



Ideas for Vermont's Energy Generation Siting Process



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Outline of presentation

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- Brief summary of NRRI Wind-Siting Survey and Report
- Best practices from NRRI Report
- Observations of Vermont's process

See NRRI research paper 2012-03:

*Put It There! - Wind Energy and Wind-Park Siting and Zoning
Best Practices and Guidance for States, at*

<http://www.nrri.org/documents/317330/18b517ca-d2c3-4edc-adb4-b7f9ff8d88b2>



Excerpts from NRRI Wind Siting Study “Big Table”

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
State	MW Installed ¹	Primary Authority (Limit) ²	Primary (P) or Secondary (S) State Authority	State Energy Siting ⁴	Primary Rule ³	Evaluation Criteria ⁵	Voluntary Guidelines ⁵	Model Ordinance	Setback Standard ⁶	Sound Standard ⁶	Local Ordinances ⁷	RPS ⁸	RPS In-State “Tilt” ⁹	REZ ¹⁰
Connecticut	0	State (>1 MW)	CECPN from Siting Council (>1 MW) (P), DEEP checks congruence with IRP (S)	Y	Home	Y						M	LR	
Maine	266	State (>20 acres) ¹³	Permit from DEP (>20 acres) (P), Permit from LURC (for “unorganized” areas) ¹³ (P)		Dillon’s	Y					8	M	BL	
Massachusetts	38	State (≥100MW)	Permit from Energy Facilities Siting Board (≥100MW) (P)		Home	Y		Y	Model	Model	2	M	L	
Michigan	164	Local	PSC checks utility-owned and PPA projects for compliance with a utility’s renewable energy plans (S)	Y	Home		Y	Y			11	M	BS	Y, RGOS
New Hampshire	26	State (≥30 MW)	COSF from Site Evaluation Committee (≥30MW) (P)		Dillon’s	Y						M	DR	
New York	1,349	Local	CPCN from PUC (>25MW) (S)		Dillon’s	Y	Y W	Y	Model	Model	1	M	L	
Rhode Island	2	State (≥40 MW)	Approval from Energy Facility Siting Board (≥40 MW) (P)		Home	Y	Y		Y	Y		M		
Vermont	6	State	CPG from PSB (P)		Dillon’s		Y					G	M	



Summary of selected survey results

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- 26 states have state-government primary authority, 22 states have local-government primary authority, 2 states (Florida and Iowa) have shared authority
- 23 states plus DC require a certificate from the PUC
- 11 states have energy facility siting authorities separate from the state PUC, including Connecticut, Maine, New Hampshire, Rhode Island
- Facility size limits triggering state authority range from 1 MW in Connecticut and 5 MW in Ohio to 300 MW in New Mexico and 350 MW in Washington



Summary of selected survey results

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- 27 states have published lists of criteria used in wind park siting, only 2 (Maine and Minnesota) had published both criteria and standards
- 10 states have published voluntary guidelines, 5 states have published model ordinances for local governments
- Mandatory setback and sound standards are found in 3 states, including Rhode Island, and model setback and sound standards exist for 6 states, including Massachusetts and New York
- At the time of the NRRI survey, 6 states were updating or refining their wind siting practices, including Connecticut, New York, and Rhode Island.



Best Practices Recommendations for Siting Procedures

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Recommendation	Description
1. Develop procedures that result in clarity, predictability, and transparency	Jurisdictions with locations suitable for commercial wind development should anticipate interest and proceed to develop and publish siting and zoning procedures, principles, and guidelines.
2. Establish a one-stop, pre-submission consultation	Provide basic information for applicants in a single meeting, identifying and explaining the basics of all necessary permits and approvals.
3. Identify and map constrained and preferred wind energy development zones	Make available and accessible to the interested public GIS maps of exclusion, avoidance, and preferred development zones.
4. Include preferred development zones in transmission plans	Begin modeling and planning for wind power interconnections in preferred development zones as soon as the zones are identified.
5. Prepare and make available guidelines for participants	Explain procedures and timelines for when, where, and how to participate in public hearings. Provide information about decisions already completed through rulemaking.
6. Prepare and make available for local siting and zoning officials guidelines, checklists, and model ordinances	Support local government decision makers by providing the best available technical resources.
7. Ensure the sequence for obtaining permits and approvals meets requirements to allow development of suitable projects	The sequence of events leading to approval or rejection of an application should entail a logical progression through the planning and design stages, prior to siting and zoning approval that allows construction to begin.



Recommendations for Wind-Park Siting and Zoning Criteria, Setbacks

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Subjects addressed:

- Noise, sound, and infrasound
- Shadow flicker
- Ice throw
- Wildlife and habitat exclusion zones
- Aesthetic requirements
- Critical competing land uses
- Permit requirements for met towers, construction, facility safety
- Decommissioning
- Dispute resolution and mitigation



Vermont's common challenges

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- Integration with regional transmission organization
- State RPS mandates/goals
- FERC Hydroelectric Generator Jurisdiction, even over small projects
- Developing, uncertain, pre-institutional framework for sustainability
- Section 248 of Title 30 requirement:
“...will not have an undue adverse effect on esthetics [sic], historic sites, air and water purity, natural environment, and public health and safety with due consideration.”
- Section 250 requirements for water, conformance with the “Capability and Development Plan”



Vermont's special challenges

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- Small land parcels
- Mountainous terrain
- Dispersed populations with strong, long-standing sense of place

Excellent features already in Vermont's processes

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- Public notice provisions
- Welcoming interested persons, permissive intervention, board assistance/guidance grouping like-minded interests.
- Readily available electronic case files
- Site visits by board to all major projects
- Conditional approvals

Timelines and timeliness

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- Early public involvement is needed.
- Certainty, clarity, and transparency are more important than any absolute timeline.
- Make clear what decisions are being made and what input is being requested at each point in the process.
- Ideally, the energy regulatory process will lead to the best development process.



Interagency Coordination

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- Timing and sequence needs to work for all the agencies and for developers
- Goal: Translate rules and regulations to GIS, conveying critical information about
 - **red** (exclusion),
 - **yellow** (proceed with caution), and
 - **green** (go-ahead) zones.
 - Examples:
 - ✦ EISPC EZ mapping (<https://eispctools.anl.gov/>),
 - ✦ Great Lakes Wind Atlas (<http://erie.glin.net/wind/>), and
 - ✦ Vermont Renewable Energy Atlas (<http://www.vsjf.org/resources/renewable-energy-atlas>)