy from a facility outside their town does that count towards municipality's target?
- 11. How is the energy counted if the renewable energy is sold out of state?
- 12. If a town does not have 3-phase power to accommodate the distribution of energy from new renewable facilities? Can that town meet its target through concentrating its effort on the transportation and heating sector?

Date: November 10, 2016

Yellow Highlighting = Committee discussion is needed

Bold text highlights inconsistencies among local constraints and the Committee needs to discuss what the procedure for this is going forward.

Green Highlighting = Documentation town has provided is less restrictive than comments suggest

Grey Highlight = Documentation aligns with comment and is equally restrictive for all forms of development

Town	General Comment	Level 1	Municipal Guiding Policy	Level 2	Municipal Guiding Policy	Preferred
Colchester		1.Existing Transportation	1.unknown	1.Shoreland District	1. Zoning 2. Town Plan 35. Zoning 6. Official Map 7.	
		Infrastructure Potential		2. Town-owned Park and Recreation Properties	Zoning?	
				3.Water Protection Overlay District		
				4.GD4 Open Space Overlay District (located near Exit 17 area)		
				5. Historic Protection Overlay District (located near Fort Ethan		
				Allen)		
				6.Planned Transportation Infrastructure Locations		
				7.Steep Slopes (Over 20% grade)		
Essex	The State of Vermont may want to consider	1. pending <u>Scenic Resource</u>	1. Draft Zoning: The purpose	1. Essex Renewable Energy Development Constraint Map	1. Zoning	The areas in Green
	incentives or take other steps to increase the amount	Overlay Protection District	of this overlay district is to	(blue/cross-hatched) includes the Resource	2. Draft Zoning: Steep slopes – Development is	on the map are the
	of rooftop solar arrays, rather than using	2. Pink Areas on Essex Renewable	avert or minimize the adverse	Preservation District - Industrial (RPD-I) but	discouraged on slopes of 15 percent or steeper	commercial and
	undeveloped land.	Energy Development Constraint	impacts of	renewable energy development is only allowed in the	due to the likelihood of erosion and stormwater	industrial zones in
	We support conserved land's inclusion as a Level2	Map The Town supports the	development on identified	40 percent sub-area of the district zoned for	runoff problems	which renewable
	Constraint. However, some conserved land may be	<mark>responsible development o</mark> f	scenic resources, viewsheds	commercial and industrial development. Past legal		energy
	so sensitive with regard to views, public recreational	commercial scale (500KW and	and roadscape corridors in	opinions have indicated that the boundaries of the 40		development has
	use, and natural resources that renewable energy	greater) ground-mounted solar	the Town of Essex	percent area are flexible. At the current time, we are		no constraints
	development should be prohibited. I reached out to	electric generation facilities in	through appropriate site	waiting for an Act 250 decision which may affect the		under the Town
	the Vermont Land Trust about language they may	only the commercial/industrial	planning and design	sub-area boundaries within the RPD-I District. The		Plan.
	currently be including in easements which reserves	zoned areas of Town. Such	practices. The standards are	mapping for this district will be updated in		
	areas for renewable energy development. I was	facilities, as well as wind	intended to provide flexibility	accordance with the provisions of the Act 250 permit.		
	advised that this is an emerging issue for them and	electric generation facilities,	so that proposed	2. Steep Slopes 15-20 percent		
	one they have their eye on.	shall not be located outside the	development can be designed			
		commercial/industrial zoning	to fit the particular			
		districts and shall have zero	characteristics of the site on			
		impact on views identified	which it			
		as "Most Scenic" in Annendix 6	is located. Scenic resources			
		Segment Mans which is	and important distant views			
		incorporated into t the Town	are identified in Views to the			
		Plan by reference	Mountain: Scenic Protection			
		Accordingly non commercial	Manual (the Manual).			
		(less than 500KW) scale solar is	2. Zoning			
		allowed in zoning districts	3. Town Plan and draft			
		denisted in pink on the man We	Regulations. Development			
		intendente work on eiting	shall be avoided on slopes of			
		standarda for these districts in	20 percent and steeper due to			
		standards for these districts in	the likelihood of			
		a standare.	environmental damage			
		5. Steep slopes 20 percent or	4. Town Plan p. 72, Forest			
		nigner	Lands: "Essex's forests			

		4. Habitat Blocks	provide large habitat blocks
			Jor animais and offer
			economic potential through
			timber narvests. Forest traiis
			open to hiking, mountain
			biking, horseback riding,
			cross-country skiing and
			snowmobiling improve
			quality of life and can support
			<mark>a recreation-based sector of</mark>
			the economy. Nearly 13,000
			acres in Essex are forested,
			yet forest fragmentation from
			development is a major
			problem in Vermont,
			including Essex. The largest
			forests in Essex stretch north
			from the northeastern and
			northwestern parts of town
			into Colchester, Milton,
			Westford, and Underhill. The
			laraely unbroken woodlands
			serve as prime habitat – the
			Vermont Agency of Natural
			Resources scores both forests
			as 9 out of 10. When
			development must occur in
			those habitat blocks, over
			offert shall be taken to
			ejjort shull be taken to
			minimize the intrusion on the
			Jorests through the use of
			siting standards."
Eccov lunction	The first criterian missing from the DSD's droft is does	1 Concerved Lands	
Essex Junction	it fit with the Verment Brand of Compact Settle water	I. CONSERVED LARIUS	1. UIIKIIOWII
	it in with the vermont Brand of Compact Settlements		
	surrounded by productive Open Farmland? If not, then		
	no other criterion should be needed, it fails the most		
	basic, and important test the application should be		
	denied We should be right sizing renewable energy		
	installations so that they produce the energy needed		
	for the place they are inThere are lot of flat roofed		
	builings in our major settlements. We could put solar		
	panels on them in a way that is screen and have the		
	energy collected where it is needed most and used.		

	Hinesburg	Hinesburg's language to describe constraints is more focused on impacts to the resource rather than viability of the development. We recommend CCRPC's level 1 and level 2 descriptions be revised on this front. Level 1 constraints should be avoided due to the sensitive nature of those resources. Instead of describing level 2 constraints as those that, "may make renewable energy generation less feasible but do not necessarily prevent development," we recommend a description that indicates the value/importance of these level 2 resources, and the need to minimize impacts rather than strict avoidance. Renewable energy facilities in locally identified growth areas or industrial areas should focus first on preferred locations (e.g., rooftops, parking lots, reclaimed gravel pits, capped landfills). In these areas, renewable energy facilities not located in preferred locations should be accessory to principal uses envisioned in the plan and associated regulations. Steep slope constraints and core wildlife habitat resources make much of Hinesburg's eastern hills unsuitable for large scale commercial/industrial wind energy facilities, even though some of these areas have high potential for wind energy per the maps provided by the CCRPC. For some resources (e.g., core wildlife habitat), determining an appropriate constraint level may depend on the specifics of a renewable energy facility proposal. Finally, the PC wants to make sure that these constraints apply to access roads serving renewable energy facilities, as these have significant impacts, especially where there is challenging topography. Concerns have also been raised about the sale of renewable energy credits out of state. The sale of these credits to satisfy renewable energy requirements for out of state utilities doesn't appear to move Vermont closer to our own energy goals. In fact, some have argued that such a scenario actually makes it harder for Vermont to reach its goals. If communities and regions are to shoulder responsibility for planning suitable renewa	1.	Steep slopes (25% or greater) – due to erosion & stormwater control, and access challenges for emergency services (e.g., fire response) Conserved lands – incompatible uses on lands preserved for agriculture, wildlife, forestry, etc.;	1.	Zoning; <u>Primary resource</u> areas are extremely sensitive or generally <u>unbuildable areas</u> unknown	1. 2. 3 .	 Moderately steep slopes (15-25%) - due to erosion & stormwater control, and access challenges for emergency services (e.g., fire response) Core wildlife habitat - a subset of wildlife habitat blocks; Village Growth Area & Industrial zoning districts - due to the need for other types of planned development here (e.g., residential, commercial, industrial, etc.)
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1. Zoning: minimize impact on secondary resource areas.

2. Zoning: minimize impact on secondary resource areas

3. Renewable energy facilities in locally identified growth areas or industrial areas should focus first on preferred locations (e.g., rooftops, parking lots, reclaimed gravel pits, capped landfills). In these areas, renewable energy facilities not located in preferred locations should be accessory to principal uses envisioned in the plan and associated regulations. Renewable energy facilities in locally identified growth areas or industrial areas should focus first on preferred locations (e.g., rooftops, parking lots, reclaimed gravel pits, capped landfills.

Jericho	 Well Protection Area Overlay District: §6.6.2. Delineation of Districts: The Wellhead Protection Area (WHPA) Overlay District shall consist of the following three areas (only 1 is listed below as 2 & 3 allow most uses): 	 Zoning Zoning Town Plan, page 38, Priority Conservation Areas. Map 9 of the Town Plan. Town Plan, Grand List 	 The Town has three designated Village Centers. This might be a Level 2 constraint, but the Jericho's Town Plan and Land Use Regulations directs residential and commercial development to these areas. So the village centers are not suitable areas for energy generation Secondary Conservation Areas are also very sensitive but some activities can occur within them without compromising their integrity. These include wildlife
	WHPA-1: A circle of radius 200 feet surrounding each of the water supply wells serving the Jericho Village Water District, the Foothills water supply, the Jericho East water supply, and the Underhill- Jericho Water District, the Jericho Heights water supply, and any other public water supply on the most recent "Water Source Protection Areas" map, prepared by the Vermont Agency of Natural Resources Water Supply Division. The above map is herein incorporated by reference and made a part of this ordinance.		 road crossings, a larger area surrounding vernal pools, significant (but not rare) natural communities, and ledge and cliff habitat that may be important for wildlife. In general, these places should be evaluated carefully when development is proposed within them for potential conflicts with the natural resource values. Tertiary Conservation Areas, which occupy a large percentage of the town, are the contiguous habitat units, or habitat blocks, that occupy the mostly forested areas of the town. Development can occur within these areas, but care should be taken to minimize the incursion of new roads and development to avoid forest fragmentation. The residents of the town continue to recognize the value of the forested landscape that forms a backdrop to nearly all activities in all seasons. The forests provide not only scenic views for residents and visitors, but also habitat
	Permitted Uses: The following uses are permitted in the Wellhead Protection Area Overlay District, WHPA-1: (a) Wildlife management; (b) Passive recreation; (c) Proper operation and maintenance of existing dams, splash boards, and other water control, supply and conservation devices; (d) Maintenance and repair of any existing structure; (e) Agriculture and forestry provided that fertilizers, herbicides, pesticides and other leachable materials are neither applied nor stored outdoors.		

1.						
	_		1 19 49 14 1			
		this how th 1 and level	e constraints 2	should be divid	e up betwee	rine that en level

		No uses are Conditional			
		2. Natural Resources Overly			
		District: §6.7. The purpose			
		of the Natural Resources			
		wildlife habitat such as			
		deeryards; to conserve and			
		and natural communities			
		such as significant habitat			
		for flora and fauna; and to			
		preserve identified scenic resources such as ridgelines			
		As seen below, the Natural			
		Areas and natural			
		restriction on development, as			
		shown in the table below.			
		However, all of these areas are			
		specifically says that if it isn't			
		listed in the table, the use is			
		prohibited.			
		 Tiered Conservation Priorities, as shown on Man 			
		9 of the Town Plan, depicts			
		all the conservation			
		priorities identified in			
		Jericho in three tiers of			
		Conservation Areas are the			
		most sensitive places: the			
		rare natural communities,			
		rare species, vernal pools,			
		riparian areas, river			
		corridors, and wetlands.			
		nese areas occupy a small			
		should not be developed.			
		Conserved Land, Current Use			
Dath	a design the second				
iviliton	a three-tier system would be more beneficial than a two-tiered system, and found that development within	1. Habitat Blocks 10, 9, and 8 The property classified as	1. – 2. IOWN Plan: Development of		
	level-2 and -3 constrained areas should be linked to	Habitat Block 8 on the eastern	municipally-owned town		
	the scope and impact of the installation, taking into	side of Milton is considered a	forest, natural areas, and		
	account noise, height and footprint. For instance,	critical wildlife corridor. Areas	recreational area is not		

while industrial-scaled projects might not be appropriate in level-2 constrained areas, those projects of a lesser scope might be. The Commission also noted the striking differences of impact between solar, wind, and hydroelectric projects and that the constraints should be customized to correspond to the type of renewable energy facility and its typical impacts.	2. <mark>3.</mark>	such as these in western Chittenden are under serious development pressure and should be protected. Agricultural and Hydric Soils; Conserved Lands. Eagle Mountain Natural Area and other land held with	expressly restricted by the Plan or the Regulations. The Town's regulatory language does not expressly forbid development in Habitat Blocks 10, 9, and 8 (as identified in Map 9 of the	
and its typical impacts. interested in seeing local studies on wildlife impact, post-installation of renewable energy facilities. The Commission expressed a general sentiment that more should be done by the State to incent residential-scale generation and storage innovation to increase the overall dependability and efficiency of wind and solar generation, given its variability.	<mark>4.</mark> 5.	other land held with conservation easements provided through land trusts. These areas were purposefully protected to retain valuable natural resources Encumbered Open Space (set aside in local development review); Town Forests and other Municipal Natural and Recreational Areas with adopted Management Plan	identified in Map 9 of the Plan) or in significant agricultural soils. Use of open space has regulatory language in several sections of the Zoning Regulations: 804.6, 852.15, and 892.1(6) that encumber development (which may or may not be taken into consideration by the PSB at this time). For example: ZR804.6 states, "The open space shall be protected by appropriate legal devices to ensure the continued use of such lands for the purpose of agriculture, forestry, recreation and conservation. Such mechanism include: dedication of development rights, conservation easements, homeowners	
			associations, restrictive covenants, conveyance to land trusts, or other appropriate grants or restrictions approved by the DRB. Permitted future uses and maintenance of the open space shall be specifically identified as part of the approval of the development []."	

Richmond	 Core Forest Wildlife Habitat Contiguous Habitat Units Natural Communities Ridgelines Connectivity Wildlife Corridors Ledge / Talus / Cliff habitat Bear habitat Deer Habitat Forested Riparian Communities Size Vistas 	1. Town Plan Natural Areas - Priorities	 Three areas in Richmond were identified where future human development should be assessed carefully. These are visualized on the map identifying Highest priority Wildlife Habitat and Contiguous Habitat Units (Appendix.<u>W</u>). The Gillett Pond Area Bryant Hill The forested area north of VYCC and the Andrews forest area north of Route 2 Vistas The Richmond Planning Commission, in 2002, mounted an effort to establish guidelines regarding the development of ridges by creating an overlay district. A side benefit of the study was identification of important vistas within the Town. A detailed study of locations of potential vistas that included ridgelines provided a long list from which to choose those that should receive top priority. Three vistas rose to the top. First and foremost is the aforementioned vista from I-89, Exit 11 Park-And-Ride that encompasses still-preserved views of Camel's Hump and Bryant Hill in particular overlooking undeveloped prime in-production agricultural lands (Figure 1). This vista has prominent consideration in the current Town Plan, to wit with regard to the Gateway District: The second vista is that from the brow of Wes White Hill, overlooking undeveloped agricultural lands to Mount Mansfield (Figure 2). The third vista is along Kenyon Road looking east over undeveloped agricultural lands and low hills to Camel's Hump (Figure 3). Other vistas unquestionably are of importance. One example is that provided at the curve in Route 2 just east of the Village that looks over undeveloped forest land at the mountains to the east, including Camel's Hump and Robbins Mountain. A second example is the vision" Workshop. 2.
Shelburne			 Significant view areas, Archeologically sensitive areas, Lake Champlain lakeshore buffer (100 feet from the 102 foot elevation contour)



South	The Commission reiterates the NRC's comment that the review timeframe	1. Zone 1 Source Protection	1. Unknown	1. Class I and Class II wetland buffers (50')	1. Zoning	Mur	nicipally owned
Burlington	was short. The Commission provides this feedback with the hope that this	Area		2. Class 3 wetlands and buffers	2. Zoning	Commented [MN4]: Need t	o follow up
0	have additional opportunities to weigh in during the development of the			3. Slopes 20% and greater	3. Zoning	conf	licting with
	Regional Plan elements. • The Commission underscores the need to			4. Habitat Blocks	4. Plan	cons	strained lands,
	examine opportunities for renewable energy siting through the lens of			5. SEQ- Natural Resources Protection zoning sub district	5. Zoning	shou	uld be added to
	as the State's energy plan does. • Policies related to level 1 and level 2			6. Scenic Views	6. Zoning Overlay Map	the	ist of priority
	constraints should be responsive to the scale of the proposed renewable			7. Riparian Connectivity	7. Plan	land	for solar
	energy generation facilities. Small scale solar should be allowed and					rene	wable energy
	activity. • The Commission would like to emphasize the Energy Committee's					gene	eration in South
	comments of highlighting through planning & mapping areas that are not					Burl	ington
	Just appropriate for renewable energy siting due to a lack of resource constraints, but also those which are desirable and encouraged by a					whe	re more intense
	municipality. o Municipally owned lands, where not conflicting with					deve	elonment such
	constrained lands, should be added to the list of priority land for solar					as lie	ant industrial is
	recommends that the CCRPC look into bird migration areas as potentially					allo	wed larger solar
	regionally constrained as they relate to wind generation facilities. • Overall,					arra	vs should also
	at least for more urbanized communities, renewable energy facilities, and in					hee	ncouraged
	other types of development in a particular location. For example, where					Win	d and solar
	more intense development, such as light industrial, is allowed, larger solar					facil	ities may be
	arrays should also be encouraged. Wind and solar facilities may be looked at differently as to how they are assessed for similarity to other types of					look	ed at differently
	allowable development.					aste	how they are
							ssed for
						simi	larity to other
						type	is of allowable
						type	alonmont
Underhill		1 Wetland Setbacks (100 ft	1 Town Plan + Zoning	1 Contaminated Lands - The Planning Commission	1 Recommended by a Commiss	sion (Not in Plan or	
ondernin		from Class I Wetlands: 50	2 Town Plan + Zoning	Recommended this as a constraint rather than a possible	Regulations)		
		ft from Class II Wetlands:	3 7 oning: All structures	site	Regulations		
		and 25 ft from Class III	with the excention of	2 Buffers for Private Wells (200 ft as described under δ	2 state statute		
		Wetlands)	telecommunications and	3 17 A 1)	3 Town Plan + Zoning: to avoid	l site 36 disturbance on	
		2. Stream and Waterbody	wind towers and ancillary	3. Areas of Steep Slope (Grade between 15% & 25%)	very steep slopes (> 25%) in		
		Setbacks (100 ft from	34 facilities, and tent	4 Areas of Uncommon Species	4 Town Plan + Zoning		
		named streams as	platforms and lean-tos				
		measured horizontally	are prohibited in this				
		from the top of the bank	district over 1 500 feet in				
		or 50 ft if measured from	35 elevation above mean				
		top of slope: 25 ft from	sea level				
		unnamed streams)	A Recommended by a				
		3 Above 1 500 ft Elevation	Commission (Not in Plan				
		for Both Solar & Wind	or Regulations) Zoning				
		4 Areas of Geographical	5 Town Plan + Zoning: The				
		Hazards (e.g. areas	nurnose of the Scenic				
		susceptible to landslides)	Preservation District is to				
		5 Scenic Corridors (the Mt	protect the scenic vistas 4				
		Mansfield Scenic	alona Pleasant Valley				
		Preservation Zoning	Road. This district				
		District)	includes upland areas				
		6. Areas of Very Steen Slope	with access and/or 5				
		(Grade more than 25%)	development constraints.				
			a creiophiene construints,	1			

			6. 7.	and valley areas with access onto Pleasant Valley Road. The goal 6 of this is achieved by allowing compatible lower densities of development or clustered 7 development that maintains Underhill's rural character while protecting the views along 8 Pleasant Valley Road development to Zoning: minimize site disturbance and construction on steep slopes (15% to 25%)	
Westford	 The Westford Planning Commission believes it should not be the policy of the CCRPC to encourage large scale power generating facilities. Rather, it should encourage, facilitate and defend the expansion of the small scale market. The CCRPC should be advising municipalities how they can support and encourage small power producers and at the same time provide advice to small municipalities on how they might be able to limit commercial solar and wind facilities. Specifically, we encourage the CCRPC to: 1. Promote point-of-use energy development with excess energy sold back to the grid at attractive rates; 2. Promote and facilitate a system that allows for excess power (energy credits) to be pooled for donation to financially needy families that struggle to pay their electric bills; 3. Oppose any proposed rules, regulations or statutes that are intended to reduce or limit how much a power company is required to pay point-of-use producers. In summary, the Westford Planning Commission does not support the development of large scale solar or wind energy generating facilities in Westford. It is our determination that Westford lands are not suitable for this type of development and that such large scale 	 Areas identified as being within the Water Resource Overlay District and/or Flood Hazard Overlay District Areas identified as being a high density residential district (e.g. Common, Village and Rural 3 Zoning Districts) Prime (and State-wide significant) Agricultural Soils Areas mapped by ANR as containing the following significant natural resources: Significant Natural Communities; Uncommon Species and Features; Deer Wintering Habitat, Rare; Threatened and /or Endangered species All view-sheds identified in the 2015 Town Plan 	1. 2. 3. 4.	Zoning Zoning Need documentation – 9 Need documentation to ensure equally restrictive for all types of development.	

energy generation development would conflict with our land use goals. We believe that the focus on developing such facilities is misplaced and that we should be encouraging and promoting small scale renewable generation, which provides more options for our communities and encourages more Vermonters to become involved in producing clean energy.	7. 8. 9.	Any town and school owned land All conserved land, including the potential Jackson Farm and Forest. An exclusion area measured 2 km from existing dwellings