

Differences in Goodhue County Ordinance and current Permit Standards (10/20/10)

Yellow indicates a potential problem between the county ordinance and the Goodhue project.

*AVA
Goodhue*

Topic	Goodhue County Ordinance	PUC Goodhue Permit Conditions	Comments
Section 1. Purpose	Not Applicable (NA)	Not Applicable (NA)	
Section 2. Definitions	NA	NA	
Section 3. Procedures	NA	NA	
Subd. 1	NA	NA	
Subd. 2*	Application Req'mts*	NA*	
Subd. 3	Aggregated Projects	NA	
Subd. 4	Development Agreement	NA	
Subd. 5	Send Copies to County	NA	
Subd. 6	Liability Insurance	The applicant must provide proof of liability insurance covering the towers/project covering the lifespan of the project from the initial construction to final decommissioning.	Not required
Section 4. District Regulations			
Subd. 1	The zoning portions are NA, not a standard	NA	
	Property Lines	3 x 5 Rotor Diameter	Same
	Neighboring Dwellings	750-feet from participating homes, 10 RD from non-participating homes	1,000-ft from participating residences and 1,500-feet from non-participating residences 10 RD is roughly 2700-feet
	Road ROW	1.1x the height of the turbine (minimum maintenance roads have a lesser standard)	Greater than 250-feet
	Other ROW	The lesser of 1.1x the turbine height or the fall zone plus 10-feet (as certified by a professional engineer)	Compliant with other relevant law or industry standards (IEEE)

OK

*NO
difficult to accommodate*

	Public Conservation Lands	3 x 5 Rotor Diameter	Same	
	Wetlands	1,000-feet or 3 x 5 RD	No setback requirement, only no place 'in' a wetland	Ordinance doesn't define wetland, this is unusually large.
	Other Structures	The lesser of 1.1x the turbine height or the fall zone plus 10-feet (as certified by a professional engineer)	No requirement	The state doesn't have a condition regarding the distance from a building, it would be subject to the 3 x 5 RD if it was on a non-participating residence.
	Other Existing WECS, Internal Turbine Spacing	3 x 5 Rotor Diameter	3 x 5 Rotor Diameter (20 % can be sited closer to each other)	
	Bluffs	1,350-feet from the top of the Mississippi and Cannon River Bluffs, 500-feet from the top of other bluffs	No requirement	This wouldn't affect the Goodhue Project (as far as staff is aware).
Section 5. Requirements and Standards				
Subd. 1	Safety Design Standards			
	A. Engineering Cert.	MN PE must certify turbine, foundation and tower design of the WECS is within accepted professional standards, giving local soil and climate conditions.	This is a site dependent condition.	Goodhue would (most likely) have this completed anyways, internally.
	B. Clearance	Rotor blades or airfoils must maintain at least 12-feet of clearance between their lowest point and the ground.	Different than PUC.	This would occur, so no one would argue this.
	C. Warnings	For all commercial WECS, a sign or signs shall be posted on the tower, transformer and substation warning of high voltage.	Different than PUC.	
Subd. 2	Total Height	NA	NA	

have trouble with that -

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Subd. 3	Tower Config.	All wind turbines (commercial) shall be installed with a tubular, monopole type tower.	Different than PUC.	This is inherent when we approve 1 or 2 turbine types.
Subd. 4	Met Towers	May be guyed.	NA	NA
Subd. 5	Color and Finish	All wind turbines shall be white, grey or another non-obtrusive color. Blades may be black in order to facilitate deicing. Finishes shall be matte or non-reflective.	Different than PUC.	This is inherent when we approve turbine types.
Subd. 6	Lighting	Lighting, including lighting intensity and frequency of strobe, shall adhere to but not exceed requirements established by the FAA permits and regulations. ... Red pulsating incandescent lights should be avoided...	Different than PUC.	
Subd. 7	Other Signage	All signage must comply with Article 11, Section 18 of the Goodhue Co. Ordinance.	NA	Unknown what Art 11 is, or if it applies.
Subd. 8	Feeder Lines	NA	NA	
Subd. 9	Waste Disposal	Must be compliant with other laws	Same	
Subd. 10	Avoidance and Mitigation of damages to Public Infrastructure	A-H	Don't regulate.	Lengthy requirements. Most likely most are in the approved developer's agreement between Goodhue and the County - we'd have to let the applicant take a stab at this one.
Subd. 11	Repair	The applicant shall immediately repair any damage to public or private drainage systems caused by the project.	Require repair.	This would be 'ok-ed' by the applicant.
Subd. 12	Discontinuation and Decommissioning	5-requirements.	Different than PUC.	Lengthy, would have to have applicant indicate whether they could commit.
Subd. 13	Orderly development	Fill out OES form.	Not a requirement.	Applicant won't care.

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2, NO FAA object to red?

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No-follow thru

OK

Section 6. Stray Voltage Testing for Commercial WECS Projects				
Subd. 1	Pre-Construction Stray Voltage Test	Two tests required at all feedloes within project and the surrounding one-mile.	Not a requirement.	
Subd. 2	Send test to:	Sent to PUC, OES, property owner, local utility, and the county.	Not a requirement.	
Subd. 3	Fix Stray Voltage	WECS shall fix any stray voltage attributable to project.	Not a requirement.	
Section 7. Preliminary Acoustic Study for Commercial WECS				
Subd. 1	Noise Study	Must prove the project will be compliant with the MPCA noise standard.	Our requirement is that they 'are' compliant with the noise standard.	They chose the 10 RD to provide adequate noise buffer and not want this additionally?
Subd. 2	One mile buffer	Model should indicate that the project is compliant at all receptors within one-mile of the project.	Not required	These are too burdensome for the developer.
Section 7. Local Emergency Services Notification Requirement for Commercial WECS Projects				
Subd. 1	Provide Info	Provide project summary to emergency response.		Past the ability to do this at the onset, could do now and wouldn't be an issue.
Subd. 2	Goodhue DHS	Provide emergency response plan to local emergency response personnel and the Goodhue Co. Emergency Mgmt.	Not a requirement.	We require they coordinate with the fire and police. This shouldn't be an issue
Section 8. Other Applicable Standards				
Subd. 1	Noise	Must comply with MPCA	Required	

No
No
No

requires clarification

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Subd. 2	Electrical Codes	Must comply with NEC	Required	
Subd. 3	Owner/Op Info	Provide Owner/Operator information to the County on a yearly basis.	Not required	Wouldn't be an issue.
Subd. 4	MSBC	Comply with the Minnesota State Building Code	Required	
Subd. 5	Interference	NA		Only pertains to county towers.

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Other Notes:

Section 3. Subdivision 2.

* It is unclear to staff whether Section 3. Subd. 2, applies to facilities that are regulated by the State only. The Subdivision indicates:

The application for WECS that are under the permitting authority of this ordinance shall include the following information:

It is unclear due to the statement 'under the permitting authority of this ordinance' since the *permitting* authority in the ordinance is strictly 0-5 megawatts (MW) facilities¹. Therefore, this section and the information to be submitted that follows, would not apply to projects that are *not* under the permitting authority of the ordinance, because it expressly only applies to county regulated facilities.

If no statement was made, it would be assumed to be applied to 0-5 MW and considered at the state level when permitting any project in Goodhue County.

Therefore, staff does not incorporate Section 3, Subdivision 2 item in the comparison of County versus state permit conditions.

Section 3. Subdivision 5.

Staff is unclear on the reading of this ordinance; 'as regulated by the county' needs to be defined.

¹ See Section 1. Purpose