# **Minnesota Public Utilities Commission**

Staff Briefing Papers

Meeting Date:	June 30, 2011	<b>;</b> **	
Company:	AWA Goodhue Wind, LLC		
Docket Nos.	IP-6701/WS-08-1233		
	In the Matter of the Application of AWA Goodhue Wind, LLC for Large Wind Energy Conversion System (LWECS) Site Permit for the MW Goodhue Wind Project in Goodhue County		
Issue(s):	Should the Commission adopt the Report provided by the Administrative La Judge? Should the Commission grant a site permit to Goodhue Wind, LLC the 78 MW Goodhue Wind Project?		
Staff:	Tricia DeBleeckere(651) 201-22	254	
Relevant Docur	ments	—	
	and RecommendationsOctober 13, 20	)10	
	tal Comments and RecommendationsOctober 20, 20		
	Order for Hearing		
	Findings of Fact, Conclusions and Recommendations April 29, 20		
The Coalition for Sensible Siting – Exceptions (20115-62596-01)			
AWA Goodhue, LLC Other – Exceptions (20115-62624-01)			
Mn Dept. of Nat	Mn Dept. of Natural Resources – Letter - Exceptions (20115-62629-01)		
Belle Creek Tow	Belle Creek Township – Other – BCT's Exceptions (20115-62625-01)		
Goodhue Wind	Goodhue Wind Truth – Other - Exceptions (20115-62631-01)		
	County of Goodhue - Other - Exceptions (20115-62627-01)		
Public Comments with Proposed Exceptions to the ALJ's Findings			
Public Comment (20115-62708-01)			
	omment (20115-62636-01)		
Public Comment (20115-62642-01) State Representatives <sup>1</sup> Re: 216F May 20, 2011			
EFP Staff Briefing Papers – Comments and Recommendations			
	Minnesota Statutes 216F Parties' Exceptions Summary		

Attachment B: Parties' Exceptions Summary

Please note, on June 8, 2011 State Representatives Drazkowski and Kelly also filed comments that were not related to exceptions regarding the ALJ Report and were concerning eagle use near and within the project area.

The attached materials are workpapers of the Commission Staff. They are intended for use by the Public Utilities Commission and are based upon information already in the record unless noted otherwise.

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#### Statement of the Issue

Should the Commission adopt the Findings of Fact provided by the Administrative Law Judge? Should the Commission grant a site permit to AWA Goodhue Wind, LLC for the 78 MW Goodhue Wind Project?

#### Procedural Background

In November 2009, the Commission issued an order accepting the amended Goodhue Wind, LLC Large Wind Energy Conversion System (LWECS) site permit application pending additional information to be submitted by the Applicant.

During 2010, the application was processed through the LWECS siting process.

On October 13, 2010, the recently enacted (early October 2010) Goodhue County Ordinance was filed in this docket and which the County intended for the Commission to apply to the Goodhue Wind Project (Project).

On October 21, 2010, the matter was brought before the Commission for a decision on whether to issue a certificate of need (Docket 09-1186) and a LWECS site permit.

On November 2, 2010<sup>2</sup>, the Commission issued the *Order: Notice and Order for Hearing*, referring the docket to the Office of Administrative Hearings to address the following issues:

- 1. The ALJ assigned to this matter is requested to develop a record on every standard in Article 18 that is more stringent than what the Commission has heretofore applied to LWECS and make recommendations regarding each such standard whether the Commission should adopt it for Large Wind Energy Conversion Systems in Goodhue County. The Commission has identified two such standards in this Order (Section 4 and Section 6) but is not by this Order restricting the ALJ from developing the record and making recommendations regarding additional standards in Article 18 that upon further examination meet the "more stringent" qualification.
- 2. The ALJ assigned to this matter is requested to allow the parties to develop a factual record on the question of "good cause" as that term appears in Minn. Stat. § 216F.081 and to provide recommendations on whether, with respect to each standard in Article 18 identified in the course of her review as "more stringent" than what the Commission has heretofore applied to LWECS, there is "good cause" for the Commission to not apply the standard to siting LWECS in Goodhue County.
- 3. As the ALJ addresses the issues identified in the previous two sections, the ALJ is requested to include (but not limited to, by this Order) whether there is sufficient evidence regarding health and safety to support a 10 rotor diameter set-back for non-participating residents and the stray voltage requirements.

On March 15-17, 2011 evidentiary hearings were conducted in the Large Hearing Room of the Commission's Offices. Five parties took part in the hearings, the Applicant, Goodhue County, Belle Creek Township, Goodhue Wind Truth and the Coalition for Sensible Siting. The Department of Commerce, Division of Energy Resources (previously the Office of Energy Security), Energy Facilities

<sup>&</sup>lt;sup>2</sup> The Commission's November 2 Order is included as a relevant document to this briefing paper.

Permitting Unit (EFP) did not appear as a party in this case; their participation during the evidentiary hearings was limited to the filing of comments, affidavits and the questioning of witnesses. Commission staff was also present.

On April 29, 2011, Administrative Law Judge Kathleen D. Sheehy issued her *Decision: Findings of Fact, Conclusions, and Recommendations* (ALJ Report).

On May 16, 2011, the five parties and the Department of Natural Resources filed exceptions to the ALJ's Report. Members of the public also filed comments which are summarized below.

#### Issues

Staff sees the main issues that need to be contemplated by the Commission in this matter are: 1) whether to consider the County's ordinance pursuant to Minn. Stat. §216F.081; 2) establishment of good cause (or lack thereof) to not apply Goodhue County's wind ordinance and 3) issuance of the Findings of Fact and Site Permit (as provided by the EFP Briefing Papers on this matter).

1) 216F.08 - Permit Authority; Assumption by Counties and 216F.081 - Application of County Standards

Application of County Standards

Staff has included the full text of Minnesota Statute § 216F as Attachment A to this briefing paper.

In the November 2 Commission Order referring this matter to the OAH for further proceedings, the order stated:

On October 5, 2010, the Goodhue County Board of Commissioners adopted amendments to the Goodhue County Zoning Ordinance, specifically Article 18 Wind Energy Conversion System regulations. Among other things, Article 18 includes a 10 Rotor Diameter (10 RD) setback requirement for non-participating landowners (Section 4) and requirements aimed at minimizing any harm due to stray voltage (Section 6). Article 18 states an intention to regulate the installation and operation of Wind Energy Conversion Systems (WECS) within Goodhue County that have a total nameplate capacity of 5 Megawatts or less (Small Wind Energy Conversion Systems – SWECS) and that are not otherwise subject to siting and oversight by the State of Minnesota pursuant to Minnesota Statutes, Chapter 216F.

With respect to Large Wind Energy Conversion Systems (LWECS) such as the system proposed by the Applicant Goodhue Wind in this matter, the ordinance states:

For LWECS, the county does not assume regulatory responsibility or permit authority under MS 216F.08, but any standards more stringent than those of the MPUC are to be considered and applied to LWECS per MS 216F.081.

Based on this section and confirmed by representatives of the Goodhue County Board at the Commission's October 21, 2010 meeting, the Commission finds that the Goodhue County Commissioners intended the Commission to be required "per MS 216F.081" to consider "any standards more stringent than those of the MPUC" when considering the application of Goodhue Wind (and any other proposer of an LWECS project in Goodhue County) for a site permit.

Minn. Stat. § 216F.081 states:

A county may adopt by ordinance standards for LWECS that are more stringent than standards in commission rules or in the commission's permit standards. The commission, in considering a permit application for LWECS in a county that has adopted more stringent standards, shall consider and apply those more stringent standards, unless the commission finds good cause not to apply the standards.

The Commission finds that certain provisions of Goodhue County Zoning Ordinance, Sections 4 and 6 of Article 18 Wind Energy Conversion System Regulations, adopt "more stringent standards" than the Commission has adopted heretofore with respect to the LWECS it regulates. As a consequence, the Commission is required, pursuant to Minn. Stat. § 216F.081 to "consider and apply those standards, unless it finds "good cause" not to apply those standards.

The Applicant has strenuously objected to the imposition of these more stringent standards on its project, but the record to date does not establish "good cause" for the Commission not to apply them.

In the ALJ's December 8, 2010 First Prehearing Order, Order point #13 noted:

13. As noted above, the parties may submit legal argument on how the good cause standard should be applied, if at all, in their closing memoranda. In particular, the Administrative Law Judge would like the parties to brief the issue whether Minn. Stat. 216F.081 (2008) is intended to apply only to counties that have assumed the responsibility to process applications and issue permits for LWECS with a combined nameplate capacity of less than 25 MW pursuant to Minn. Stat. 216F.081. ...

This is not an issue that the Commission referred to the ALJ. The ALJ's findings on this issue are included in her report as findings #39 - 47.

#### Parties' Positions

The parties' positions on this issue are summarized within the Judge's findings #39-#47 in Attachment B – Parties' Exceptions Summary.

Please also see the letter on this issue from Minnesota Representatives Drazkowski and Kelly dated May 15, 2011, included as a relevant document to this briefing paper (eFiled May 17, 2011).

#### Staff Comment

Staff recommends that the Commission consider all parties' positions on this matter and their previous November 2, 2010 Order for Hearing (cited above).

Staff believes that if the Commission comes to the same conclusion as the November 2, 2010 Order, it should strike ALJ findings #40-46 on the basis that the Commission has already considered this matter and the matter was not referred to the ALJ. Findings #39 and 47 are general in nature and staff doesn't believe the findings would need to be omitted.

If the Commission finds otherwise, and determines that the county ordinance should not be applied since Goodhue County did not take on permitting authority for facilities up to 25 MW, the

Commission could adopt the findings as written by the ALJ. Following, the Commission would not need to consider the following issues outlined in this briefing paper (good cause to apply or not apply the County Ordinance) since the County Ordinance would no longer be applicable. The Commission could move directly to consideration of the EFP staff's comments and recommendations on site permit issuance.

### 2) Good Cause

Staff has compiled a summary table of the parties' exceptions to the ALJ's Findings, included to these briefing papers as Attachment B – Parties' Exceptions Summary; staff recommends referring to each Party's official exception filing (included as relevant documents to this briefing paper) for entire comments.

Staff incorporates comments within the table on findings #10, 60 and 71 and provides comments on findings #39-47, above.

Staff notes that exceptions to the ALJ Report were also filed by members of the public regarding findings #10, 18, 25, 34 and 149, those comments are included as relevant documents to this briefing paper and are referenced within the exceptions table.

# 3) EFP Findings of Fact and Proposed Draft LWECS Site Permit

See EFP's briefing paper regarding their proposed findings of fact and draft LWECS site permit.

### Staff Recommendation

Staff recommends adopting the ALJ's Report with the following changes:

- 1) modifications to findings #10, 60 and 71 as outlined in Attachment B under 'Staff';
- 2) striking findings #40-46, as discussed above; and
- 3) providing for other modifications the Commission deems necessary.

# **Commission Decision Alternatives**

#### A. ALJ Report

- 1. Adopt ALJ Report;
- 2. Modify and adopt the ALJ Report as provided by staff (above) *without* additional modifications:
- 3. Modify and adopt the ALJ Report as provided by staff (above) *with* additional modifications; or,
- 4. Take some other action.

### B. Site Permit Issuance

See EFP staff briefing papers for decision options.

# **CHAPTER 216F**

### WIND ENERGY CONVERSION SYSTEMS

216F.01	DEFINITIONS.	216F.06	MODEL ORDINANCE.
216F.011	SIZE DETERMINATION.	216F.07	PREEMPTION.
216F.012	SIZE ELECTION.	216F.08	PERMIT AUTHORITY; ASSUMPTION BY
216F.02	EXEMPTIONS.		COUNTIES.
216F.03	SITING OF LWECS.	216F.081	APPLICATION OF COUNTY STANDARDS.
216F.04	SITE PERMIT.	216F.09	WECS AGGREGATION PROGRAM.
216F.05	RULES.		

#### 216F.01 DEFINITIONS.

Subdivision 1. **Scope.** As used in this chapter, the terms defined in section 216E.01 and this section have the meanings given them, unless otherwise provided or indicated by the context or by this section.

- Subd. 2. Large wind energy conversion system or LWECS. "Large wind energy conversion system" or "LWECS" means any combination of WECS with a combined nameplate capacity of 5,000 kilowatts or more.
- Subd. 3. **Small wind energy conversion system or SWECS.** "Small wind energy conversion system" or "SWECS" means any combination of WECS with a combined nameplate capacity of less than 5,000 kilowatts.
- Subd. 4. **Wind energy conversion system or WECS.** "Wind energy conversion system" or "WECS" means any device such as a wind charger, windmill, or wind turbine and associated facilities that converts wind energy to electrical energy.

**History:** 1995 c 203 s 1

#### 216F.011 SIZE DETERMINATION.

- (a) The total size of a combination of wind energy conversion systems for the purpose of determining what jurisdiction has siting authority under this chapter must be determined according to this section. The nameplate capacity of one wind energy conversion system must be combined with the nameplate capacity of any other wind energy conversion system that:
  - (1) is located within five miles of the wind energy conversion system;
- (2) is constructed within the same 12-month period as the wind energy conversion system; and
- (3) exhibits characteristics of being a single development, including, but not limited to, ownership structure, an umbrella sales arrangement, shared interconnection, revenue sharing arrangements, and common debt or equity financing.
- (b) The commissioner shall provide forms and assistance for project developers to make a request for a size determination. Upon written request of a project developer, the commissioner of commerce shall provide a written size determination within 30 days of receipt of the request and of any information requested by the commissioner. In the case of a dispute, the chair of the Public Utilities Commission shall make the final size determination.

(c) An application to a county for a permit under this chapter for a wind energy conversion system is not complete without a size determination made under this section.

**History:** 2007 c 136 art 4 s 12

### 216F.012 SIZE ELECTION.

- (a) A wind energy conversion system of less than 25 megawatts of nameplate capacity as determined under section 216F.011 is a small wind energy conversion system if, by July 1, 2009, the owner so elects in writing and submits a completed application for zoning approval and the written election to the county or counties in which the project is proposed to be located. The owner must notify the Public Utilities Commission of the election at the time the owner submits the election to the county.
- (b) Notwithstanding paragraph (a), a wind energy conversion system with a nameplate capacity exceeding five megawatts that is proposed to be located wholly or partially within a wind access buffer adjacent to state lands that are part of the outdoor recreation system, as enumerated in section 86A.05, is a large wind energy conversion system. The Department of Natural Resources shall negotiate in good faith with a system owner regarding siting and may support the system owner in seeking a variance from the system setback requirements if it determines that a variance is in the public interest.
- (c) The Public Utilities Commission shall issue an annual report to the chairs and ranking minority members of the house of representatives and senate committees with primary jurisdiction over energy policy and natural resource policy regarding any variances applied for and not granted for systems subject to paragraph (b).

**History:** 2008 c 296 art 1 s 18

### 216F.02 EXEMPTIONS.

- (a) The requirements of chapter 216E do not apply to the siting of LWECS, except for sections 216E.01; 216E.03, subdivision 7; 216E.08; 216E.11; 216E.12; 216E.14; 216E.15; 216E.17; and 216E.18, subdivision 3, which do apply.
- (b) Any person may construct an SWECS without complying with chapter 216E or this chapter.
- (c) Nothing in this chapter shall preclude a local governmental unit from establishing requirements for the siting and construction of SWECS.

**History:** 1995 c 203 s 2

#### 216F.03 SITING OF LWECS.

The legislature declares it to be the policy of the state to site LWECS in an orderly manner compatible with environmental preservation, sustainable development, and the efficient use of resources.

**History:** 1995 c 203 s 3

# 216F.04 SITE PERMIT.

(a) No person may construct an LWECS without a site permit issued by the Public Utilities Commission.

- (b) Any person seeking to construct an LWECS shall submit an application to the commission for a site permit in accordance with this chapter and any rules adopted by the commission. The permitted site need not be contiguous land.
- (c) The commission shall make a final decision on an application for a site permit for an LWECS within 180 days after acceptance of a complete application by the commission. The commission may extend this deadline for cause.
- (d) The commission may place conditions in a permit and may deny, modify, suspend, or revoke a permit.

**History:** 1995 c 203 s 4; 2005 c 97 art 3 s 19

#### 216F.05 RULES.

The commission shall adopt rules governing the consideration of an application for a site permit for an LWECS that address the following:

- (1) criteria that the commission shall use to designate LWECS sites, which must include the impact of LWECS on humans and the environment;
  - (2) procedures that the commission will follow in acting on an application for an LWECS;
- (3) procedures for notification to the public of the application and for the conduct of a public information meeting and a public hearing on the proposed LWECS;
  - (4) requirements for environmental review of the LWECS;
- (5) conditions in the site permit for turbine type and designs; site layout and construction; and operation and maintenance of the LWECS, including the requirement to restore, to the extent possible, the area affected by construction of the LWECS to the natural conditions that existed immediately before construction of the LWECS;
- (6) revocation or suspension of a site permit when violations of the permit or other requirements occur; and
- (7) payment of fees for the necessary and reasonable costs of the commission in acting on a permit application and carrying out the requirements of this chapter.

**History:** 1995 c 203 s 5; 2005 c 97 art 3 s 19

### 216F.06 MODEL ORDINANCE.

The commission may assist local governmental units in adopting ordinances and other requirements to regulate the siting, construction, and operation of SWECS, including the development of a model ordinance.

**History:** 1995 c 203 s 6; 2005 c 97 art 3 s 19

### 216F.07 PREEMPTION.

A permit under this chapter is the only site approval required for the location of an LWECS. The site permit supersedes and preempts all zoning, building, or land use rules, regulations, or ordinances adopted by regional, county, local, and special purpose governments.

**History:** 1995 c 203 s 7

### 216F.08 PERMIT AUTHORITY; ASSUMPTION BY COUNTIES.

(a) A county board may, by resolution and upon written notice to the Public Utilities Commission, assume responsibility for processing applications for permits required under this

chapter for LWECS with a combined nameplate capacity of less than 25,000 kilowatts. The responsibility for permit application processing, if assumed by a county, may be delegated by the county board to an appropriate county officer or employee. Processing by a county shall be done in accordance with procedures and processes established under chapter 394.

- (b) A county board that exercises its option under paragraph (a) may issue, deny, modify, impose conditions upon, or revoke permits pursuant to this section. The action of the county board about a permit application is final, subject to appeal as provided in section 394.27.
- (c) The commission shall, by order, establish general permit standards, including appropriate property line set-backs, governing site permits for LWECS under this section. The order must consider existing and historic commission standards for wind permits issued by the commission. The general permit standards shall apply to permits issued by counties and to permits issued by the commission for LWECS with a combined nameplate capacity of less than 25,000 kilowatts. The commission or a county may grant a variance from a general permit standard if the variance is found to be in the public interest.
- (d) The commission and the commissioner of commerce shall provide technical assistance to a county with respect to the processing of LWECS site permit applications.

**History:** 2007 c 136 art 4 s 13

### 216F.081 APPLICATION OF COUNTY STANDARDS.

A county may adopt by ordinance standards for LWECS that are more stringent than standards in commission rules or in the commission's permit standards. The commission, in considering a permit application for LWECS in a county that has adopted more stringent standards, shall consider and apply those more stringent standards, unless the commission finds good cause not to apply the standards.

**History:** 2007 c 136 art 4 s 14

# 216F.09 WECS AGGREGATION PROGRAM.

Subdivision 1. **Program established.** The entity selected to provide rural wind development assistance under Laws 2007, chapter 57, article 2, section 3, subdivision 6, shall also establish a wind energy conversion system (WECS) aggregation program. The purpose of the program is to create a clearinghouse to coordinate and arrange umbrella sales arrangements for groups of individuals, farmstead property owners, farmers' cooperative associations, community-based energy project developers, school districts, and other political subdivisions to aggregate small-volume purchases, as a group, in order to place large orders for wind energy conversion systems with WECS manufacturers.

# Subd. 2. **Responsibilities.** The entity shall:

- (1) provide application procedures for participation in the program;
- (2) set minimum standards for wind energy conversion systems to be considered for purchase through the program, which may include price, quality and installation standards, timely delivery schedules and arrangements, performance and reliability ratings, and any other factors considered necessary or desirable for participants;
- (3) set eligibility considerations and requirements for purchasers, including availability to the applicant of land authorized for installation and use of WECS, likelihood of a permit being

approved by the commission or a county under this chapter, documentation of adequate financing, and other necessary or usual financial or business practices or requirements;

- (4) provide a minimal framework for soliciting or contacting manufacturers on behalf of participants; and
  - (5) coordinate purchase agreements between the manufacturer and participants.
- Subd. 3. **Report.** By February 1, 2009, and each year thereafter, the commissioner of commerce shall submit a report to the chairs and ranking minority members of the senate and house of representatives committees with primary jurisdiction over energy policy on the activities and results of the program, including the number of participants and the number of purchases made.
- Subd. 4. **Assessment; appropriation.** Annual costs of the program, up to \$100,000, must be assessed under section 216C.052, subdivision 2, paragraph (c), clause (1). The assessment is appropriated to the commissioner of commerce to be used by the director of the Office of Energy Security for a grant to the entity to carry out the purposes of this section.

**History:** 2008 c 296 art 1 s 19

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# Attachment B -Parties' Exception Summary

For an official copy of the parties' exceptions, please see each party's exception filing included as relevant document to staff's briefing paper.

Please note, staff did not include parties' proposed exceptions to the Judge's heading titles, witness list, sequence of findings or other items that were not the Judge's findings or recommendations.

Staff also did not incorporate parties' exceptions to the judge's footnotes or newly proposed footnotes due to formatting limitations. Staff incorporated any new footnote *number* references within party's proposed modified findings, or exception language – see the original exception filings for parties' modified or newly proposed footnotes.

Belle Creek Township has reviewed the Exceptions to Findings of Fact, Conclusions, and Recommendations of Goodhue County, and for the purposes of judicial efficiency, Belle Creek Township joins in the Exceptions put forward by Goodhue County in all respects, and adopts such Exceptions as its own.

# I. Statutory Background.

ALJ Finding 1.	1. Wind energy developments are governed by the Minnesota Wind Siting Act, Minnesota Statutes Chapter 216F. The chapter defines a large wind energy conversion system (LWECS) as any combination of wind energy conversion systems with a combined nameplate capacity of 5 megawatts (5,000 kilowatts) or more. A small wind energy conversion system (SWECS) means any combination with combined nameplate capacity of less than 5 megawatts. <sup>3</sup> It is the policy of the state to site LWECS in an orderly manner compatible with environmental preservation, sustainable development, and the efficient use of resources. <sup>4</sup>
County	Exception to Number 1:  LWEC site permits are subject to Minnesota Rules Chapter 7854, Public Utilities Commission Site Permit; Large Wind Energy System. LWECS up to 25 MW are also subject to Commissioner's Order "In The Matter of Establishment of General Permit Standards for the Siting of Wind Generation Projects Less Than 25 Megawatts, Order Establishing General Wind Permit Standards, Docket No. E,G-999/M-07-1102 (Jan. 11, 2008)."
GWT	1. Wind energy developments are governed by the Minnesota Wind Siting Act, Minnesota Statutes Chapter 216F. The chapter defines a large wind energy conversion system (LWECS) as any combination of wind energy conversion systems with a combined nameplate capacity of 5 megawatts (5,000 kilowatts) or more. A small wind energy conversion system (SWECS) means any combination with combined nameplate capacity of less than 5 megawatts." Those projects under 25MW are also subject to the standards found in the Commission's Order "In The Matter of Establishment of General Permit Standards for the Siting of Wind Generation Projects Less Than 25 Megawatts, Order Establishing General Wind Permit Standards, Docket No. E,G-999/M-07-1102. It is the policy of the state to site LWECS in an orderly manner compatible with environmental preservation, sustainable development, and the

<sup>&</sup>lt;sup>3</sup> Minn. Stat.§ 216F.01, subds. 2 & 3.

<sup>&</sup>lt;sup>4</sup> Minn. Stat.§ 216F.03.

### efficient use of resources,"

# CFSS

1. Wind energy developments are governed by the Minnesota Wind Siting Act, Minnesota Statutes Chapter 216F. The following should be added "The chapter defines a large wind energy conversion system (LWECS) as any combination of wind energy conversion systems with a combined nameplate capacity of 5 megawatts (5,000 kilowatts) or more." A small wind energy conversion system (SWECS) means any combination with combined nameplate capacity of less than 5 megawatts. It is the policy of the state to site LWECS in an orderly manner compatible with environmental preservation, sustainable development, and the efficient use of resources.

Exception to No. 1: It is imperative that the following be added to this section. "LWECS up to 25 MW are also subject to Commissioner's Order "In The Matter of Establishment of General Permit Standards for the Siting of Wind Generation Projects Less Than 25 Megawatts, Order Establishing General Wind Permit Standards, Docket No. E,G-999/M-07-1102 (Jan. 11, 2008)." Throughout the submission of testimony in this matter and at the hearing, the PUC has taken the position that this guidance document applies as law.

# ALJ Finding 2.

2. No person may construct a LWECS without a site permit from the Public Utilities Commission.<sup>5</sup> A permit under Chapter 216F is the only site approval required for the location of an LWECS. The site permit supersedes and preempts all zoning, building, or land use rules, regulations, or ordinances adopted by regional, county, local, and special purpose governments.<sup>6</sup> Local governments may establish requirements for the siting and construction of SWECS.<sup>7</sup>

### **CFSS**

2. No person may construct a LWECS without a site permit from the Public Utilities Commission. A permit under Chapter 216F is the only site approval required for the location of an LWECS. The site permit supersedes and preempts all zoning, building, or land use rules, regulations, or ordinances adopted by regional, county, local, and special purpose governments. Local governments may establish requirements for the siting and construction of SWECS.

Exception to No. 2: In the second sentence above, the ALJ makes a confusing statement about "site approval required for the location of an LWECS." A more accurate statement of the law provides that a permit issued by the PUC pursuant to Chapter 216F is required to locate an LWECS in any location in Minnesota. Other permitting agencies have jurisdiction over LWECs siting like the US Fish and Wildlife Service for critical habitat and the Minnesota Department of Natural Resources and the US Army Corps of Engineers with respect to the location of LWECS in and around wetlands and finally the Federal Aviation Administration with respect to LWECS placement near air traffic.

# ALJ Finding 3.

3. In 2007, chapter 216F was amended by the Next Generation Energy Act of 2007. The amendments provided in relevant part that a county board may assume responsibility for processing applications for permits for LWECS with a combined nameplate capacity of less than 25 megawatts, if the board takes such action by resolution and provides written notice to the Public Utilities Commission. The legislature required the Commission to establish, by order, general permit standards (including property line setbacks) for LWECS under this section. The statute further provides that the order must consider existing and historic commission standards for wind permits issued by the commission. These general permit standards "shall apply to permits issued by counties and to permits issued by the

<sup>&</sup>lt;sup>5</sup> Minn. Stat.§ 216F.04.

<sup>&</sup>lt;sup>6</sup> Minn. Stat.§ 216F.07.

<sup>&</sup>lt;sup>7</sup> Minn. Stat.§ 216F.02(c).

<sup>&</sup>lt;sup>8</sup> Minn. Stat.§ 216F.08(a).

commission for LWECS with a combined nameplate capacity of less than 25,000 kilowatts." The commission or a county may grant variance from a general permit standard if the variance is found to be in the public interest.9 ALJ 4. Included in the 2007 amendments was the following provision: Finding A county may adopt by ordinance standards for LWECS that are more stringent than standards in commission rules or in the commission's permit standards. The commission, in considering a permit application for LWECS in a county that has adopted more stringent standards, shall consider and apply those more stringent standards, unless the commission finds good cause not to apply the standards. 10 ALJ 5. In response to these amendments, the Commission opened a docket to **Finding** establish general wind permit standards that would be applicable to permits issued by 5. counties and to permits issued by the commission for LWECS with a combined nameplate capacity of less than 25 megawatts. After notice and a comment period, the Commission issued an order establishing general wind turbine permit setbacks and standards for LWECS facilities permitted by counties pursuant to Minn. Stat. § 216F.08. As stated in the Order, these standards and setbacks maintain most of the Commission's established LWECS permit standards and setbacks that had been in effect for the previous 12 years, with some minor changes. 11 County Exception to Number 5: These rules apply only to LWECS with a combined nameplate capacity of less than 25 megawatts. No official standards have been adopted for LWECS 25 MW or larger. The OES/EFP develops recommendations for each permit individually. OES/EFP relies on their knowledge of past permits and conversations with the applicant to develop permit requirements for each new project. Footnote No. 1 on Pg. 2 of Judge Sheehy's Second Prehearing Order acknowledges that: "The recommended standards appear to be based (emphasis added) on the Commission's order establishing general wind permit standards, as modified by the Applicant's agreement in this case to increase the setback from non-participating dwellings. See In the Matter of Establishment of General Permit Standards for the Siting of Wind Generation Projects Less than 25 Megawatts, Order Establishing General Wind Permit Standards, Docket No. E,G-999/M-07-1102 (Jan. 11, 2008)." The title of the Order limits its authority to "Projects Less than 25 Megawatts" while the language of the Order itself reiterates this limitation. "ORDER 1. The Commission herein adopts the Large Wind Energy Conversion System General Wind Turbine Permit Setbacks and Standards proposed by the

<sup>10</sup> Minn. Stat. s 216F.081.

<sup>&</sup>lt;sup>9</sup> Minn. Stat. § 216F.08(c).

<sup>&</sup>lt;sup>11</sup> In the Matter of Establishment of General Permit Standards for the Siting of Wind Generation Projects Less than 25 Megawatts, Docket No. E,G-999/M-07-1102, Order Establishing General Wind Permit Standards (Jan. 11, 2008) (General Wind Permit Standards Order). For ease of reference, a copy of this Order and its attached Ex. A was received in evidence as Ex. 21.

Department of Commerce Energy Facility Permitting staff, attached as Exhibit A. The general permit standards shall apply to large wind energy conversion system site permits issued by counties pursuant to Minn. Stat. 216F.08 and to permits issued by the Commission for LWECS with a combined nameplate capacity of less than 25,000 watts.

- 2. The Commission requests that the Department of Commerce Energy Facility Permitting staff further investigate wetland setback issues with stakeholders and develop recommendations for Commission consideration.
- 3. This Order shall become effective immediately."

Page 7 of *In the Matter of Establishment of General Permit Standards for the Siting of Wind Generation Projects Less than 25 Megawatts*, Order Establishing General Wind Permit Standards, Docket No. E,G-999/M-07-1102 (Jan. 11, 2008).

No citation is provided in this Order or in any of the OES permit documents associated with PUC Dockets in this matter, to broader general performance permit standards, rules or orders currently adopted by MNPUC and enforced by the OES EFP. No such minimum standards currently exist in binding policy to inform local governments, the public or the applicant what performance standards will be applied to evaluate, permit and regulate large wind energy conversion systems 25 MW or greater in size. The OES EFP staff did provide a chart summarizing their assessment of variations between the Goodhue County Wind Regulations and the requirements typically imposed as part of the PUC permitting process. These common permit requirements for LWECS 25 MW or larger are not part of a PUC Order, Rule, or Minnesota Statute. See also Minn. Stat. § 14.05 for requirements for rule making.

GWT

5. In response to these amendments, the Commission opened a docket to establish general wind permit standards that would be applicable to permits issued by counties and to permits issued by the commission for LWECS with a combined nameplate capacity of less than 25 megawatts. Noting in a letter to Commerce that there are no formal siting standards and instead an "implementation approach" has been used:

Commission staff and Department of Commerce Energy Facility Permitting staff have developed an implementation approach that relies on the Department's wind siting expertise and the former EQB staff's role in development of the historic standards that currently support the Commission's wind siting decisions...<sup>14</sup>

After notice and a comment period, the Commission issued an order establishing general wind turbine permit setbacks and standards for LWECS facilities <u>under 25 MW</u> permitted by counties pursuant to Minn. Stat. § 216F.03. <u>However, although the legislature required the Commission to establish, by order, general permit standards (including property line setbacks) for LWECS, general permit standards have not been established and the Commission has yet to comply with the statute. As stated in the Order, these standards and setbacks maintain most of the Commission's established <u>practice in siting</u> LWECS <u>on a case-by-case basis-permit standards and setbacks that had been in effect</u> for the previous 12 years, with some minor changes. <u>Permits are issued on a case-by-case basis, with setbacks being increased arbitrarily, in some cases with specific language that this is not to be regarded as "standards" for future siting dockets:</u></u>

Adoption of this special condition is based on facts unique to this case and provides no precedent or foreshadowing regarding the size of the set back that the Commission may deem appropriate and reasonable to require in future dockets. 15

#### **CFSS**

Exception to Number 5: These rules apply only to LWECS with a combined nameplate capacity of less than 25 megawatts application of these principals to LWECS larger than 25 MWs would be unauthorized rule making and a violation of the Administrative Procedure Act, Minn. Stat. §14.00, et. al.

The PUC has not adopted any rules for LWECS 25 MW or larger which would apply to the present project.

The OES/EFP develops recommendations for each permit individually relying on their knowledge of past permits and conversations with the applicant to develop permit requirements for each new project. This process is a prima facie violation of the Minnesota Administrative Procedures Act.

The ALJ identifies this violation in the Footnote No. 1 on Pg. 2 of the Second Prehearing Order acknowledges that:

"The recommended standards **appear to be based** on the Commission's order establishing general wind permit standards, as modified by the Applicant's agreement in this case to increase the setback from non-participating dwellings. See *In the Matter of Establishment of General Permit Standards for the Siting of Wind Generation Projects Less than 25 Megawatts*, Order Establishing General Wind Permit Standards, Docket No. E,G-999/M-07-1102 (Jan. 11, 2008)."

Furthermore, the PUC's own record does not support the ALJ's contention that PUC has established standards for LWECS greater than 25 MW in size. Page 7 of *In the Matter of Establishment of General Permit Standards for the Siting of Wind Generation Projects Less than 25 Megawatts*, Order Establishing General Wind Permit Standards, Docket No. E,G-999/M-07-1102 (Jan. 11, 2008). The mere *appearance* that the standards established by the PUC for projects that are less than 25 MW in size should apply to larger projects reflects either an intentional or unintentional ignorance of the Minnesota Administrative Procedures Act requirements and procedures for establishment of administrative rules by Regulatory Agencies in Minnesota.

No such minimum standards currently exist in binding policy to inform local governments, the public or the applicant what performance standards will be applied to evaluate, permit and regulate large wind energy conversion systems 25 MW or greater in size. The OES EFP staff did provide a chart summarizing their assessment of variations between the Goodhue County Wind Regulations and the requirements typically imposed as part of the PUC permitting process. These common permit requirements for LWECS 25 MW or larger are not part of a PUC Order, Rule, or Minnesota Statute.

# ALJ Finding 6.

6. The Commission's *General Wind Permit Standards Order* contains setbacks and standards for LWECS that are permitted by counties under Minn. Stat. § 216F.08. Those standards are essentially the same as the permit standards the Commission had developed in other dockets and had previously applied to all LWECS, prior to the 2007 amendments. <sup>12</sup>

# GWT

6. The Commission's *General Wind Permit Standards Order for the Siting of Wind Generation Projects Less than 25 Megawatts* contains setbacks and standards for LWECS that are permitted by counties under Minn. Stat. § 216F.03. Those standards apply only to those project under 25 MW.<sup>16</sup> are essentially the same as the permit standards the Commission had developed in other dockets and had previously applied to all

<sup>&</sup>lt;sup>12</sup> Ex. 21 at 3 and Attachment A. See also Ex. 24A at 514 (commission permit standards developed in generic dockets and individual project dockets).

### LWECS, prior to the 2007 amendments. 12

# CFSS

Exception to No. 6: These rules apply only to LWECS with a combined nameplate capacity of less than 25 megawatts application of these principals to LWECS larger than 25 MWs would be unauthorized rule making and a violation of the Administrative Procedure Act, Minn. Stat. §14.00, et. al.

The PUC has not adopted any rules for LWECS 25 MW or larger which would apply to the present project.

The OES/EFP develops recommendations for each permit individually relying on their knowledge of past permits and conversations with the applicant to develop permit requirements for each new project. This process is a prima facie violation of the Minnesota Administrative Procedures Act.

The ALJ identifies this violation in the Footnote No. 1 on Pg. 2 of the Second Prehearing Order acknowledges that:

"The recommended standards **appear to be based** on the Commission's order establishing general wind permit standards, as modified by the Applicant's agreement in this case to increase the setback from non-participating dwellings. See *In the Matter of Establishment of General Permit Standards for the Siting of Wind Generation Projects Less than 25 Megawatts*, Order Establishing General Wind Permit Standards, Docket No. E,G-999/M-07-1102 (Jan. 11, 2008)."

Furthermore, the PUC's own record does not support the ALJ's contention that PUC has established standards for LWECS greater than 25 MW in size. Page 7 of *In the Matter of Establishment of General Permit Standards for the Siting of Wind Generation Projects Less than 25 Megawatts*, Order Establishing General Wind Permit Standards, Docket No. E,G-999/M-07-1102 (Jan. 11, 2008). The mere *appearance* that the standards established by the PUC for projects that are less than 25 MW in size should apply to larger projects reflects either an intentional or unintentional ignorance of the Minnesota Administrative Procedures Act requirements and procedures for establishment of administrative rules by Regulatory Agencies in Minnesota.

No such minimum standards currently exist in binding policy to inform local governments, the public or the applicant what performance standards will be applied to evaluate, permit and regulate large wind energy conversion systems 25 MW or greater in size. The OES EFP staff did provide a chart summarizing their assessment of variations between the Goodhue County Wind Regulations and the requirements typically imposed as part of the PUC permitting process. These common permit requirements for LWECS 25 MW or larger are not part of a PUC Order, Rule, or Minnesota Statute.

# ALJ Finding 7.

7. As of January 2010, six counties had assumed responsibility to permit wind projects: Lyon, Murray, Freeborn, Lincoln, Stearns, and Meeker counties.<sup>13</sup>

### GWT

7. As of January 2010, six counties had assumed responsibility to permit wind projects: Lyon, Murray, Freeborn, Lincoln, Stearns, and Meeker counties. As of January 2010, here were more than 1,400 wind turbines in Minnesota with a total nameplate capacity of more than 1,800 megawatts. 17

<sup>&</sup>lt;sup>13</sup> Ex. 24A at 510.

ALJ	
Finding	8. As of January 2010, there were more than 1,400 wind turbines in Minnesota with
8.	a nameplate capacity of more than 1,800 megawatts. Of those turbines, approximately
	1,058 were permitted by the MPUC, and 361 were permitted by local governments. <sup>14</sup>
County	Exception to Number 8:
	There were more than 1,400 wind turbines in Minnesota with a total nameplate capacity
	of more than 1,800 megawatts. See Ex. 24A at 503.
GWT	8. As of January 2010, there were more than 1,400 wind turbines in Minnesota with a
	nameplate capacity of more than 1,800 megawatts. Of those turbines, approximately 1,058
	were permitted by the MPUC, and 361 were permitted by local governments.
CFSS	Exception to Number 8: There were more than 1,400 wind turbines in Minnesota with a
	total nameplate capacity of more than 1,800 megawatts. See Ex. 24A at 503.
ALJ	
Finding	9. The Applicant, AWA Goodhue, LLC, is the developer of a proposed 78 MW
9.	wind farm in Goodhue County. The project as proposed consists of 50 1.5- or 1.6-MW GE
	xle wind turbine generators, gravel access roads, an underground electrical collection
	system, two permanent meteorological towers, an operation and maintenance facility, two
	project substations, and step-up transformers at the base of each turbine. The
	expected cost to design and construct the project is \$179 million <sup>15</sup> .
County	Exception to Number 9:
	holes Observe at all as March 40,0040, that for a sightime at a consequence the sales and
	Judge Sheehy noted on March 16, 2010, that financial impacts were marginally relevant.
GWT	Transcript Vol. 2, p. 157-158, line 19-3.  9. The Applicant, AWA Goodhue, LLC, filed its initial siting application on October
	24, 2008 <sup>18</sup> . AWA Goodhue, LLC is the developer of a proposed 78 MW wind farm in
	Goodhue County. The project as proposed consists of 50 1.5- or 1.6-MW GE xle wind
	turbine generators, gravel access roads, an underground electrical collection system, two
	permanent meteorological towers, an operation and maintenance facility, two project
	substations, and step-up transformers at the base of each turbine. The expected cost
	to design and construct the project is \$179 million.
CFSS	Exception to No. 9.: The value placed on the project by the Applicant and the ALJ fails to take
	into account the American Recovery and Reinvestment Act of 2009 which allows taxpayers
	eligible for the federal renewable electricity production tax credit to take the federal business
	energy investment tax credit ("ITC") or to receive a grant from the U.S. Treasury Department
	instead of taking the PTC for new installations. The new law also allows taxpayers eligible for
	the business ITC to receive a grant from the U.S. Treasury Department instead of taking the business ITC for new installations. The grant is only available to systems where construction
	begins prior to December 31, 2011. The federal business energy ITC available under 26
	U.S.C. § 48 was expanded significantly by the Energy Improvement and Extension Act of 2008.
	The credit was further expanded by The American Recovery and Reinvestment Act of 2009,
	enacted in February 2009. Section 707 of the Tax Relief, Unemployment Insurance
	Reauthorization and Job Creation Act of 2010 extended the availability of the ITC for one more
	year until December 31, 2011. This investment tax credit will result in a cash payment to the
	Applicant of approximately 30% of the costs of the project (approximately \$50 million), therefore
	the costs discussed by the ALJ are inaccurate.
ALJ	
Finding	

<sup>&</sup>lt;sup>14</sup> Ex. 24A at 503, 505.
<sup>15</sup> Ex. 1, Ward Direct at 3-4; Ex. 2, Robertson Direct at 2.

10. The Applicant owns National Wind, LLC, a development company headquartered in Minneapolis. American Wind Alliance, LLC, owns the Applicant; Mesa Power Group owns American Wind Alliance; and Thomas Boone Pickens, Jr., owns Mesa Power Group. Upon commercial operation, the Applicant will be owned jointly by American Wind Alliance (99%) and Ventem Energy, LLC, a group of about 20 Minnesota investors (one percent). 17
In Finding #10, the ALJ describes the ownership structure of AWA Goodhue. The finding states in part, "[t]he Applicant owns National Wind, LLC, a development company headquartered in Minneapolis." The Applicant excepts to this finding because there is no ownership affiliation between AWA Goodhue and National Wind. Rather, AWA Goodhue has contracted with National Wind for local development services. As such, National Wind serves as the project's primary developer. AWA Goodhue requests that the Commission correct Finding #10 in its final order as follows:
10. The Applicant owns has contracted with National Wind, LLC, a development company headquartered in Minneapolis, to provide development services for the project. American Wind Alliance, LLC, owns the Applicant; Mesa Power Group owns American Wind Alliance; and Thomas Boone Pickens, Jr., owns Mesa Power Group. Upon commercial operation, the Applicant will be owned jointly by American Wind Alliance (99%) and Ventem Energy, LLC, a group of about 20 Minnesota investors (one percent).
Exception to Number 10:
Mesa Power Group, which owns American Wind Alliance, is not a Minnesota Corporation (Transcript, Vol. 2, p. 68, l. 19-21).
10. The Applicant owns the assets, including this project, of National Wind, LLC, a development company headquartered in Minneapolis. American Wind Alliance, LLC, a Texas corporation, owns the Applicant; Mesa Power Group, a Texas corporation owns American Wind Alliance; and Thomas Boone Pickens, Jr., a Texas resident, owns Mesa Power Group. Upon commercial operation, the Applicant will be owned jointly by American Wind Alliance (99%), a Texas corporation, and Ventem Energy, LLC, a group of about 20 Minnesota investors (one percent) whose identities have not yet been disclosed.
See additional exceptions made by the public, included as relevant documents to this briefing paper, Document ID: 20115-62636-01.
Modify finding #10 to read:
10. The Applicant owns has contracted with National Wind, LLC, a development company headquartered in Minneapolis, to provide development services for the project. American Wind Alliance, LLC, owns the Applicant; Mesa Power Group owns American Wind Alliance; and Thomas Boone Pickens, Jr., owns Mesa Power Group. Upon commercial operation, the Applicant will be owned jointly by American Wind Alliance (99%) and Ventem Energy, LLC, a group of about 20 Minnesota investors (one percent).
11. The project permit boundary includes 32,684 acres in Belle Creek, Minneola,
11. The project permit boundary includes 32,684 acres in Belle Creek, Minneola, Goodhue, Vasa, and Zumbrota Townships in Goodhue County. 18

<sup>&</sup>lt;sup>16</sup> Ex. 3, Burdick Direct at 1. <sup>17</sup> Ex. 1, Ward Direct at 4; Tr. 2:68-69 (Ward). <sup>18</sup> Ex. 3, Burdick Direct at 2-3.

GWT	11. The project's draft permit boundary includes 32,684 acres in Belle Creek, Minneola, Goodhue, Vasa, and Zumbrota Townships in Goodhue County.
ALJ Finding 12.	12. On .October 15, 2009, the Applicant filed an application for a certificate of need with the Commission. <sup>19</sup>
ALJ Finding 13.	13. On October 19, 2009, the Applicant filed an amended application for a site permit with the Commission. <sup>20</sup>
ALJ Finding 14.	14. In October 2009, the Applicant entered into two Power Purchase Agreements (PPAs) with Xcel Energy representing purchases of the full expected output of the project. <sup>21</sup> On April 28, 2010, the Commission approved Xcel Energy's petitions for approval of these PPAs. <sup>22</sup>
ALJ Finding 15.	15. On May 3, 2010, the Commission issued an order denying Goodhue Wind Truth's request for a contested case hearing in this docket, concluding that there were no material issues of fact that would require a contested case hearing. The Commission expanded the scope of the public hearings in the certificate of need docket, however, to include siting and permitting issues. The Commission also approved for distribution and comment a draft site permit. <sup>23</sup>
County	Exception to Number 15:  On November 2, 2010, the PUC found that it could not satisfactorily resolve on the record before it all questions regarding the applicability of an ordinance adopted by the Goodhue County Board on October 5, 2010, and referred the matter to the Office of Administrative Hearings, Docket 6701/WS-08-1233 (Nov. 2, 2010). Please see number 39 p. 8 of the Findings of Fact, Conclusions and Recommendations wherein the Commission changed its position following the adoption of the Wind Regulations Amendments to Article 18 of the Goodhue County Zoning Ordinance.
ALJ Finding 16.	16. Public hearings were held on July 21-22, 2010. The hearings were well attended, and a summary of public testimony was provided to the Commission in September 2010. <sup>24</sup>
County	Exception to Number 16:

<sup>&</sup>lt;sup>19</sup> In the Matter of the Application of AWA Goodhue Wind, LLC, for a Certificate of Need for a 78- Megawatt Wind Project and Associated Facilities in Goodhue County, Docket No. IP-6701/CN-09-1186 (Certificate of Need Docket).

<sup>&</sup>lt;sup>20</sup> In the Matter of the Application of AWA Goodhue Wind, LLC, for a Large Wind Energy Conversion System Site Permit for the 78 Megawatt Goodhue Wind Project in Goodhue County, Docket No. IP-6701/WS-08-1233 (Site Permit Docket).
<sup>21</sup> Ex. 1, Ward Direct at 3.

In the Matter of Northern States Power Company's Request for Approval of Power Purchase Agreements with Goodhue Wind, LLC, Docket Nos. E-002/M-09-1349, E-002/M-09-1350, Order Approving Power Purchase Agreements, Approving Contract Amendments, and Requiring Further Filings (Apr. 28, 2010) (copy included in Ex. 24A at 138-47).

<sup>&</sup>lt;sup>23</sup> Certificate of Need Docket and Site Permit Docket, Order Approving Distribution of Draft Site Permit and Denying Contested Case (May 3, 2010).

<sup>&</sup>lt;sup>24</sup> Certificate of Need Docket and Site Permit Docket, Summary of Public Testimony (Sept. 7, 2010).

	Public hearings were held on July 21-22, 2010, in Goodhue, Minnesota, by the Honorable Eric Lipman. (emphasis added)
	These hearings before the Honorable Eric Lipman consisted largely of individuals testifying against the proposed project.
GWT	16. Public hearings were held <u>in Goodhue, Minnesota</u> on July 21-22, 2010. The hearings were well attended, and a summary of public testimony was provided to the Commission in September 2010, incorporated here by reference.
ALJ	
Finding 17.	17. The Applicant has negotiated easements, leases, and participation agreements with approximately 200 persons who own land in the project area. Through these agreements, approximately 12,000 acres of land are available to site wind turbines and provide setbacks of 1,500 feet from non-participating residences and a minimum of 1,000 feet for participants. <sup>25</sup>
County	Exception to Number 17:
	Testimony and documents vary on the number of individual persons or separate entities participating. Some property is held in family trusts and others by multiple owners of single parcels. Clearly, there are less than 200 individual participant ownership interests controlling the property in footprint. Some participants are absentee land owners. See Ryan Testimony, Transcript Vol. 3B, p. 103, lines 14-25, through p. 104, line 1: "Q You've indicated in your testimony that some of the individuals who signed participation agreements actually don't live on their property. Can you give us an example of that?  A I know of two different people. One is my neighbor, they own several – 300 – I'd say roughly 300 acres. They do not preside on that property at all.  Q Do you know of any other individuals that don't reside on the property?  A There's another individual on the southeast corner of our township that I know does not reside at his acreage that he owns."  See also the discussion by Mr. Burdick in Ex. 3 Burdick Cross at p. 42 lines 9-15 and through p. 44.  "Q How many parcels? Owned by separate owners?"  "A I don't have that number offhand. As you know, Mr. Betcher, title for any individual parcel is held sometimes very differently, even within the same family."  "Again, I don't have a number offhand, and it's sometimes difficult to distinguish. Sometimes a brother and brother own a parcel, sometimes a husband and wife own a parcel, sometimes a trust owns a parcel, and I don't know whether you would want me to consider all of them in the same family group or three separate groups."
GWT	17. The Applicant has negotiated easements, leases, and participation agreements to site 50 turbines with approximately 200 persons who own land in the project area, including multiple owners of single parcels, and counting each parcel owner/s for each parcel. Siting of 50 turbines requires far less than 200 individual parcels of land, but Applicants could not or would not state the specific numbers. Less than half the land in the project footprint has been signed, which is not efficient use of resources. Through these agreements, approximately 12,000 acres of land are available to site wind turbines and provide setbacks of 1,500 feet from non-participating residences and a minimum of 1,000 1,500 feet for participants.
CFSS	Exception to Number 17: Testimony and documents vary on the number of individual persons or separate entities participating. Some property is held in family trusts and others by multiple owners of single parcels. Clearly, there are less than 200 individual participant

<sup>25</sup> Ex. 3, Burdick Direct at 2-3.

	ownership interests controlling the property in footprint.  See the discussion by Mr. Burdick in Ex. 3 Burdick Cross at 42 lines 9-15 and through
	page 44.  "Q How many parcels? Owned by separate owners?"
	"A I don't have that number offhand. As you know, Mr. Betcher, title for any individual parcel is held sometimes very differently, even within the same family."
	"Again, I don't have a number offhand, and it's sometimes difficult to distinguish. Sometimes a brother and brother own a parcel, sometimes a husband and wife own a parcel, sometimes a trust owns a parcel, and I don't know whether you would want me to consider all of them in the same family group or three separate groups."
ALJ Finding 18.	18. At present, the Applicant proposes to site all the turbines in Belle Creek and Minneola Townships. These townships are not significantly different, in terms of housing density, than townships that are hosting other wind turbine projects in Dodge and Mower Counties. <sup>26</sup>
County	Exception to Number 18:
	No evidence is cited in support of this assertion. Minn. R. 1400-7300 provides that no factual information shall be considered in the case which is not part of the record. Goodhue County is more densely populated than any area industrial wind turbines have previously been sited. While two to three more residences per square mile may be considered insignificant in an urban area, two to three more houses per square mile in Goodhue County's rural farm environment represents a population density two to three
GWT	times more dense than the areas used for comparison in other counties.  18. At present, the Applicant proposes to site all the turbines in Belle Creek and
	Minneola Townships. While the overall housing density is not significantly different on a countywide basis, the distribution of turbines and population is different, with Belle Creek township more density populated. These townships are not significantly different, in terms of housing density, than townships that are hosting other wind turbine projects in Dodge and Mower Counties. 26
CFSS	Exception to No. 18: The Report assumes facts not entered into evidence with response to differences between Belle Creek and Mineola Township and other townships in Dodge and Mower County. There is no scope given for the this statement and a comparison of townships seems superficial and inaccurate if one only considers housing density.
Staff	See additional exceptions made by the public, included as relevant documents to this briefing paper, Document ID: 20115-62636-01.
ALJ	
Finding 19.	19. The Applicant has invested approximately \$7.5 million in acquisition and development costs for the project. <sup>27</sup>
County	
County	Exception to Number 19:
	Judge Sheehy noted on March 16, 2010, that financial impacts were marginally relevant to the contested case hearing. Transcript Vol. 2 p. 157-158, lines 19-3.
GWT	19. The Applicant has invested approximately \$7.5 million in acquisition and development costs for the project. The turbine deposit of approximately \$/ million was paid by AWA and will not be lost.
ALJ	

<sup>26</sup> Ex. 3, Burdick Direct at 20. <sup>27</sup> Ex. 2, Robertson Direct at 2.

Finding 20.	20. The Applicant anticipates that the project will generate \$768,000 per year to participating landowners, or about \$20 million over the life of the Power Purchase Agreements negotiated with Xcel Energy. In addition, the Applicant anticipates that local governments (the County and townships) would receive \$302,000 per year in energy production tax payments, or about \$6 million over the life of the Power Purchase Agreements.
County	Exception to Number 20:
	See Exception to Number 19.
GWT	20. The Applicant anticipates that, that based on and assuming unverified production estimates, the project will generate \$768,000 per year to participating landowners, or about \$20 million over the life of the Power Purchase Agreements negotiated with Xcel Energy. In addition, the Applicant anticipates that local governments (the County and townships) would receive \$302,000 per year in energy production tax payments, or about \$6 million over the life of the Power Purchase Agreements. For each dollar received, the local government will lose an equal amount in state funding.
ALJ Finding 21.	21. On October 20, 2010, OES/EFP recommended approval of the site permit application with conditions. The proposed site permit was attached to its recommendation. <sup>30</sup>
ALJ Finding 22.	22. Goodhue County is located approximately one hour southeast of the metropolitan Twin Cities area. It is bordered generally by Dakota County on the north, Dodge and Olmsted Counties on the south, Rice County on the west, and Wabasha County and the Mississippi River on the east. It has approximately 46,000 residents. <sup>31</sup>
County	Exception to Number 22:
	Minn. R. 1400-7300 provides that no factual information shall be considered in the case which is not part of the record. No acknowledgment of the intent to take judicial notice of the Goodhue County website was made in the hearing.
GWT	22. Goodhue County is an intervenor with all rights and responsibilities of a party. Goodhue County is located approximately one hour southeast of the metropolitan Twin Cities area. It is bordered generally by Dakota County on the north, Dodge and Olmsted Counties on the south, Rice County on the west, and Wabasha County and the Mississippi River on the east. It has approximately 46,000 residents. <sup>31</sup>
ALJ Finding 23.	23. The land within the project boundary is zoned under a variety of different agricultural zoning classifications. <sup>32</sup>
GWT	23. The land within the project boundary is zoned under a variety of different agricultural zoning classifications, including non-farm residences. <sup>32</sup>
ALJ Finding	24. The Goodhue County Comprehensive Plan explicitly supports the

<sup>28</sup> Ex. 2, Robertson Direct at 9. <sup>29</sup> Ex. 2, Robertson Direct at 9.

Site Permit Docket, Comments and Recommendations of the Minnesota Office of Energy Security Energy Facility Permitting Staff (Oct. 13, 2010); Supplemental Comments and Recommendations (Oct. 20, 2010). These documents were re-filed as Attachments 2 and 3 to OES Comments filed on December 20, 2010.

http://www.co.goodhue.mn.us/visitors/about\_ghc.aspx.

Tr. 1:180-81 (Burdick). See also Ex. 3, Burdick Direct at 3 & Attachment 3A.

24.	development of "innovative industrial agricultural" land uses such as ethanol production and wind generation. <sup>33</sup>
County	Exception to Number 24:
	Michael Wozniak testified that the County "defines commercial and wind energy conversion systems as over one megawatt and commercial wind turbines are restricted entirely from some of the zoned districts. And in other zoned districts, such as the agriculture districts, they are listed as conditional use, and that would apply, of course, to projects that are within the County's authority to permit. Transcript Vol. 3B, p. 81-82, lines 21-6.
GWT	24. The Goodhue County Comprehensive Plan explicitly supports the development of "innovative industrial agricultural" land uses such as ethanol production and wind generation, within the parameters of the County Ordinances. <sup>33</sup>
ALJ Finding 25.	25. The County Board passed a resolution supporting the project as a community-based energy development project. <sup>34</sup>
County	Exception to Number 25:
	Proponents and Intervenors were precluded from inquiring into the C-Bed Resolution of support by the Goodhue County Board as C-Bed was not part of the PUC charge to the ALJ. The county resolution applied to the previously constituted proposal by National Wind prior to the sale to Mesa Power and Mr. Pickens. See p. 3 at 1.1.2 of Goodhue Wind Project Amended Application for a Site Permit for a large Wind Energy Conversion System MPUC Docket No. IP6701/WS-08-1233.
GWT	25. The County Board passed a resolution supporting the "Goodhue Wind Energy Project" project as a community-based energy development project, without any supporting documentation of C-BED status. Since that time, the footprint, size, and ownership of the project has changed. This C-BED resolution was for the project as originally presented by National Wind, prior to sale to AWA, Mesa Power and/or AWA Goodhue, at which time the ownership and structure of the project has changed. The County Resolution is regarding a 39 turbine project owned by a Minnesota limited liability company organized by Minnesota Residents.
CFSS	Exception to Number 25: Proponents and Intervenors were precluded from inquiring into the C-Bed Resolution of support by the Goodhue County Board as C-Bed was not part of the PUC charge to the ALJ. The county resolution applied to the previously constituted proposal by National Wind prior to the sale to Mesa Power and Mr. Pickens. See p. 3 at 1.1.2 of Goodhue Wind Project Amended Application for a Site Permit for a large Wind Energy Conversion System MPUC Docket No. IP6701/WS-08-1233.
Staff	See additional exceptions made by the public, included as relevant documents to this briefing paper, Document ID: 20115-62636-01.
ALJ Finding 26.	26. The County negotiated a Development Agreement with the Applicant that addresses the. Applicant's obligations to comply with the State Building Code, obtain building permits, repair any damage to roads caused by construction traffic, restore roads to preconstruction surface condition, repair any damage to underground drainage systems, and pay all reasonable costs incurred by the County in connection with the project. The negotiations were completed and the County Board approved it on October 5, 2010, but the Development Agreement has not been executed. <sup>35</sup>

<sup>33</sup> Ex. 24A at 881. *See also* Tr. 2:314-15 (Hanni).
<sup>34</sup> Ex. 24A at 143; Tr. 1:54.
<sup>35</sup> Ex. 1, Ward Direct at Attachment B; Ex. 3, Burdick Direct at 23.

GWT	26. The County negotiated a Development Agreement with the Applicant that addresses the. Applicant's obligations to comply with the State Building Code, obtain building permits, repair any damage to roads caused by construction traffic, restore roads to preconstruction surface condition, repair any damage to underground drainage systems, and pay all reasonable costs incurred by the County in connection with the project. The negotiations were completed and the County Board approved it on October 5, 2010, but the Development Agreement has not been executed. Environmental review of this project has not been completed or declared adequate by the Commission.
ALJ	
Finding 27.	27. On October 5, 2010, Goodhue County adopted amendments to Article 18 of its zoning ordinance for wind projects. <sup>36</sup> The County did not assume responsibility to process applications or permit LWECS. In section 1, the ordinance provides:
	This ordinance is established to regulate the installation and operation of Wind Energy Conversion Systems (WECS) within Goodhue county that have a total nameplate capacity of 5 Megawatts or less (Small Wind Energy Conversion Systems – SWECS) and are not otherwise subject to siting and oversight by the State of Minnesota pursuant to Minnesota Statues, Chapter 216F, Wind Energy Conversion Systems, as amended. For LWECS, the county does not assume regulatory responsibility or permit authority under MS 216F.08, but any standards more stringent than those of the MPUC are to be considered and applied to LWECS per MS 216F.081. <sup>37</sup>
County	Exception to Number 27:
	Michael Wozniak testified that the process of the County prior to the passage of the ordinance included consideration by the Goodhue County Planning Advisory Commission on October 5, 2010, its subcommittee and the Goodhue County Board. These meetings included extensive public testimony and comments. Transcript Vol. 3B, p.p. 9-15.
GWT	27. On October 5, 2010, Goodhue County adopted amendments to Article 18 of its zoning ordinance for wind projects <u>5 MW or less</u> . The County did not assume responsibility to process applications or permit LWECS. In section 1, the ordinance provides:
	This ordinance is established to regulate the installation and operation of Wind Energy Conversion Systems (WECS) within Goodhue county that have a total nameplate capacity of 5 Megawatts or less (Small Wind Energy Conversion Systems – SWECS) and are not otherwise subject to siting and oversight by the State of Minnesota pursuant to Minnesota Statues, Chapter 216F, Wind Energy Conversion Systems, as amended. For LWECS, the county does not assume regulatory responsibility or permit authority under MS 216F.08, but any standards more stringent than those of the MPUC are to be considered and applied to LWECS per MS 216F.081. <sup>37</sup>
ALJ Finding 28.	28. The ordinance has no standards that specifically regulate LWECS. The setback provisions for commercial WECS, which are defined as "a WECS of 1 megawatt to 5 megawatts in total name plate generating capacity," include setbacks of 750 feet from

<sup>&</sup>lt;sup>36</sup> Ex. 24B. <sup>37</sup> Ex. 248, Art. 18, § 1.

	participating dwellings and ten rotor-diameters (RD) from non-participating dwellings, unless an owner has agreed to a reduced setback (in no event less than 750 feet). The ordinance also contains provisions requiring the application for a commercial WECS to include offers of two pre-construction stray voltage tests at all registered feedlots within the proposed project boundary and within one mile of the proposed project. 9
County	Exception to Number 28:
	The ordinance standards for WECS and LWECS are equivalent even though the County did not assume the responsibility for permitting LWECS.
GWT	28. The ordinance has no <u>separate</u> standards that specifically regulate LWECS. The setback provisions for commercial WECS, which are defined as "a WECS of 1 megawatt to 5 megawatts in total name plate generating capacity," include setbacks of 750 feet from participating dwellings and ten rotor-diameters (RD) from non-participating dwellings, unless an owner has agreed to a reduced setback (in no event less than 750 feet). <sup>38</sup> The ordinance also contains provisions requiring the application for a commercial WECS to include offers of two pre-construction stray voltage tests at all registered feedlots within the proposed project boundary and within one mile of the proposed project. <sup>39</sup>
CFSS	Exception to No. 28: The ALJ clearly ignores the clear text of Goodhue County Ordinance, Article 18, which states in the pre-amble "For LWECS, the County does not assume regulatory responsibility or permit authority under MS 216F.08, but any standards more stringent than those of the MPUC are to be considered and applied to LWECS per MS 216F.081".
ALJ Finding 29.	29. The City of Goodhue, which has a population of approximately 925 people, and the City of Zumbrota intervened in this matter but did not participate in the contested case hearing. On August 12, 2009, the Goodhue City Council passed a resolution calling for a two-mile setback from the city of Goodhue "to prevent any Large Wind Energy Conversion System (LWECS) of being constructed. <sup>40</sup>
GWT	29. The City of Goodhue, which has a population of approximately 925 people, and the City of Zumbrota intervened in this matter but did not participate in the contested case hearing. On August 12, 2009, the Goodhue City Council passed a resolution calling for a two-mile setback 'tram the city of Goodhue. "to prevent any Large Wind Energy Conversion System (LWECS) of being constructed. On, the City of Zumbrota passed a resolution calling for a two-mile setback from the City of Zumbrota.
ALJ Finding 30.	30. Belle Creek Township is an agricultural community of fewer than 450 people within Goodhue County. The township board has held about one dozen meetings to discuss the project. Approximately 40-50 people have consistently attended these meetings to oppose the project. Approximately 40-50 people have consistently attended these meetings to oppose the project.
GWT	30. Belle Creek Township is an intervenor with all rights and responsibilities of a party. Belle Creek Township is an agricultural community of fewer than 450 people within Goodhue County. The township board has held about one dozen meetings to discuss the project. Approximately 40-50 people have consistently attended these meetings to oppose the project.
ALJ	

<sup>&</sup>lt;sup>38</sup> Ex. 248, Art. 18, § 2, subd. 5; § 4, subd. 1.
<sup>39</sup> Ex. 248, Art. 18, § 3, subd. 2 G; § 6, subds. 1-3.
<sup>40</sup> Ex. 24A at 448. The same document appears at 451, 855, and 1194.
<sup>41</sup> Ex. 31, Ryan Direct at 2.

<sup>&</sup>lt;sup>42</sup> Ex. 31, Ryan Direct at 4.

Finding 31.	31. Goodhue Wind Truth is an informal association that is not legally organized and has no membership other than Marie and Bruce McNamara, who live in section 11 within the project area. The turbine site proposed to be closest to their address appears to be at least one-half mile away. They use the name Goodhue Wind Truth for purposes of providing information regarding this project and other wind projects generally. They have established a website, bought newspaper advertisements and billboards, printed flyers, and hosted meetings in the community regarding county and state permitting issues for wind development. <sup>43</sup>
GWT	31. Goodhue Wind Truth is an intervenor with all rights and responsibilities of a party. Belle Creek Township. Goodhue Wind Truth is an informal association that is not legally organized and has no membership other than Marie and Bruce McNamara, who live in section 11 within the project area. The turbine site proposed to be closest to their residence address appears to be at least approximately one-half mile away. They use the name Goodhue Wind Truth for purposes of providing information regarding this project and other wind projects generally. They have established a website, bought newspaper advertisements and billboards, printed flyers, and hosted meetings in the community regarding county and state permitting issues for wind development. <sup>43</sup>
ALJ Finding 32.	32. The Coalition for Sensible Siting is organized as a non-profit corporation in Minnesota to provide facts and information on wind energy projects to the public. Steve Groth and Ann Buck are members of the Board of Directors. Steve Groth lives in Zumbrota, outside the project area. Ann Buck owns property in section 24 within the project area. The turbine site proposed to be closest to her property appears to be about three-quarters of a mile away. The Coalition for Sensible Siting has no members or shareholders. <sup>44</sup>
GWT	32. The Coalition for Sensible Siting is an intervenor with all rights and responsibilities of a party. The Coalition for Sensible Siting is organized as a non-profit corporation in Minnesota to provide facts and information on wind energy projects to the public. Steve Groth and Ann Buck are members of the Board of Directors. Steve Groth lives owns and operates a business in Zumbrota, outside and lives at 14601 Co. 50 Blvd., Goodhue, MN 55027, within the project area. The closest turbine would be sited approximately 1,500 feet north of his home, with three turbine sites on the neighboring property, owned by Mark Vieths. Ann Buck owns rental property in section 24 within the project area, and their residence is 37298 180 <sup>th</sup> Ave. Goodhue, MN 55027, Goodhue Township, section 19, within the footprint. The turbine site proposed to be closest to her property appears to be about three-quarters of a mile away. The Coalition for Sensible Siting has no members or shareholders. <sup>44</sup>
ALJ Finding 33.	33. Goodhue Township and Zumbrota Township passed resolutions on March 9, 2010, providing that LWECS could be sited no closer than one-half mile from non-participating residences. The resolutions were based on the "possible health and safety effects" associated with LWECS. Neither Goodhue Township nor Zumbrota Township petitioned to intervene in this matter, nor did they participate in the hearing.
GWT	33. Goodhue Township and Zumbrota Township <u>are not parties to this proceeding,</u> but passed resolutions on March 9, 2010, providing that LWECS could be sited no closer than

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Ex. 32, McNamara Direct at 2; Affidavit of Marie McNamara (Feb. 8, 2011), efiled in connection with Goodhue Wind Truth's Motion for Reconsideration (Feb. 11, 2011) (contains address); Ex. 3, Burdick Direct at Attachment B (contains turbine locations).
 Affidavit of Steve Groth (Feb. 8, 2011), efiled in connection with Goodhue Wind Truth's Motion

<sup>&</sup>lt;sup>44</sup> Affidavit of Steve Groth (Feb. 8, 2011), efiled in connection with Goodhue Wind Truth's Motion for Reconsideration (Feb. 11, 2011) (contains property locations); Ex. 3, Burdick Direct at Attachment B (contains turbine locations).

<sup>&</sup>lt;sup>45</sup> Ex. 24A at 935 (and 2503 and 5289) (Zumbrota Township); 1094-95 (Goodhue Township).

one-half mile from non-participating residences.<sup>45</sup> The resolutions were based on the "possible health and safety effects" associated with LWECS. Neither Goodhue Township nor Zumbrota Township petitioned to intervene in this matter, nor did they participate in the hearing.

### IV. Issues for Hearing

### ALJ Finding 34.

- 34. On October 21, 2010, approximately two weeks after the County adopted its amended wind ordinance, the Commission met to consider the site permit application. The Commission concluded that it could not satisfactorily resolve, on the basis of the record before it, all questions regarding the applicability of the County's ordinance, including whether there was good cause for the Commission not to apply any ordinance standards that are more stringent than the standards currently applied to LWECS by the Commission.<sup>46</sup> The matter was referred to the Office of Administrative Hearings for a contested case proceeding to develop the record as follows:
  - •Development of a record on every standard in Article 18 of the Goodhue County Ordinances on Wind Energy Conversion Systems that is more stringent than what the Commission has heretofore applied to large wind energy conversion systems (LWECS), for the purpose of making recommendations regarding whether the standard should be adopted for LWECS in Goodhue County;
  - •Development of a record on the question of "good cause" as that term appears in Minn. Stat. § 216F.081, for the purpose of making recommendations on whether there is good cause for the Commission to not apply the standard to LWECS in Goodhue County; and
  - •Development of a record to determine whether there is sufficient evidence regarding health and safety to support two specific portions of Article 18: the 10-rotor diameter setback for nonparticipating residents, contained in Section 4, and the stray voltage requirements, contained in Section 6.<sup>47</sup>

#### County

# Exception to Number 34:

The actual charge of the PUC to the Administrative Law Judge is worded as follows:

- "1. The ALJ assigned to this matter is requested to develop a record on every standard in Article 18 that is more stringent than what the Commission has heretofore applied to LWECS and make recommendations regarding each such standard whether the Commission should adopt it for Large Wind Energy Conversion Systems in Goodhue County. The Commission has identified two such standards in this Order (Section 4 and Section 6) but is not by this Order restricting the ALJ from developing the record and making recommendations regarding additional standards in Article 18 that upon further examination meet the "more stringent" qualification.
- 2. The ALJ assigned to this matter is requested to allow the parties to develop a factual record on the question of "good cause" as that term appears in Minn. Stat. § 216F.081 and to provide recommendations on whether, with

<sup>46</sup> Site Permit Docket, Notice and Order for Hearing at 2 (Nov. 2, 2010).

<sup>&</sup>lt;sup>47</sup> Site Permit Docket, Notice and Order for Hearing at 4 (Nov. 2, 2010).

respect to each standard in Article 18 identified in the course of her review as "more stringent" than what the Commission has heretofore applied to LWECS, there is "good cause" for the Commission to not apply the standard to siting LWECS in Goodhue County.

3. As the ALJ addresses the issues identified in the previous two sections, the ALJ is requested to include (but not limited to, by this Order) whether there is sufficient evidence regarding health and safety to support a 10 rotor diameter setback for non-participating residents and the stray voltage requirements.

Footnote number 46 is incorrect. It should read Site Permit Docket, Notice and Order for Hearing at 3 (November 2, 2010).

**GWT** 

34. On October 21, 2010, approximately two weeks after the County adopted its amended wind ordinance, the Commission met to consider the site permit application. The Commission concluded that it could not satisfactorily resolve, on the basis of the record before it, all questions regarding the applicability of the County's ordinance, including whether there was good cause for the Commission not to apply any ordinance standards that are more stringent than the standards currently applied to LWECS by the Commission. <sup>46</sup> The matter was referred to the Office of Administrative Hearings for a contested case proceeding to develop the record as follows:

Development of a record on every standard in Article 18 of the Goodhue County Ordinances on Wind Energy Conversion Systems that is more stringent than what the Commission has heretofore applied to large wind energy conversion systems (LWECS). for the purpose of making recommendations regarding whether the standard should be adopted for LWECS in Goodhue County;

- -Development of a record on the question of "good cause" as that term appears in Minn. Stat. § 216F.081, for the purpose of making recommendations on whether there is good cause for the Commission to not apply the standard to LWECS in Goodhue County; and
- -Development of a record to determine whether there is sufficient evidence regarding health and safety to support two specific portions of Article 18: the 10-rotor diameter setback for nonparticipating residents, contained in Section 4, and the stray voltage requirements, contained in Section 6. 47-
- 1. The ALJ assigned to this matter is requested to develop a record on every standard in Article 18 that is more stringent than what the Commission has heretofore applied to LWECS and make recommendations regarding each such standard whether the Commission should adopt it for Large Wind Energy Conversion Systems in Goodhue County. The Commission has identified two such standards in this Order (Section 4 and Section 6) but is not by this Order restricting the ALJ from developing the record and making recommendations regarding additional standards in Article 18 that upon further examination meet the "more stringent" qualification.
- 2. The ALJ assigned to this matter is requested to allow the parties to develop a factual record on the question of "good cause" as that term appears in Minn. Stat. § 216F.081 and to provide recommendations on whether, with respect to each standard in Article 18 identified in the course of her review as "more stringent" than

	what the Commission has heretofore applied to LWECS, there is "good cause" for the Commission to not apply the standard to siting LWECS in Goodhue County.
	3. As the ALJ addresses the issues identified in the previous two sections, the ALJ is requested to include (but not limited to, by this Order) whether there is sufficient evidence regarding health and safety to support a 10 rotor diameter set-back for non-participating residents and the stray voltage requirements.
Staff	See additional exceptions made by the public, included as relevant documents to this briefing paper, Document ID: 20115-62708-01.
ALJ Finding 35.	35. On November 5, 2010, the Commission deferred consideration of the application for a certificate of need, pending completion of the contested case in this docket. <sup>48</sup>
ALJ Finding 36.	36. The County, Goodhue Wind Truth, and the Coalition for Sensible Siting have argued in part that there is no conflict between the County's ordinance requirements and the Commission's general permitting standards because the Commission has <i>no</i> permitting standards applicable to LWECS of 25 megawatts or more. They rely on the <i>General Wind Permit Standards Order</i> for the proposition that the Commission has only established permitting conditions for projects under 25 megawatts.
County	Exception to Number 36:
	Specifically, Goodhue County stated in its Intervenor Brief dated April 1, 2011: "These common permit requirements for LWECS 25 MW or larger are not part of PUC Order, Rules or Minnesota Statute."
	Specifically, Goodhue Wind Truth stated in its Intervenor Brief dated April 1, 2011:
	"For each of the different sections of the County Ordinance identified in the Second Prehearing Order, there are no state standards applicable to LWECS of 25 MW or more."
	Specifically, the Coalition for Sensible Siting stated in its Intervenor Brief of April 1, 2011:  "The PUC standard at issue refers to the "General Permit Standards for the Stiing of Wind Generation Projects Less than 25 MegawattsBy its very name – "Less than 25 Megawatts" as a matter of definition, would not apply to the
GWT	AWA Project."  36. The County, Goodhue Wind Truth, and the Coalition for Sensible Siting have
	argued in part that there is no conflict between the County's ordinance requirements and the Commission's general permitting standards because the Commission has <i>no</i> permitting standards applicable to LWECS of 25 megawatts or more. They rely on the General Wind Permit Standards Order for the proposition that the Commission has only established permitting conditions for projects under 25 megawatts.
CFSS	Exception to Number 36: These rules apply only to LWECS with a combined nameplate capacity of less than 25 megawatts application of these principals to LWECS larger than 25 MWs would be unauthorized rule making and a violation of the Administrative Procedure Act, Minn. Stat. §14.00, et. al.

<sup>&</sup>lt;sup>48</sup> Certificate of Need Docket, Order Deferring Consideration of Application for Certificate of Need (Nov. 5, 2010).

The PUC has not adopted any rules for LWECS 25 MW or larger which would apply to the present project.

The OES/EFP develops recommendations for each permit individually relying on their knowledge of past permits and conversations with the applicant to develop permit requirements for each new project. This process is a prima facie violation of the Minnesota Administrative Procedures Act.

The ALJ identifies this violation in the Footnote No. 1 on Pg. 2 of the Second Prehearing Order acknowledges that:

"The recommended standards **appear to be based** on the Commission's order establishing general wind permit standards, as modified by the Applicant's agreement in this case to increase the setback from non-participating dwellings. See *In the Matter of Establishment of General Permit Standards for the Siting of Wind Generation Projects Less than 25 Megawatts*, Order Establishing General Wind Permit Standards, Docket No. E,G-999/M-07-1102 (Jan. 11, 2008)."

Furthermore, the PUC's own record does not support the ALJ's contention that PUC has established standards for LWECS greater than 25 MW in size. Page 7 of *In the Matter of Establishment of General Permit Standards for the Siting of Wind Generation Projects Less than 25 Megawatts*, Order Establishing General Wind Permit Standards, Docket No. E,G-999/M-07-1102 (Jan. 11, 2008). The mere *appearance* that the standards established by the PUC for projects that are less than 25 MW in size should apply to larger projects reflects either an intentional or unintentional ignorance of the Minnesota Administrative Procedures Act requirements and procedures for establishment of administrative rules by Regulatory Agencies in Minnesota.

No such minimum standards currently exist in binding policy to inform local governments, the public or the applicant what performance standards will be applied to evaluate, permit and regulate large wind energy conversion systems 25 MW or greater in size. The OES EFP staff did provide a chart summarizing their assessment of variations between the Goodhue County Wind Regulations and the requirements typically imposed as part of the PUC permitting process. These common permit requirements for LWECS 25 MW or larger are not part of a PUC Order, Rule, or Minnesota Statute.

# ALJ Finding 37.

37. This argument fails to consider the purpose of the general permit standards docket. The Commission had existing permit standards that were applicable to all site permit applications for LWECS. The 2007 legislation required the Commission to adopt standards for use by counties that had elected, under Minn. Stat. § 216F.08, to assume responsibility for processing applications for permits for LWECS with a combined nameplate capacity of less than 25 megawatts. The fact that the Commission complied with the legislation and provided this guidance to counties in the *General Wind Permit Standards Order* does not mean that the commission's existing standards, established in other dockets, became inapplicable to LWECS of 25 megawatts or more.

#### County

### **Exception to Number 37:**

Minn. Stat. 216F.05 Rules provides that the Commission should adopt rules governing the consideration of an application for a site permit for an LWECS. M.S. 216F.01 defines an LWECS as:

"...any combination of WECS with a combined nameplate capacity of 5,000 kilowatts or more."

"Minn. Stat. 216F.05 Rules, states:

The commission shall adopt rules governing the consideration of an application for a site permit for an LWECS that address the following (emphasis added):

- 1. criteria that the commission shall use to designate LWECS sites, which must include the impact of LWECS on humans and the environment;
- 2. procedures that the commission will follow in acting on an application for an LWECS;
- procedures for notification to the public of the application and for the conduct of a public information meeting and a public hearing on the proposed LWECS;
- 4. requirements for environmental review of the LWECS;
- conditions in the site permit for turbine type and designs; site layout and construction; and operation and maintenance of the LWECS, including the requirement to restore, to the extent possible, the area affected by construction of the LWECS to the natural conditions that existed immediately before construction of the LWECS;
- 6. revocation or suspension of a site permit when violations of the permit or other requirements occur; and
- 7. payment of fees for the necessary and reasonable costs of the commission in acting on a permit application and carrying out the requirements of this chapter."

To date, the PUC has not adopted those rules.

Minn. Stat. § 216F.08 relates to the assumption of permit authority by counties for LWECS for a combined nameplate capacity of less than 25,000 kilowatts. It reads, in relevant part, as follows:

### "Minn. Stat. § 216F.08 (c)

The commission shall, by order, establish general permit standards, including appropriate property line setbacks, governing site permits for LWECS under this section. The order must consider existing and historic commission standards for wind permits issued by the commission. The general permit standards shall apply to permits issued by counties and to permits issued by the commission for LWECS with a combined nameplate capacity of less than 25,000 kilowatts. The commission or a county may grant a variance from a general permit standard if the variance is found to be in the public interest."

The Order establishing General Wind Permit Standards dated January 11, 2008, Docket no. E,G-999/M-07-1102, states specifically at number 1, that it applies to:

"The general permit standards shall apply to large wind energy conversion systems site permits issued by counties pursuant to Minn. Stat. 216F.08 and to permits issued by the Commission for LWECS with a combined nameplate capacity of less than 25,000 kilowatts."

The Administrative Law Judge appears to state that there is a purpose for the general permit standards docket. This position would presumably be that if one wished to apply for a permit, a review of each docket in which a permit was issued should be reviewed on a piece meal basis. The Legislature required that rules be adopted. Minn. Stat. § 14.05 provides for the authority to adopt original rules. Procedural requirements are set out in Chapter 14. In the event that a rule is not property adopted, Minn. R. 1400-2100 provides for a standard of review. A rule must be disapproved by a Judge if it is not adopted

in compliance with Minnesota Statutes Chapter 14, or other law or rule.

The Order applies only to LWECS with a combined nameplate capacity of less than 25 megawatts. No official standards have been adopted for LWECS 25 MW or larger. The OES/EFP develops recommendations for each permit individually. Staff at the OES/EFP relies on their knowledge of past permits and conversations with the applicant to develop permit requirements for each new project. Footnote No. 1 on Pg. 2 of the Second Prehearing Order acknowledges that:

"The recommended standards <u>appear to be based</u> (emphasis added) on the Commission's order establishing general wind permit standards, as modified by the Applicant's agreement in this case to increase the setback from non-participating dwellings. See *In the Matter of Establishment of General Permit Standards for the Siting of Wind Generation Projects Less than 25 Megawatts*, Order Establishing General Wind Permit Standards, Docket No. E,G-999/M-07-1102 (Jan. 11, 2008)."

The title of the Order limits its authority to "Projects Less than 25 Megawatts" while the language of the Order itself reiterates this limitation.

### "ORDER

- 1. The Commission herein adopts the Large Wind Energy Conversion System General Wind Turbine Permit Setbacks and Standards proposed by the Department of Commerce Energy Facility Permitting staff, attached as Exhibit A. The general permit standards shall apply to large wind energy conversion system site permits issued by counties pursuant to Minn. Stat. 216F.08 and to permits issued by the Commission for LWECS with a combined nameplate capacity of less than 25,000 watts.
- 2. The Commission requests that the Department of Commerce Energy Facility Permitting staff further investigate wetland setback issues with stakeholders and develop recommendations for Commission consideration.
- 3. This Order shall become effective immediately."

Page 7 of In the Matter of Establishment of General Permit Standards for the Siting of Wind Generation Projects Less than 25 Megawatts, Order Establishing General Wind Permit Standards, Docket No. E,G-999/M-07-1102 (Jan. 11, 2008).

No citation is provided in this Order or in any of the OES permit documents associated with PUC Dockets in this matter, to broader general performance permit standards, rules or orders currently adopted by MNPUC and enforced by the OES EFP. No such minimum standards currently exist in binding policy to inform local governments, the public or the applicant what performance standards will be applied to evaluate, permit and regulate large wind energy conversion systems 25 MW or greater in size. The OES EFP staff did provide a chart summarizing their assessment of variations between the Goodhue County Wind Regulations and the requirements typically imposed as part of

the PUC permitting process. These common permit requirements for LWECS 25 MW or larger are not part of a PUC Order, Rule, or Minnesota Statute.

The record does not contain a factual citation or recitation of previous permit requirements imposed by the PUC. Thus, it cannot be considered pursuant to Minn. R. 1400-7300, Subp. 4.

GWT

37. This argument fails to consider the purpose of the general permit standards docket. The Commission had no existing permit standards that were applicable to all site permit applications for LWECS and no parti is able to provide a citation to permit standards adopted by the Commission for LWECS over 25 MW. The 2007 legislation required the Commission to adopt general permit standards and instead the Commission adopted only standards for use by counties that had elected, under Minn. Stat. § 216F.08, to assume responsibility for processing applications for permits for LWECS with a combined nameplate capacity of less than 25 megawatts<sup>36</sup>. The fact that the Commission complied with the legislation and provided this guidance to counties in the General Wind Permit Standards Order does not mean that the commission's existing standards, established in other dockets, became inapplicable to LWECS of 25 megawatts or more.

**CFSS** 

**Exception to Number 37:** The ALJ's final sentence admits a prima facie violation of the Minnesota Administrative Procedures Act for adoption of rule by State Agencies. An Agency may not adopt a rule (or an "existing standard" as identified by the ALJ) without formal rule making taking place. Neither a standard nor a rule may be adopted simply because it is published in a permit (especially for another project) without formal rule making<sup>50</sup>.

Furthermore, these rules apply only to LWECS with a combined nameplate capacity of less than 25 megawatts. No official standards have been adopted for LWECS 25 MW or larger. The OES/EFP develops recommendations for each permit individually. Staff at the OES/EFP relies on their knowledge of past permits and conversations with the applicant to develop permit requirements for each new project. Footnote No. 1 on Pg. 2 of the Second Prehearing Order acknowledges that:

"The recommended standards appear to be based on the Commission's order establishing general wind permit standards, as modified by the Applicant's agreement in this case to increase the setback from non-participating dwellings. See *In the Matter of Establishment of General Permit Standards for the Siting of Wind Generation Projects Less than 25 Megawatts*, Order Establishing General Wind Permit Standards, Docket No. E,G-999/M-07-1102 (Jan. 11, 2008)."

The title of the Order limits its authority to "Projects Less than 25 Megawatts" while the language of the Order itself reiterates this limitation.

#### "ORDER

- 1. The Commission herein adopts the Large Wind Energy Conversion System General Wind Turbine Permit Setbacks and Standards proposed by the Department of Commerce Energy Facility Permitting staff, attached as Exhibit A. The general permit standards shall apply to large wind energy conversion system site permits issued by counties pursuant to Minn. Stat. 216F.08 and to permits issued by the Commission for LWECS with a combined nameplate capacity of less than 25,000 watts.
- 2. The Commission requests that the Department of Commerce Energy Facility Permitting staff further investigate wetland setback issues with stakeholders and develop recommendations for Commission consideration.

# 3. This Order shall become effective immediately."

Page 7 of *In the Matter of Establishment of General Permit Standards for the Siting of Wind Generation Projects Less than 25 Megawatts*, Order Establishing General Wind Permit Standards, Docket No. E,G-999/M-07-1102 (Jan. 11, 2008). No citation is provided in this Order or in any of the OES permit documents associated with PUC Dockets in this matter, to broader general performance permit standards, rules or orders currently adopted by MNPUC and enforced by the OES EFP. No such minimum standards currently exist in binding policy to inform local governments, the public or the applicant what performance standards will be applied to evaluate, permit and regulate large wind energy conversion systems 25 MW or greater in size. The OES EFP staff did provide a chart summarizing their assessment of variations between the Goodhue County Wind Regulations and the requirements typically imposed as part of the PUC permitting process. These common permit requirements for LWECS 25 MW or larger are not part of a PUC Order, Rule, or Minnesota Statute.

The ALJ has clearly used facts that were never introduced into evidence to develop this recommendation because record does not contain a citation or recitation of previous permit requirements imposed by the PUC.

# ALJ Finding 38.

38. In addition, the County, Goodhue Wind Truth, the Coalition for Sensible Siting, and Belle Creek Township contend that the statutory provision giving counties the authority to adopt more stringent standards "stands on its own," so to speak, and provides unlimited authority for any county to adopt standards for LWECS that the Commission must, in turn, apply to projects located in the county unless there is good cause not to do so.

# BCT

38. In addition, the County, Goodhue Wind Truth, the Coalition for Sensible Siting, and Belle Creek Township contend that the statutory provision giving counties the authority to adopt more stringent standards "stands on its own," so to speak, and provides unlimited authority for any county to adopt standards for LWECS that the Commission must, in turn, apply to projects located in the county unless there is good cause not to do so.

#### Exception to Number 38:

No party has argued that the statute provides a county with "unlimited" authority. Any authority to adopt standards is limited by the language of the statute.

#### GWT

38. In addition, the County, Goodhue Wind Truth, the Coalition for Sensible Siting, and Belle Creek Township contend that the statutory provision giving counties the authority to adopt more stringent standards "stands on its own," so to speak, and provides unlimited authority for any county to adopt standards for LWECS that the Commission must, in turn, apply to projects located in the county unless there is good cause not to do so.

### **CFSS**

Exception to Number 38: In this case, the statutory framework for regulation of all Wind Energy Conversion Systems (WECS) in M.S. 216F.01-09 also decisively supports the position of Goodhue County and PUC staff, not OES staff, (as described by Counsel for the OES EFP). A county is specifically delegated authority by Minn. Stat. 216F.02 to adopt regulations for all SWECS and may adopt regulations for LWECS, including those for which the PUC issues permits. The legislature's language in Minn. Stat. §216F.081 is clear on this issue. <sup>51</sup>

When adopting this law, the legislature made no distinction is made in this subdivision of the statute between LWECS from 5 MW to 25 MW and those LWECS 25 MW and larger that the PUC exclusively permits. Since a county may assume exclusive permitting authority with no

PUC permit to be issued at all for LWECS up to 25 MW, concurrent regulation by county ordinance standards included in a PUC issued permit will only exist where (such as in our case) a county does not assume direct permitting authority.

	V. Good Cause
ALJ Finding 39.	39. Statutory construction is a question of law. When a statute does not expressly define a term, but the term is defined in a related statute, the statutes are <i>in pari materia</i> and should be construed together. In addition, every law shall be construed, if possible, to give effect to all its provisions. 50
ВСТ	39. Statutory construction is a question of law. If the language of a statue is unambiguous, a court applies its plain meaning. Minn. Stat. § 645.16. Minnesota Statutes § 216F.081 simply states that "a county" may adopt standards. It does not state that a designated county may adopt standards. It does not state that particular counties may adopt standards. It does not state, as suggested by AWA, that "only counties that have assumed responsibility to permit LWECS up to 25 MW under Minn. Stat. § 216F.08" may adopt standards. The statute does not modify the word "county" in any way. It simply uses the term county. There is no ambiguity, and, therefore, the Court cannot engage in any further analysis." When a statute does not expressly define a term, but the term is defined in a related statute, the statutes are <i>in pari materia</i> and should be construed together. In addition, every law shall be construed, if possible, to give effect to all its provisions.
	Exception to Number 39:  The only relevant term not defined by the statute is "county." Had the Legislature wished to define county in a way other than its common usage, it could have done so. It did not, and because the word is not ambiguous, it is inappropriate for there to be any further analysis of what the word county means.
ALJ Finding 40.	40. Although Minn. Stat. § 216F.02(c) restricts local governments to the establishment of requirements for the siting and construction of SWECS, the amendment in Minn. Stat. § 216F.081 provides that a county "may" adopt ordinance standards for LWECS that are more stringent than those applied by the Commission. Minn. Stat. § 216F.081 does not indicate how these two apparently conflicting provisions are to be reconciled. This absence, however, does not render the statute ambiguous.
County	Exception to Number 40:  Minn. Stat. § 216F.02(c) contains no restriction (emphasis asdded) on local governments; rather it does not preclude (emphasis added) a local government from establishing requirements for the siting and construction of SWECS. SWECS is defined by Minn. Stat. § 216F.081, Subd. 3 as less than 5,000 kilowatts. Counties are allowed by Minn. Stat. § 216F.08 to permit up to 25,000 kilowatts. There is no reference to § 216F.08 in § 216F.081 in Minn. Stat. § 216F.02(c). The statute stands alone.
ВСТ	40. Although Minn. Stat. § 216F.02(c) restricts local governments to the establishment of requirements for the siting and construction of SWECS, the amendment in Minn. Stat. § 216F.081 provides that a county "may" adopt ordinance standards for LWECS that

<sup>49</sup> In the Matter of the Commission's Investigation of Issues Governed by Minnesota Statutes Section 216A.036, 724 N.W.2d 743, 746 (Minn. App. 2006). See also Minneapolis Police Officers Federation v. City of Minneapolis, 481 N.W.2d 372, 374 (Minn. App. 1992) (statutes relating to the same subject matter must be construed as consistent with each other).

Minn. Stat. § 645.16.

are more stringent than those applied by the Commission. Minn. Stat. § 216F.081 does not indicate how these two apparently conflicting provisions are to be reconciled. This absence, however, does not render the statute ambiguous.

### Exception to Number 40:

Any legal analysis of this question rightfully stops with the unambiguous language of the statute. Where statutory language is unambiguous, there need not, and cannot be, any reconciliation of "apparently conflicting provisions."

CFSS

Exception to No. 40.: There is no need for an analysis of the ambiguity in the Statute, it simply doesn't apply because to apply the contention proposed by the ALJ above would result in a violation of Minn. Stat. 14.01, *et. seq.* 

Staff

See briefing papers for staff comments.

### ALJ Finding 41.

It is clear from a reading of the entire statute that a county generally has 41. authority to regulate SWECS; a county may also assume the responsibility to issue permits for LWECS of less than 25 megawatts, pursuant to Minn. Stat. § 216F.08; when it does so, the county "shall" apply the commission's general permit standards; it "may" grant a variance from a permit standard if the variance is in the public interest; and it "may" adopt by ordinance more stringent standards than those established by the commission. When those events have occurred, it makes sense that the Commission, when issuing site permits for projects of 25 megawatts or larger in that county, would be required to consider and apply any more stringent ordinance standards, so that all LWECS sited within a given county (regardless of whether they are under or over 25 megawatts and regardless of whether the county or the PUC issues the permit) are required to meet similar standards. In all other circumstances, a site permit for an LWECS issued by the Commission "supersedes and preempts all zoning, building, or land use rules, regulations, or ordinances adopted by regional, county, local, and special purpose governments."<sup>51</sup> This reading of the statute gives effect to all of its provisions and construes them consistently with each other. The ALJ has concluded that Chapter 216F unambiguously requires this interpretation.

#### County

### Exception to Number 41:

The Administrative Law Judge was tasked by the PUC to develop a record on "good cause" as that appears in Minn. Stat. § 216F.081, for the purpose of making recommendations on whether there is good cause for the Commission to not apply the standard to LWECS in Goodhue County.

In its First Prehearing Order dated December 8, 2010, the Administrative Law Judge stated at number 13, in part:

"In particular, the Administrative Law Judge would like the parties to brief the issue whether Minn. Stat. § 216F.081 (2008) is intended to apply only to counties that have assumed the responsibility to process applications and issue permits for LWECS with a combined nameplate capacity of less than 25 MW, pursuant to Minn. Stat. § 216F.08."

On December 20, 2010, the Office of Energy Security replied to this request with "Comments" and the affidavits of employees Deborah Pile and Ingrid Bjorklund, dated December 20, 2010. In her affidavit, Ms. Pile states:

"No. 15. OES EFP continued to advise that counties must first assume

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<sup>&</sup>lt;sup>51</sup> Minn. Stat.§ 216F.07.

jurisdiction over LWECS up to 25 MW before adopting more stringent standards under section 216F.081 until we became aware that Commission staff had interpreted section 216F.081 during the course of processing the AWA Goodhue application to mean that any county, regardless of assuming jurisdiction for LWECS up to 25 MW in size, could adopt more stringent standards which the Commission would be required to consider under 216F.081."

At number 16 of her Affidavit Mr. Pile states that:

"...the November 2, 2010, Order referring this matter to the Office of Administrative Hearings <u>may</u> (underlining added) imply a request for the ALJ to provide a recommendation regarding the interpretation of 216F.081."

A review of the Commission's Order of November 2, 2010, finds that there is no explicit order for the Administrative Law Judge to interpret the statute.

In regard to an "implicit" order, Minn. R. 7854.0900, subd. 5(D) states in part:

"Alternatively, the Commission may request the Administrative Law Judge to identify the issues and determine the appropriate scope and conduct of the hearing according to applicable law, due process, and fundamental fairness."

A review of the November 2, 2010, PUC order indicates that this was not ordered. A review of the Applicant's Petition for Rehearing and Reconsideration of Decision Remanding these Matters to the Office of Administrative Hearings for Additional Hearing dated November 4, 2010, and the resulting PUC Notice and Order for Hearing dated November 20, 2010, does not task the Administrative Law Judge with the interpretation of Minn. Stat. § 216F.081.

The reasoning herein is incorrect. There will be no uniformity in LWECS regulations unless all counties and the PUC follow the same standards. Those statewide standards must first be adopted by the PUC to apply to <u>all</u> LWECS.

The County reiterates that rules for LWECS have not been adopted pursuant to Minn. Stat. § 216F.05.

"Minn. Stat. 216F.05 Rules.

The commission shall adopt rules governing the consideration of an application for a site permit for an LWECS that address the following: (emphasis added)

- 1. criteria that the commission shall use to designate LWECS sites, which must include the impact of LWECS on humans and the environment;
- 2. procedures that the commission will follow in acting on an application for an LWECS;
- procedures for notification to the public of the application and for the conduct of a public information meeting and a public hearing on the proposed LWECS;
- 4. requirements for environmental review of the LWECS;
- 5. conditions in the site permit for turbine type and designs; site layout and construction; and operation and maintenance of the LWECS, including the requirement to restore, to the extent possible, the area affected by construction of the LWECS to the natural conditions that existed immediately before construction of the LWECS;
- 6. revocation or suspension of a site permit when violations of the permit or other requirements occur; and

	7. payment of fees for the necessary and reasonable costs of the
	commission in acting on a permit application and carrying out the
	requirements of this chapter."
BCT	41. It is clear from a reading of the entire statute that a county generally has
	authority to regulate SWECS; a county may also assume the responsibility to issue permits for
	LWECS of less than 25 megawatts, pursuant to Minn. Stat. § 216F.08; when it does so, the
	county "shall" apply the commission's general permit standards; it "may" grant a variance from a
	permit standard if the variance is in the public interest; and it "may" adopt by ordinance more stringent standards than those established by the commission. When those events have
	occurred, it makes sense that the Commission, when issuing site permits for projects of 25
	megawatts or larger in that county, would be required to consider and apply any more stringent
	ordinance standards, so that all LWECS sited within a given county (regardless of whether they
	are under or over 25 megawatts and regardless of whether the county or the PUC issues the
	permit) are required to meet similar standards. In all other circumstances, a site permit for an
	LWECS issued by the Commission "supersedes and preempts all zoning, building, or land use
	rules, regulations, or ordinances adopted by regional, county, local, and special purpose
	governments."51 This reading of the statute gives effect to all of its provisions and construes them consistently with each other. The ALJ has concluded that Chapter 216F unambiguously
	requires this interpretation.
GWT	41. It is clear from a reading of the entire statute that a A county generally has
	authority to regulate SWECS; a county may also assume the responsibility to issue permits
	for LWECS of less than 25 megawatts, pursuant to Minn. Stat. § 216F.08; when it does
	so, the county "shall" apply the commission's general permit standards; it "may" grant a
	variance from a permit standard if the variance is in the public interest; and it "may" adopt by
	ordinance more stringent standards than those established by the commission. When those
	events have occurred, it makes sense that the Commission, when issuing site permits for
	projects of 25 megawatts or larger in that county, would be required to consider and apply
	any more stringent ordinance standards, so that all LWECS sited within a given county
	(regardless of whether they are under or over 25 megawatts and regardless of whether the county or the PUC issues the permit) are required to meet similar standards. In all
	other circumstances, a site permit for an LWECS issued by the Commission "supersedes
	and preempts all zoning, building, or land use rules, regulations, or ordinances adopted by
	regional, county, local, and special purpose governments." <sup>51</sup> This reading of the statute
	gives effect to all of its provisions and construes them consistently with each other. The
	ALJ has concluded that Chapter 216F unambiguously requires this interpretation.
CFSS	Exception to Number 41: The ALJ's reasoning herein is incorrect. There will be no
	uniformity in LWECS regulations unless all counties and the PUC follow the same standards.
	Those statewide standards must first be adopted by the PUC pursuant to formal rule making
Staff	requirements of Minn. Stat. 14.01, <i>et. Seq.</i> to apply to all LWECS <sup>55</sup> .  See briefing papers for staff comment.
ALJ	See briefing papers for stan comment.
Finding	42. The position that any county may regulate LWECS, regardless of size, and
42.	that the commission must apply those standards unless there is good cause not to do so,
	is an interpretation of Minn. Stat. § 216F.081 that conflicts expressly with other provisions
	of the Wind Siting Act. This interpretation reads both the limitation provided by 216F.08
	(assumption of permitting responsibility for projects under 25 megawatts) and the pre-
	emption language of 216F.07 out of the Act. It cannot be the case that local regulation is
	completely pre-empted by a site permit issued by the Commission, and that the
	Commission is simultaneously obligated to consider and to apply the local regulation
	absent good cause. Moreover, this interpretation makes no practical sense. No county would go to the expense of assuming the permitting responsibilities for LWECS of less than
	25 megawatts, if it could avoid those responsibilities and achieve virtually the same end
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# ALJ Finding 43.

43. Because Chapter 216F is not ambiguous, it is not necessary to consider the evidence of legislative history provided by the OES.

### County

### Exception to Number 43:

Goodhue County's Ordinance does not directly regulate large WECS in Goodhue County. However, pursuant to M.S. 216F.081, the existence of Article 18 of the Goodhue County Zoning Ordinance as contained in Exhibit 24B, requires the MNPUC to apply each of the County's more stringent standards to large WECS sited in the County unless the PUC finds good cause not to apply a specific standard. The "good cause" standard is statutorily incorporated into the permit requirements to be applied by the MNPUC pursuant to M.S. 216F.081. The extent of county authority is made plain by the wording of M.S. 216F.081. This statute embodies a strong, affirmative policy enactment, pursuant to M.S. 216F.02, put in place to support counties in their broad responsibilities to protect citizens' legitimate interest in health, safety, and public welfare from industrial development. Each standard in the Ordinance stands alone subject to the good cause test and is, therefore, severable for purposes of evaluation and subsequent incorporation into the PUC permit. Pursuant to an application for a permit under the jurisdiction of the PUC, including an LWECS permit for a project of 25 MW or greater capacity (as determined pursuant to M.S. 216F.011(b)) the applicant bears the responsibility for providing all necessary information which the PUC needs to evaluate a permit application. See Minn. R. 1400.7300.

The OES EFP has historically disagreed with the above interpretation of relevant statutes. One staff supervisor of the OES states in her affidavit which is Attachment 4 of the Office of Energy Security Comments dated December 20, 2010, filed herein, at pg. 4 of the affidavit, paragraphs 16-18 as follows:

- "16. The Commission speaks through its orders. To date, the OES EFP is unaware that the Commission has considered legal arguments or issued a formal order interpreting section 216F.081. However, the November 2, 2010, order referring this matter to the Office of Administrative Hearings may imply a request for the ALJ to provide a recommendation regarding the interpretation of section 216F.081. [emphasis added]
- 17. The OES EFP believes that Assistant Commissioner Mike Bull clearly stated in response to questioning by a senate committee member that his interpretation of section 216F.081 was that the application of county standards would apply to those counties who assumed permitting authority for LWECS up to 25 MW. A quorum of the members of the Senate Energy, Utilities, Technology and Communications Committee were present and heard Mr. Bull's response, and the legislation being considered at that time included the two separated sections, 216F.08 and 216F.081.
- 18. My understanding of Minnesota law is that legislative history and intent is only considered if the interpreting authority finds a statute to be capable of more than one reasonable interpretation, and that the plain language of the statute otherwise will control. (emphasis added) The OES EFP staff provides the information contained in this affidavit and the affidavit of Ingrid E. Bjorklund to assist the Administrative Law Judge in interpreting

sections 216F.08 and 216F.081, should the ALJ find that the statutes are capable of more than one reasonable interpretation such that they should be read together, with consideration of legislative intent." [emphasis added]

A second staff member of the OES also notes in her affidavit which is Attachment 5 of the OES Comments dated December 20, 2010, at pg. 4, paragraph 18:

"18. There does not appear to be any explanation why the A-2 amendment separated the county delegation (now under the heading "Permit Authority; Assumption by Counties") and the application of county standards language into two sections (216F.08 and 216F.081). The provisions appear to have been separated without any public discussion. Mr. Bull's statement, and a statement by Senator Prettner Solon, as discussed below, appear to be the only public record on the matter. From the time the committee adopted the A-2 amendment, the provisions remained separated."

This staff member, who is also a licensed attorney, goes on to make several observations and provide some specific documentation from legislative proceedings which to her established that the legislature <u>mistakenly</u> adopted the present statutory language which decoupled the authority for counties to adopt more stringent wind regulation than the PUC permit standards from the counties' responsibility to issue permits. By this argument, staff clearly acknowledges that the language of the statute as enacted allows counties to adopt more stringent wind standards than the PUC <u>and</u> to do so without adopting permitting responsibility. M.S. 216F.08 and 216F.081 were always separate in the proposed legislation. With their background in development of earlier versions of the statute, it is understandable that OES EFP staff have heretofore interpreted the statute contrary to its final plain language. Counsel for the OES EFP admits as much in her comments on pg. 3 and 4 of the Office of Energy Security Comments, dated December 20, 2010, when she says:

"Although the Commission appears to have interpreted section 2116F.081 [sic] to mean that the Commission is required to consider Goodhue County's more stringent standards, the OES EFP relies on its factual background to conclude that section 216F.081 may be capable of more than one reasonable meaning..."

and at pg. 4, Section III:

"After OES EFP staff became aware that Commission staff did not interpret the statute in the same manner, OES EFP ceased providing its previous advice in response to such inquiries."

The Affidavit of Ms. Ingrid E. Bjorklund reviewed the "legislative history" of Minn. Stat. § 216F.081 and reached conclusions at number 22 and number 23. At number 22 Ms. Bjorklund states that:

"I conclude that committee members did not intend Minn. Stat. § 216F.081 to apply to counties that did not undertake permitting responsibility of LWECS up to 25 MW. It is my opinion that Committee members did not perceive a difference between combining or separating the provisions in Minn. Stat. §§ 216F.08 and .081."

On December 1, 2010, Ms. Bjorklund submitted Comments and Recommendations in Docket no. IP-6605/WS-06-1445 regarding Kenyon Wind, LLC. At page 5, "Goodhue County Ordinance" Ms. Bjorklund states:

"Many commentators expressed that the standards under the Goodhue County ordinance should apply to this project....The Goodhue County ordinance would be considered if Kenyon Wind applied for a new site permit because its existing permit expired or was revoked by the Commission. Alternatively, the Commission could choose to amend Kenyon Wind's existing permit to include all or parts of the ordinance."

In this case, the statutory framework for regulation of all Wind Energy Conversion Systems (WECS) in M.S. 216F.01-09 also decisively supports the position of Goodhue County and PUC staff, not OES staff, (as described by Counsel for the OES EFP). A county is specifically delegated authority by Minn. Stat. 216F.02 to adopt regulations for all SWECS and may adopt regulations for LWECS, including those for which the PUC issues permits. The plain language of M.S. 216F.081 states:

"Minn. Stat. 216F.081 APPLICATION OF COUNTY STANDARDS. A county may adopt by ordinance standards for LWECS that are more stringent than standards in commission rules or in the commission's permit standards. The commission, in considering a permit application for LWECS in a county that has adopted more stringent standards, shall consider and apply those more stringent standards, unless the commission finds good cause not to apply the standards." [emphasis added]

No distinction is made in this subdivision of the statute between LWECS from 5 MW to 25 MW and those LWECS 25 MW and larger that the PUC exclusively permits. Since a county may assume exclusive permitting authority with no PUC permit to be issued at all for LWECS up to 25 MW, concurrent regulation by county ordinance standards included in a PUC issued permit will only exist where (such as in our case) a county does not assume direct permitting authority.

**GWT** 

- 43. The Wind Siting Ordinance is analogous to the Power Plant Siting Act, which it is modeled on, which also pre-empts local control of utility infrastructure siting. Many times, the PPSA has been criticized<sup>37</sup> for its provision to utilities of the "local option" where a utility proposing certain projects may choose to apply to a local government<sup>38</sup>. The criticism is that the PPSA is inequitable to the extent that local governments do not have ordinances, resources or expertise to handle siting.
- 43. Because Chapter 216F is not ambiguous, it is not necessary to consider the evidence of legislative history provided by the OES.

**CFSS** 

Exception to Number 43: While Chapter 216F itself may not be ambiguous, the scheme of using Pursuant to M.S. 216F.081, the existence of Article 18 of the Goodhue County Zoning Ordinance as contained in Exhibit 24B, requires the MNPUC to apply each of the County's more stringent standards to large WECS sited in the County unless the PUC finds good cause not to apply a specific standard. The "good cause" standard is statutorily incorporated into the permit requirements to be applied by the MNPUC pursuant to M.S. 216F.081. The extent of county authority is made plain by the wording of M.S. 216F.081. This statute embodies a strong, affirmative policy enactment, pursuant to M.S. 216F.02, put in place to support counties in their broad responsibilities to protect citizens' legitimate interest in health, safety, and public welfare from industrial development. Each standard in the Ordinance stands alone subject to

the good cause test and is, therefore, severable for purposes of evaluation and subsequent incorporation into the PUC permit. Pursuant to an application for a permit under the jurisdiction of the PUC, including an LWECS permit for a project of 25 MW or greater capacity (as determined pursuant to M.S. 216F.011(b)) the applicant bears the responsibility for providing all necessary information which the PUC needs to evaluate a permit application. See M.R. 1400.7300.

The OES EFP has historically disagreed with the above interpretation of relevant statutes. One staff supervisor of the OES states in her affidavit which is Attachment 4 of the Office of Energy Security Comments dated December 20, 2010, filed herein, at pg. 4 of the affidavit, paragraphs 16-18 as follows:

- "16. The Commission speaks through its orders. To date, the OES EFP is unaware that the Commission has considered legal arguments or issued a formal order interpreting section 216F.081. However, the November 2, 2010, order referring this matter to the Office of Administrative Hearings may imply a request for the ALJ to provide a recommendation regarding the interpretation of section 216F.081. [emphasis added]
- 17. The OES EFP believes that Assistant Commissioner Mike Bull clearly stated in response to questioning by a senate committee member that his interpretation of section 216F.081 was that the application of county standards would apply to those counties who assumed permitting authority for LWECS up to 25 MW. A quorum of the members of the Senate Energy, Utilities, Technology and Communications Committee were present and heard Mr. Bull's response, and the legislation being considered at that time included the two separated sections, 216F.08 and 216F.081.
- 18. My understanding of Minnesota law is that legislative history and intent is only considered if the interpreting authority finds a statute to be capable of more than one reasonable interpretation, and that the plain language of the statute otherwise will control. The OES EFP staff provides the information contained in this affidavit and the affidavit of Ingrid E. Bjorklund to assist the Administrative Law Judge in interpreting sections 216F.08 and 216F.081, should the ALJ find that the statutes are capable of more than one reasonable interpretation such that they should be read together, with consideration of legislative intent." [emphasis added]

A second staff member of the OES also notes in her affidavit which is Attachment 5 of the OES Comments dated December 20, 2010, at pg. 4, paragraph 18:

"18. There does not appear to be any explanation why the A-2 amendment separated the county delegation (now under the heading "Permit Authority; Assumption by Counties") and the application of county standards language into two sections (216F.08 and 216F.081). The provisions appear to have been separated without any public discussion. Mr. Bull's statement, and a statement by Senator Prettner Solon, as discussed below, appear to be the only public record on the matter. From the time the committee adopted the A-2 amendment, the provisions remained separated."

This staff member, who is also a licensed attorney, goes on to make several observations and provide some specific documentation from legislative proceedings which to her established that the legislature mistakenly adopted the present statutory language which decoupled the authority for counties to adopt more stringent wind regulation than the PUC permit standards from the counties' responsibility to issue permits. By this argument, staff clearly acknowledges that the language of the statute as enacted allows counties to adopt more stringent wind standards than the PUC and to do so without adopting permitting responsibility. M.S. 216F.08 and 216F.081 were always separate in the proposed legislation. With their

background in development of earlier versions of the statute, it is understandable that OES EFP staff have heretofore interpreted the statute contrary to its final plain language. Counsel for the OES EFP admits as much in her comments on pg. 3 and 4 of the Office of Energy Security Comments, dated December 20, 2010, when she says:

"Although the Commission appears to have interpreted section 2116F.081 [sic] to mean that the Commission is required to consider Goodhue County's more stringent standards, the OES EFP relies on its factual background to conclude that section 216F.081 may be capable of more than one reasonable meaning..."

and at pg. 4, Section III:

"After OES EFP staff became aware that Commission staff did not interpret the statute in the same manner, OES EFP ceased providing its previous advice in response to such inquiries."

In this case, the statutory framework for regulation of all Wind Energy Conversion Systems (WECS) in M.S. 216F.01-09 also decisively supports the position of Goodhue County and PUC staff, not OES staff, (as described by Counsel for the OES EFP). A county is specifically delegated authority by Minn. Stat. 216F.02 to adopt regulations for all SWECS and may adopt regulations for LWECS, including those for which the PUC issues permits. The plain language of M.S. 216F.081 states:

"Minn. Stat. 216F.081 APPLICATION OF COUNTY STANDARDS. A county may adopt by ordinance standards for LWECS that are more stringent than standards in commission rules or in the commission's permit standards. The commission, in considering a permit application for LWECS in a county that has adopted more stringent standards, shall consider and apply those more stringent standards, unless the commission finds good cause not to apply the standards." [emphasis added]

No distinction is made in this subdivision of the statute between LWECS from 5 MW to 25 MW and those LWECS 25 MW and larger that the PUC exclusively permits. Since a county may assume exclusive permitting authority with no PUC permit to be issued at all for LWECS up to 25 MW, concurrent regulation by county ordinance standards included in a PUC issued permit will only exist where (such as in our case) a county does not assume direct permitting authority.

# ALJ Finding 44.

Staff

See briefing papers for staff comment.

44. If the statute were considered to be ambiguous, the Commission could consider the contemporaneous legislative history in determining the intention of the legislature. The legislative history supports the interpretation that the legislature intended that the Commission would be obligated to consider and apply more stringent county standards only if those counties assumed the responsibility to process applications and issue permits for LWECS of less than 25 megawatts. 53

### County

Exception to Number 44:

See Exceptions to Numbers 41 - 43.

BCT

44. If the statute were considered to be ambiguous, the Commission could consider the contemporaneous legislative history in determining the intention of the legislature. The legislative history supports the interpretation that the legislature intended that the Commission

<sup>52</sup> Minn. Stat. § 645.16.

<sup>&</sup>lt;sup>53</sup> OES Comments (Dec. 20, 2010), Attachments 4 and 5 (Affidavits of D. Pile and I. Bjorklund).

would be obligated to consider and apply more stringent county standards only if those counties assumed the responsibility to process applications and issue permits for LWECS of less than 25 megawatts.<sup>53</sup>

### Exception to Numbers 44 & 45:

If it is not necessary to discuss the legislative history then it should not be discussed. Further, paragraphs 44 and 45 do not provide any insight into what legislative history was considered and how this conclusion regarding its merit was reached. The legislative history, in particular the Revisor's "Side-by-Side" attached as Exhibit C to the Affidavit of Ingrid Bjorklund, demands that the PUC reach the opposite conclusion; that there is nothing in the legislative history indicating that the statute should be read in any way other than its plain meaning.

**GWT** 

- 44. Rather than give the utilities opportunity to elect local review, as in PPSA, the LWECS Siting Statute puts onus on local governments to affirmatively select local control and take on this responsibility, including development of siting standards if local control is desired. Only local governments prepared to handle siting will be permitting LWECS in the 5-25MW range.
- 44. If the statute were considered to be ambiguous, the Commission could consider the contemporaneous legislative history in determining the intention of the legislature. The legislative history supports the interpretation that the legislature intended that the Commission would be obligated to consider and apply more stringent county standards only if those counties assumed the responsibility to process applications and issue permits for LWECS of less than 25 megawatts.

# CFSS Exception to Number 44:

Goodhue County's Ordinance does not directly regulate large WECS in Goodhue County, however, pursuant to M.S. 216F.081, the existence of Article 18 of the Goodhue County Zoning Ordinance as contained in Exhibit 24B, requires the MNPUC to apply each of the County's more stringent standards to large WECS sited in the County unless the PUC finds good cause not to apply a specific standard. The "good cause" standard is statutorily incorporated into the permit requirements to be applied by the MNPUC pursuant to M.S. 216F.081. The extent of county authority is made plain by the wording of M.S. 216F.081. This statute embodies a strong, affirmative policy enactment, pursuant to M.S. 216F.02, put in place to support counties in their broad responsibilities to protect citizens' legitimate interest in health, safety, and public welfare from industrial development. Each standard in the Ordinance stands alone subject to the good cause test and is, therefore, severable for purposes of evaluation and subsequent incorporation into the PUC permit. Pursuant to an application for a permit under the jurisdiction of the PUC, including an LWECS permit for a project of 25 MW or greater capacity (as determined pursuant to M.S. 216F.011(b)) the applicant bears the responsibility for providing all necessary information which the PUC needs to evaluate a permit application. See M.R. 1400.7300.

The OES EFP has historically disagreed with the above interpretation of relevant statutes. One staff supervisor of the OES states in her affidavit which is Attachment 4 of the Office of Energy Security Comments dated December 20, 2010, filed herein, at pg. 4 of the affidavit, paragraphs 16-18 as follows:

"16. The Commission speaks through its orders. To date, the OES EFP is unaware that the Commission has considered legal arguments or issued a formal order interpreting section 216F.081. However, the November 2, 2010, order referring this

matter to the Office of Administrative Hearings may imply a request for the ALJ to provide a recommendation regarding the interpretation of section 216F.081. [emphasis added]

- 17. The OES EFP believes that Assistant Commissioner Mike Bull clearly stated in response to questioning by a senate committee member that his interpretation of section 216F.081 was that the application of county standards would apply to those counties who assumed permitting authority for LWECS up to 25 MW. A quorum of the members of the Senate Energy, Utilities, Technology and Communications Committee were present and heard Mr. Bull's response, and the legislation being considered at that time included the two separated sections, 216F.08 and 216F.081.
- 18. My understanding of Minnesota law is that legislative history and intent is only considered if the interpreting authority finds a statute to be capable of more than one reasonable interpretation, and that the plain language of the statute otherwise will control. The OES EFP staff provides the information contained in this affidavit and the affidavit of Ingrid E. Bjorklund to assist the Administrative Law Judge in interpreting sections 216F.08 and 216F.081, should the ALJ find that the statutes are capable of more than one reasonable interpretation such that they should be read together, with consideration of legislative intent." [emphasis added]

A second staff member of the OES also notes in her affidavit which is Attachment 5 of the OES Comments dated December 20, 2010, at pg. 4, paragraph 18:

"18. There does not appear to be any explanation why the A-2 amendment separated the county delegation (now under the heading "Permit Authority; Assumption by Counties") and the application of county standards language into two sections (216F.08 and 216F.081). The provisions appear to have been separated without any public discussion. Mr. Bull's statement, and a statement by Senator Prettner Solon, as discussed below, appear to be the only public record on the matter. From the time the committee adopted the A-2 amendment, the provisions remained separated."

This staff member, who is also a licensed attorney, goes on to make several observations and provide some specific documentation from legislative proceedings which to her established that the legislature mistakenly adopted the present statutory language which decoupled the authority for counties to adopt more stringent wind regulation than the PUC permit standards from the counties' responsibility to issue permits. By this argument, staff clearly acknowledges that the language of the statute as enacted allows counties to adopt more stringent wind standards than the PUC and to do so without adopting permitting responsibility. M.S. 216F.08 and 216F.081 were always separate in the proposed legislation. With their background in development of earlier versions of the statute, it is understandable that OES EFP staff have heretofore interpreted the statute contrary to its final plain language. Counsel for the OES EFP admits as much in her comments on pg. 3 and 4 of the Office of Energy Security Comments, dated December 20, 2010, when she says:

"Although the Commission appears to have interpreted section 2116F.081 [sic] to mean that the Commission is required to consider Goodhue County's more stringent standards, the OES EFP relies on its factual background to conclude that section 216F.081 may be capable of more than one reasonable meaning..."

and at pg. 4, Section III:

"After OES EFP staff became aware that Commission staff did not interpret the statute

in the same manner, OES EFP ceased providing its previous advice in response to such inquiries."

In this case, the statutory framework for regulation of all Wind Energy Conversion Systems (WECS) in M.S. 216F.01-09 also decisively supports the position of Goodhue County and PUC staff, not OES staff, (as described by Counsel for the OES EFP). A county is specifically delegated authority by Minn. Stat. 216F.02 to adopt regulations for all SWECS and may adopt regulations for LWECS, including those for which the PUC issues permits. The plain language of M.S. 216F.081 states:

"Minn. Stat. 216F.081 APPLICATION OF COUNTY STANDARDS. A county may adopt by ordinance standards for LWECS that are more stringent than standards in commission rules or in the commission's permit standards. The commission, in considering a permit application for LWECS in a county that has adopted more stringent standards, shall consider and apply those more stringent standards, unless the commission finds good cause not to apply the standards." [emphasis added]

No distinction is made in this subdivision of the statute between LWECS from 5 MW to 25 MW and those LWECS 25 MW and larger that the PUC exclusively permits. Since a county may assume exclusive permitting authority with no PUC permit to be issued at all for LWECS up to 25 MW, concurrent regulation by county ordinance standards included in a PUC issued permit will only exist where (such as in our case) a county does not assume direct permitting authority.

### Staff

See briefing papers for staff comment.

## ALJ Finding 45.

45. Because Goodhue County has not assumed the responsibility to process applications and issue permits for LWECS of less than 25 megawatts, the commission is not obligated to consider or apply the more stringent standards established by the county ordinance.

#### County

#### Exception to Number 45:

Goodhue County's Ordinance does not directly regulate large WECS in Goodhue County. However, pursuant to M.S. 216F.081, the existence of Article 18 of the Goodhue County Zoning Ordinance as contained in Exhibit 24B, requires the MNPUC to apply each of the County's more stringent standards to large WECS sited in the County unless the PUC finds good cause not to apply a specific standard. The "good cause" standard is statutorily incorporated into the permit requirements to be applied by the MNPUC pursuant to M.S. 216F.081. The extent of county authority is made plain by the wording of M.S. 216F.081. This statute embodies a strong, affirmative policy enactment, pursuant to M.S. 216F.02, put in place to support counties in their broad responsibilities to protect citizens' legitimate interest in health, safety, and public welfare from industrial development. Each standard in the Ordinance stands alone subject to the good cause test and is, therefore, severable for purposes of evaluation and subsequent incorporation into the PUC permit. Pursuant to an application for a permit under the jurisdiction of the PUC, including an LWECS permit for a project of 25 MW or greater capacity (as determined pursuant to M.S. 216F.011(b)) the applicant bears the responsibility for providing all necessary information which the PUC needs to evaluate a permit application. See Minn. R. 1400.7300.

## See Number 41-43 above for a detailed analysis.

BCT

45. Because Goodhue County has not assumed the responsibility to process applications and issue permits for LWECS of less than 25 megawatts, the commission is not

obligated to consider or apply the more stringent standards established by the county ordinance.

#### Exception to Numbers 44 & 45:

If it is not necessary to discuss the legislative history then it should not be discussed. Further, paragraphs 44 and 45 do not provide any insight into what legislative history was considered and how this conclusion regarding its merit was reached. The legislative history, in particular the Revisor's "Side-by-Side" attached as Exhibit C to the Affidavit of Ingrid Bjorklund, demands that the PUC reach the opposite conclusion; that there is nothing in the legislative history indicating that the statute should be read in any way other than its plain meaning.

**GWT** 

- 45. There is no direct link between Minn. Stat. §216F.08 and §216F.081. No distinction is made in §216F.081 between LWECS from 5 MW to 25 MW and those LWECS 25 MW and larger that the PUC exclusively permits. Since a county may assume exclusive permitting authority with no PUC permit to be issued at all for LWECS up to 25 MW, concurrent regulation by county ordinance standards included in a PUC issued permit will only exist where a county does not assume direct permitting authority. Further, there is no provision for severance of various ordinance provisions the county's ordinance stands on its own, as a whole, for purposes of evaluation and incorporation into the PUC permit
  - 45. Because Goodhue County has not assumed the responsibility to process applications and issue permits for LWECS of less than 25 megawatts, the commission is not obligated to consider or apply the more stringent standards established by the county ordinance.

**CFSS** 

Exception to Number 45: Goodhue County's Ordinance does not directly regulate large WECS in Goodhue County, however, pursuant to M.S. 216F.081, the existence of Article 18 of the Goodhue County Zoning Ordinance as contained in Exhibit 24B, requires the MNPUC to apply each of the County's more stringent standards to large WECS sited in the County unless the PUC finds good cause not to apply a specific standard. The "good cause" standard is statutorily incorporated into the permit requirements to be applied by the MNPUC pursuant to M.S. 216F.081. The extent of county authority is made plain by the wording of M.S. 216F.081. This statute embodies a strong, affirmative policy enactment, pursuant to M.S. 216F.02, put in place to support counties in their broad responsibilities to protect citizens' legitimate interest in health, safety, and public welfare from industrial development. Each standard in the Ordinance stands alone subject to the good cause test and is, therefore, severable for purposes of evaluation and subsequent incorporation into the PUC permit. Pursuant to an application for a permit under the jurisdiction of the PUC, including an LWECS permit for a project of 25 MW or greater capacity (as determined pursuant to M.S. 216F.011(b)) the applicant bears the responsibility for providing all necessary information which the PUC needs to evaluate a permit application. See M.R. 1400.7300.

The OES EFP has historically disagreed with the above interpretation of relevant statutes. One staff supervisor of the OES states in her affidavit which is Attachment 4 of the Office of Energy Security Comments dated December 20, 2010, filed herein, at pg. 4 of the affidavit, paragraphs 16-18 as follows:

"16. The Commission speaks through its orders. To date, the OES EFP is unaware that the Commission has considered legal arguments or issued a formal order interpreting section 216F.081. However, the November 2, 2010, order referring this matter to the Office of Administrative Hearings may imply a request for the ALJ to provide a recommendation regarding the interpretation of section 216F.081. [emphasis added]

- 17. The OES EFP believes that Assistant Commissioner Mike Bull clearly stated in response to questioning by a senate committee member that his interpretation of section 216F.081 was that the application of county standards would apply to those counties who assumed permitting authority for LWECS up to 25 MW. A quorum of the members of the Senate Energy, Utilities, Technology and Communications Committee were present and heard Mr. Bull's response, and the legislation being considered at that time included the two separated sections, 216F.08 and 216F.081.
- 18. My understanding of Minnesota law is that legislative history and intent is only considered if the interpreting authority finds a statute to be capable of more than one reasonable interpretation, and that the plain language of the statute otherwise will control. The OES EFP staff provides the information contained in this affidavit and the affidavit of Ingrid E. Bjorklund to assist the Administrative Law Judge in interpreting sections 216F.08 and 216F.081, should the ALJ find that the statutes are capable of more than one reasonable interpretation such that they should be read together, with consideration of legislative intent." [emphasis added]

A second staff member of the OES also notes in her affidavit which is Attachment 5 of the OES Comments dated December 20, 2010, at pg. 4, paragraph 18:

"18. There does not appear to be any explanation why the A-2 amendment separated the county delegation (now under the heading "Permit Authority; Assumption by Counties") and the application of county standards language into two sections (216F.08 and 216F.081). The provisions appear to have been separated without any public discussion. Mr. Bull's statement, and a statement by Senator Prettner Solon, as discussed below, appear to be the only public record on the matter. From the time the committee adopted the A-2 amendment, the provisions remained separated."

This staff member, who is also a licensed attorney, goes on to make several observations and provide some specific documentation from legislative proceedings which to her established that the legislature mistakenly adopted the present statutory language which decoupled the authority for counties to adopt more stringent wind regulation than the PUC permit standards from the counties' responsibility to issue permits. By this argument, staff clearly acknowledges that the language of the statute as enacted allows counties to adopt more stringent wind standards than the PUC and to do so without adopting permitting responsibility. M.S. 216F.08 and 216F.081 were always separate in the proposed legislation. With their background in development of earlier versions of the statute, it is understandable that OES EFP staff have heretofore interpreted the statute contrary to its final plain language. Counsel for the OES EFP admits as much in her comments on pg. 3 and 4 of the Office of Energy Security Comments, dated December 20, 2010, when she says:

"Although the Commission appears to have interpreted section 2116F.081 [sic] to mean that the Commission is required to consider Goodhue County's more stringent standards, the OES EFP relies on its factual background to conclude that section 216F.081 may be capable of more than one reasonable meaning..."

and at pg. 4, Section III:

"After OES EFP staff became aware that Commission staff did not interpret the statute in the same manner, OES EFP ceased providing its previous advice in response to such inquiries."

In this case, the statutory framework for regulation of all Wind Energy Conversion

Systems (WECS) in M.S. 216F.01-09 also decisively supports the position of Goodhue County and PUC staff, not OES staff, (as described by Counsel for the OES EFP). A county is specifically delegated authority by Minn. Stat. 216F.02 to adopt regulations for all SWECS and may adopt regulations for LWECS, including those for which the PUC issues permits. The plain language of M.S. 216F.081 states:

"Minn. Stat. 216F.081 APPLICATION OF COUNTY STANDARDS. A county may adopt by ordinance standards for LWECS that are more stringent than standards in commission rules or in the commission's permit standards. The commission, in considering a permit application for LWECS in a county that has adopted more stringent standards, shall consider and apply those more stringent standards, unless the commission finds good cause not to apply the standards." [emphasis added]

No distinction is made in this subdivision of the statute between LWECS from 5 MW to 25 MW and those LWECS 25 MW and larger that the PUC exclusively permits. Since a county may assume exclusive permitting authority with no PUC permit to be issued at all for LWECS up to 25 MW, concurrent regulation by county ordinance standards included in a PUC issued permit will only exist where (such as in our case) a county does not assume direct permitting authority.

#### Staff

See briefing papers for staff comment.

## ALJ Finding 46.

46. If the Commission were to conclude nonetheless that it was obligated to consider and apply the ordinance standards unless there was good cause not to do so, it would have to determine the meaning of "good cause."

#### County

### **Exception to Number 46:**

The reasoning herein is incorrect. The ordinance was necessary, practicable, and is not contrary to the public interest in Goodhue County. There will be no uniformity in LWECS regulations unless all counties and the PUC follow the same standards. Those statewide standards must first be adopted by the PUC to apply to <u>all</u> LWECS.

"Minn. Stat. 216F.05 Rules, states:

The commission shall adopt rules governing the consideration of an application for a site permit for an LWECS that address the following: (emphasis added)

- 1. criteria that the commission shall use to designate LWECS sites, which must include the impact of LWECS on humans and the environment;
- 2. procedures that the commission will follow in acting on an application for an LWECS;
- procedures for notification to the public of the application and for the conduct of a public information meeting and a public hearing on the proposed LWECS;
- 4. requirements for environmental review of the LWECS;
- 5. conditions in the site permit for turbine type and designs; site layout and construction; and operation and maintenance of the LWECS, including the requirement to restore, to the extent possible, the area affected by construction of the LWECS to the natural conditions that existed immediately before construction of the LWECS;
- 6. revocation or suspension of a site permit when violations of the permit or other requirements occur; and
- 7. payment of fees for the necessary and reasonable costs of the commission in acting on a permit application and carrying out the requirements of this chapter."

GWT	46. If tThe Commission were to conclude nonetheless that it was IS obligated to consider and apply the ordinance standards unless there wals good cause not to do so.; it would have to determine the meaning of "good cause." Good cause has not been demonstrated by AWA Goodhue.  Exception to Number 46: The ALJ's reasoning falls far short of correct and appears to impose
	improperly adopted administrative rules alleged by the PUC on applicants and counties that were never adopted pursuant to Minn. Stat. § 14.01, et. seq. <sup>59</sup> Any statewide standards for LWECS greater than 25 MW must first be adopted by the PUC to apply to all LWECS.
Staff	See briefing papers for staff comment.
ALJ	
Finding 47.	47. The phrase is not defined in the statute, but the common legal meaning of "good cause" is a legally sufficient reason. <sup>54</sup> A conclusion as to whether there is or is not good cause is a mixed question of fact (what the record shows) and law (whether the showing is sufficient). <sup>55</sup> The Commission applied a similar good cause standard in Minn. Stat. §216B.243, subd. 5, in deciding to extend the 12-month time period for determining whether to issue a certificate of need in this case.
GWT	47. The phrase "good cause" is not defined in the statute, but the common legal meaning of "good cause" is a legally sufficient reason. <sup>54</sup> A conclusion as to whether there is or is not good cause is a mixed question of fact (what the record shows) and law (whether the showing is sufficient). <sup>55</sup> The Commission applied a similar good cause standard in Minn. Stat. §216B.243, subd. 5, in deciding to extend the 12-month time period for determining whether to issue a certificate of need in this case.
CFSS	Exception to Number 47:
	Good Cause  The Administrative Law Judge was tasked by the PUC to develop a record on "good cause" as that appears in Minn. Stat. § 216F.081, for the purpose of making recommendations on whether there is good cause for the Commission to not apply the standard to LWECS in Goodhue County.
	In its First Prehearing Order dated December 8, 2010, the Administrative Law Judge stated at number 13, in part:
	"In particular, the Administrative Law Judge would like the parties to brief the issue whether Minn. Stat. § 216F.081 (2008) is intended to apply only to counties that have assumed the responsibility to process applications and issue permits for LWECS with a combined nameplate capacity of less than 25 MW, pursuant to Minn. Stat. § 216F.08."
	On December 20, 2010, the Office of Energy Security replied to this request with "Comments" and the affidavits of employees Deborah Pile and Ingrid Bjorklund, dated December 20, 2010. In her affidavit, Ms. Pile states:
	"No. 15. OES EFP continued to advise that counties must first assume jurisdiction over LWECS up to 25 MW before adopting more stringent standards under section 216F.081 until we became aware that Commission staff had interpreted section 216F.081 during the course of processing the AWA Goodhue application to mean that any county, regardless of assuming jurisdiction for LWECS up to 25 MW in size, could adopt more stringent standards which the Commission would be required to consider under 216F.081."

<sup>&</sup>lt;sup>54</sup> Black's Law Dictionary (9<sup>1</sup> ed. 2009). <sup>55</sup> See Averbeck v. State, 791 N.W.2d 559, 561 (Minn. App. 2010).

At number 16 of her Affidavit Mr. Pile states that:

"...the November 2, 2010, Order referring this matter to the Office of Administrative Hearings may (underlining added) imply a request for the ALJ to provide a recommendation regarding the interpretation of 216F.081."

A review of the Commission's Order of November 2, 2010, finds that there is no explicit order for the Administrative Law Judge to interpret the statute.

In regard to an "implicit" order, Minnesota R. 7854.0900, subd. 5(D) states in part:

"Alternatively, the Commission may request the Administrative Law Judge to identify the issues and determine the appropriate scope and conduct of the hearing according to applicable law, due process, and fundamental fairness."

A review of the November 2, 2010, PUC order indicates that this was not ordered. A review of the Applicant's Petition for Rehearing and Reconsideration of Decision Remanding these Matters to the Office of Administrative Hearings for Additional Hearing dated November 4, 2010, and the resulting PUC Notice and Order for Hearing dated November 20, 2010, does not task the Administrative Law Judge with the interpretation of Minn. Stat. § 216F.081.

The Affidavit of Ms. Ingrid E. Bjorklund reviewed the "legislative history" of Minn. Stat. § 216F.081 and reached conclusions at number 22 and number 23. At number 22 Ms. Bjorklund states that:

"I conclude that committee members did not intend Minn. Stat. § 216F.081 to apply to counties that did not undertake permitting responsibility of LWECS up to 25 MW. It is my opinion that Committee members did not perceive a difference between combining or separating the provisions in Minn. Stat. §§ 216F.08 and .081."

On December 1, 2010, Ms. Bjorklund submitted Comments and Recommendations in Docket no. IP-6605/WS-06-1445 regarding Kenyon Wind, LLC. At page 5, "Goodhue County Ordinance" Ms. Bjorklund states:

"Many commentators expressed that the standards under the Goodhue County ordinance should apply to this project....The Goodhue County ordinance would be considered if Kenyon Wind applied for a new site permit because its existing permit expired or was revoked by the Commission. Alternatively, the Commission could choose to amend Kenyon Wind's existing permit to include all or parts of the ordinance."

Additionally, By simply charging the ALJ with analyzing whether there is "good cause" not to apply the County's ordinance, and there is a presumption that the ordinance is validly adopted and might apply. If the ordinance was not valid, then why analyze it. If the ALJ and PUIC are seeking development of record about the ordinance and whether there is "good cause" not to apply it (not whether it is applicable, not whether a county must assume 5-25MW, that's all distraction from the Commission's presumption).

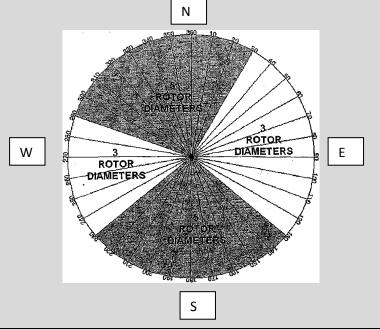
## **VI. Setbacks from Property Lines**

# ALJ Finding 48.

48. The County's ordinance in section 4, subdivision 1, provides for a property line setback for commercial WECS of "3 RD Non-prevailing and 5 RD Prevailing." It further provides that these setbacks shall be measured horizontally from the tower base. Prevailing wind is defined as the azimuth between 290 degrees to 30 degrees and between 130 degrees and 230 degrees. Non-prevailing wind is defined as the azimuth between 30 degrees and 130 degrees and between 230 degrees and 290 degrees.

# ALJ Finding 49.

49. The County's witnesses did not recall any discussion of the definition of prevailing wind in the meetings held in connection with adopting the ordinance.<sup>57</sup> The definition of prevailing wind and non-prevailing wind in the County, ordinance was taken from a similar ordinance provision adopted in Nicollet County.<sup>58</sup> The Nicollet County ordinance contains the following depiction of the manner in which prevailing and non-prevailing winds are defined:<sup>59</sup>



## ALJ Finding 50.

50. The Commission's general wind permit standards do not reference setbacks from property lines, but provide instead that wind turbine towers shall not be placed less than 5 RD from all boundaries of a developer's site control area (including wind and land rights) on the predominant wind axis, which is typically north-south; and 3 RD on the secondary wind axis (typically east-west). This setback applies to all parcels for which the permittee does not control land and wind rights, including all public lands.<sup>60</sup> This

<sup>57</sup> Tr. 2:313-14 (Hanni); Tr. 38:17 (Wozniak).

<sup>&</sup>lt;sup>56</sup> Ex. 248, Art. 18, § 4, subd. 1.

<sup>&</sup>lt;sup>58</sup> Tr. 38:12 (Wozniak); Nicollet County Wind Energy Conversion Systems Ordinance§ 801.1 adopted Aug. 11, 2009).

<sup>&</sup>lt;sup>59</sup> Nicollet County Wind Energy Conversion Systems Ordinance, Appendix A.

<sup>&</sup>lt;sup>60</sup> Ex. 21, Attachment A at 8.

standard is intended to protect the wind access rights of non-participating property owners and to minimize the effects of wind turbine-induced turbulence downwind. <sup>61</sup>
51. The County ordinance defines two 100° arcs for the prevailing wind direction, whereas the Commission's general wind permit standards allow an applicant to identify the predominant wind axis based on actual wind data obtained on the project site. 62
52. The Applicant used wind data measured at meteorological towers built on the site to determine that the wind blows most often in the project area from the West/Northwest along a directional line of 300 degrees. <sup>63</sup>
52. The Applicant used wind data measured at meteorological towers in Clarks Grove <sup>24</sup> , Minnesota for the Bent Tree project, as data from met towers built on the site is being collected and is not yet available. Clarks Grove data was used to determine that the wind blows most often in the project area from the West/Northwest along a directional line of 300 degrees. <sup>63</sup>
53. Because the County ordinance defines prevailing wind direction in two 100° arcs, the 5 RD setback in the ordinance would apply to more than half of the compass rose. The application of this setback would preclude placement of 35 of the 50 turbines sited in the project area. <sup>64</sup>
54. To the extent that the ordinance is intended to protect the wind access rights of non-participating property owners, the manner in which prevailing wind is defined in the ordinance is both overly broad and less accurate than the definition used by the Commission. The ordinance uses a broadly defined proxy measurement rather than actual data to define prevailing wind direction, and it functions to greatly reduce the amount of land available for siting turbines. There is no evidence in the record to suggest that a setback of this magnitude is necessary to protect wind access rights of non-participating property owners.
Exception to Number 54:
Re-Cross Ronald Peterson, Transcript Vol. 3A at p. 66, lines 2-10, proponent's expert admits there is a range for prevailing wind direction:  "And then when you look at prevailing wind directions, there's a range there, too, it's not just a vector, that — it's, you know, exactly, you know, such and such degrees." Mr. Peterson further stated that it was not impossible to establish a setback based on prevailing wind direction. Transcript Vol. 3A, p. 67, lines 1-6.  The Judge previously stated that this hearing did not constitute a due process

<sup>61</sup> OES Comments (Dec. 20, 2010), Attachment 3 at 3.
<sup>62</sup> Ex. 3, Burdick Direct at 7.
<sup>63</sup> Ex. 3, Burdick Direct at 7-8.
<sup>64</sup> Ex. 3, Burdick Direct at 8-9 & Ex. 3D (comparing setback compliance under the Commission's standard and the County ordinance).

	ordinance was not reasonable, was continious or was arbitrary
	ordinance was not reasonable, was capricious or was arbitrary.
GWT	54. To the extent that the ordinance is intended to protect the wind access
	rights of non-participating property owners, the manner in which prevailing wind is defined in
	the ordinance is both overly broad and less accurate than the definition used by the
	Commission. The ordinance uses abroadly defined proxy measurement rather than actual
	data to define prevailing wind direction, and it functions to greatly reduce the amount of
	land available for siting turbines. There is no evidence in the record to suggest that a
	setback of this magnitude is necessary to protect wind access rights of non-participating
	property owners.
ALJ	property emission
7	55. The Administrative Law Judge concludes there is good cause not to apply
Finding	this provision of the ordinance to the project.
55.	this provision of the ordinance to the project.
County	Exception to Number 55:
	Exception to Number 55.
	The proponent has not met its burden to establish by a preponderance of the
	evidence that there is good cause for the Commission to not apply the County
	Ordinance as it pertains to establishing the prevailing wind direction.
GWT	55. The Administrative Law Judge concludes there is good cause not to apply
OW.	
	this provision of the ordinance to the project.
CFSS	Exception to Number 55: The proponent has not met its burden to establish by clear and
	convincing evidence that the County Ordinance requirement is arbitrary or capricious as it
	pertains to establishing the prevailing wind direction.

## VII. Setbacks from Neighboring Dwellings

# ALJ Finding 56.

56. The County's ordinance provision for a commercial WECS specifies a 750-foot setback from participating dwellings and a 10 RD setback for non-participating dwellings, unless the owner agrees to a lesser setback. No setback may be less than 750 feet. The ordinance further provides that the setback for dwellings, schools, churches, health care facilities, and campgrounds shall be reciprocal unless the owner or authorized agent signs a letter of understanding waiving this setback, but no less than a 750 foot setback.

## ALJ Finding 57.

57. The 10 RD setback in the ordinance was intended to function in lieu of more specific performance standards governing noise and shadow flicker.<sup>67</sup> The County acknowledged that the effects of flicker and noise generated by wind towers were difficult to ascertain:

It would be a matter of determining what level of burden on quiet enjoyment of neighboring properties would be reasonably acceptable. If we chose a decibel level or the number of hours of flicker, we would also have had to determine how and by whom these limits would be measured, how often, under what weather conditions and how costs of measurement would be paid.

Based upon staffing and financial resources, in addition to the logistical realities, the County Board chose to eliminate noise and flicker measurement issues by increasing the setback of towers from non-participating neighbors. The idea being that a greater distance would eliminate the need for noise or flicker limitations. We chose a sliding scale of a .10 rotor diameter setback instead of a specific distance setback. The purpose behind this decision was that the size of the tower would determine the setback distance. For instance a shorter tower would have less of a noise or flicker impact and could be sited closer to dwellings. 68

#### County

#### Exception to Number 57:

Lisa Hanni, Transcript Vol. 2, p. 321 line 4-p. 324 line 8. Ms. Hanni discusses the County's approach to developing Ordinance standards that support the public health, safety, morals, and welfare with clear, enforceable regulation that can be affordably enforced by County staff.

"On page 2 of your testimony, in paragraph 9, the second paragraph of paragraph 9, I guess, you state: We discussed the effects of flicker and noise generated by wind towers. These two issues were difficult to ascertain. It would be a matter of determining what level of burden on quiet enjoyment of neighboring properties would be reasonably acceptable. And by reasonably acceptable who are you referring to?

<sup>66</sup> Ex. 248, Art. 18, § 4.

<sup>&</sup>lt;sup>65</sup> Ex. 24B, Art. 18, § 4.

<sup>&</sup>lt;sup>67</sup> Tr. 2:323-24 (Hanni).

<sup>&</sup>lt;sup>68</sup> Ex. 24, Hanni Rebuttal at 2.

A The neighboring properties.

Q That would be all property owners, participants, nonparticipants?

A Yes, it would be all the owners – all the property owners, but especially in this, you know, that's why we have a different level for participants and nonparticipants, different setbacks.

Q Is that generally a standard that the county uses in developing or in adopting ordinances, whether it's something that's reasonably acceptable?

A Part of our consideration in adopting ordinances or conditional use permits or any of that is we look at how we can regulate things. If we put a regulation in, we have to figure out how we're going to enforce that.

And part of it also is when we get public comment and we find out that this new use in the neighborhood might have some adverse effects, that's also taken into account. That's part of the public hearing process.

And so this is, you know, part of our statute is to look at the health, safety, morals, and welfare of the community. And so it's involved in all the planning processes.

Q Is that different than the – like, for example, a public interest standard?

A I'm not familiar with what you're meaning by a public interest standard.

Q Okay. I'll move on. You go on to say in that paragraph: If we chose a decibel level or the number of hours of flicker, we would also have had to determine how and by whom these limits would be measured, how often, under what weather conditions, and how cost of measurement would be paid. So by not choosing particular levels for those, for flicker or noise, is it primarily the enforceability problem?

A That's a part of it. We would have to come to a consensus on how we would – what amount of flicker and noise we would deem acceptable, but – when we would do the testing, where the testing would be, would it be inside ah ome, would it be outside the home on any part of the person's property, the length of time we think would be reasonably acceptable.

If we had to purchase equipment to do the measuring, if I had to hire more staff to do it, all those things come into account when we make our regulations to see how are we going to enforce this. If somebody complains that they are over that amount, how are we as the county going to enforce that.

Q So you do consider the sort of complaints that might come in; is that correct?

A We consider how we're going to enforce what we've written.

Q All right. Is it a fair characterization to say that the 10 RD setback was substituted for standards on noise and flicker?

A The 10 RD setback from my understanding was they didn't want the – it went through a number of iterations, from the subcommittee to the planning commission, to the county board, all within about a month, and it went back and forth.

The county board's final decision was take out flicker and noise limits and set the setback at 10 RD.

Q So essentially that's substituting 10 RD for noise and flicker; is that correct? A That was my understanding of their decision."

**GWT** 

57. The 10 RD setback in the ordinance was intended to function in lieu of more specific performance standards governing noise and shadow flicker.<sup>67</sup> The County acknowledged that the effects of flicker and noise generated by wind towers were difficult to ascertain <u>and regulate</u>:

It would be a matter of determining what level of burden on quiet enjoyment of neighboring properties would be reasonably acceptable. If we chose a decibel level or the number of hours of flicker, we would also have had to determine how and by whom these limits would be measured, how often, under what weather conditions and how costs of measurement would be paid.

Based upon staffing and financial resources, in addition to the logistical realities, the County Board chose to eliminate noise and flicker measurement issues by increasing the setback of towers from non-participating neighbors. The idea being that a greater distance would eliminate the need for noise or flicker limitations. We chose a sliding scale of a 10 rotor diameter setback instead of a specific distance setback. The purpose behind this decision was that the size of the tower would determine the setback distance. For instance a shorter tower would have less of a noise or flicker impact and could be sited closer to dwellings. <sup>68</sup>

**CFSS** 

Exception to Number 57: Lisa Hanni Transcript Cross at p. 321 line 4 – p. 324 line 8. Ms. Hanni discusses the County's approach to developing Ordinance standards that support the public health, safety, morals, and welfare with clear, enforceable regulation that can be affordably enforced by County staff.

"On page 2 of your testimony, in paragraph 9, the second paragraph of paragraph 9, I guess, you state: We discussed the effects of flicker and noise generated by wind towers. These two issues were difficult to ascertain. It would be a matter of determining what level of burden on quiet enjoyment of neighboring properties would be reasonably acceptable.

And by reasonably acceptable who are you referring to?

- A The neighboring properties.
- Q That would be all property owners, participants, nonparticipants?
- A Yes, it would be all the owners all the property owners, but especially in this, you know, that's why we have a different level for participants and nonparticipants, different setbacks.
- Q Is that generally a standard that the county uses in developing or in adopting ordinances, whether it's something that's reasonably acceptable?
- A Part of our consideration in adopting ordinances or conditional use permits or any of that is we look at how we can regulate things. If we put a regulation in, we have to figure out how we're going to enforce that.

And part of it also is when we get public comment and we find out that this new use in the neighborhood might have some adverse effects, that's also taken into account. That's part of the public hearing process.

And so this is, you know, part of our statute is to look at the health, safety, morals, and welfare of the community. And so it's involved in all the planning processes.

- Q Is that different than the like, for example, a public interest standard?
- A I'm not familiar with what you're meaning by a public interest standard.
- Q Okay. I'll move on. You go on to say in that paragraph: If we chose a decibel level or the number of hours of flicker, we would also have had to determine how and by whom these limits would be measured, how often, under what weather conditions, and how cost of measurement would be paid.

So by not choosing particular levels for those, for flicker or noise, is it primarily the enforceability problem?

A That's a part of it. We would have to come to a consensus on how we would – what amount of flicker and noise we would deem acceptable, but – when we would do the testing, where the testing would be, would it be inside ah ome, would it be outside the home on any part of the person's property, the length of time we think would be reasonably acceptable.

If we had to purchase equipment to do the measuring, if I had to hire more staff to do it, all those things come into account when we make our regulations to see how are we going to enforce this. If somebody complains that they are over that amount, how are we as the county going to enforce that.

Q So you do consider the sort of complaints that might come in; is that correct? A We consider how we're going to enforce what we've written. Q All right. Is it a fair characterization to say that the 10 RD setback wags substituted for standards on noise and flicker? A The 10 RD setback from my understanding was they didn't want the - it went through a number of iterations, from the subcommittee to the planning commission, to the county board, all within about a month, and it went back and forth. The county board's final decision was take out flicker and noise limits and set the setback at 10 RD. Q So essentially that's substituting 10 RD for noise and flicker; is that correct? A That was my understanding of their decision. ALJ Finding 58. The County also asserts that: 58. Recognizing the challenge of administering various performance standards for regulating such impacts as noise or shadow flicker the County Board settled on a setback from non-participating dwellings of 10 rotor diameters as a rational standard that would better protect the quality of life A lesser setback of a minimum of 750' plus compliance with State Noise Standards included in the revised ordinance was intended to allow more flexibility in locating wind turbines in proximity to the dwellings of participating property owners or non-participating property owners who may be willing to negotiate a setback of less than 10 rotor diameters with a Wind Energy Developer.69 ALJ 59. In a portion of the ordinance relating to procedures (as opposed to **Finding** setbacks), the ordinance provides: 59. The County may, at its discretion, require a Development Agreement to address specific technical procedures which may include but are not limited to: road use and repair, telephone line repair, site specific issues, payment in lieu of taxes, other financial securities, or real property value protection plans. The County may negotiate with applicants to limit night time noise to a limit of an annual average of 40 decibels (dBA), corresponding to the sound from a quiet street in a residential area (World Health Organization night noise guidelines for Europe).70 **GWT** 59. In a portion of the ordinance relating to procedures (as opposed to setbacks), the ordinance provides for negotiation to comply with the World Health Organization guidelines: The County may, at its discretion, require a Development Agreement to address specific technical procedures which may include but are not limited to: road use and repair, telephone line repair, site specific issues, payment in lieu of taxes, other financial securities, or real property value protection plans. The County may negotiate with applicants to limit

<sup>69</sup> Ex. 27, Wozniak Rebuttal at 5. Although the setback provisions in section 4 make no reference to state noise standards, a different part of the ordinance provides that all WECS shall comply with State of Minnesota Noise Standards. See Ex. 248, Art. 18, § 9, subd. 1.

night time noise to a limit of an annual average of 40 decibels (dBA), corresponding to the sound from a quiet street in a residential area (World Health Organization night noise

guidelines for Europe).<sup>70</sup>

ALJ

<sup>&</sup>lt;sup>70</sup> Ex. 24 8, Art. 18, § 3, subd. 4.

Finding 60.	60. The Commission's general wind permit standards require that turbines must be set back at least 500 feet from all homes, plus whatever additional distance is necessary to meet state noise standards. In siting wind turbines, the setback distance necessary to comply with this standard is calculated based on site layout and turbine for each residential receiver. Typically, a setback of between 750 and 1,500 feet is required to meet this standard, depending on turbine model, layout, and other site-specific conditions. Conditions.
GWT	60. The Commission's general wind permit standards require that turbines must be set back at least 500 feet from all homes, plus whatever additional distance is necessary to meet state noise standards. In siting wind turbines, the setback distance necessary to comply with this standard is calculated based on site layout and turbine for each residential receiver. Typically, a setback of between 750 and 1,500 feet is required to meet this standard, depending on turbine model, layout, and other site-specific conditions: (no citation).
Staff	Staff recommends providing a clarification to finding #60 that would state:  60. The Commission's general wind permit standards General Wind Permit Standards Order requires that turbines must be set back at least 500 feet from all homes, plus whatever additional distance is necessary to meet state noise standards. In siting wind turbines, the setback distance necessary to comply with this standard is calculated based on site layout and turbine for each residential receiver. Typically, a setback of between 750 and 1,500 feet is required to meet this standard, depending on turbine model, layout, and other site-specific conditions.
ALJ Finding 61.	61. The Applicant has proposed to site turbines using a setback of 1,500 feet from the dwellings of non-participants and a minimum of 1,000 feet for participating landowners. The OES recommended these setbacks as permit conditions.
County	OES Comments (Dec. 20, 2010), Attachment 2 (Comments and Recommendations of the Minnesota Office of Energy Security, Energy Facility Permitting Staff dated Oc. 13, 2010); Attachment 3 (Supplemental Comments dated Oct. 20, 2010):  "62. AWA Goodhue has agreed to site all turbines at least 1,500 feet away from the nearest non-participating residence and at least 1,000 feet from participating residences (site permit section 4.2). In addition, the Permittee will be required to site all turbines at distances sufficient to meet the Minnesota Noise Standard found in Minnesota Rules Chapter 7030 (site permit section 4.3).  63. In addition, the site permit will require AWA Goodhue to set back its turbines a minimum of five rotor diameters (1,355 feet) on the prevailing wind axis from the center of the wind turbine tower to the property boundary of all non-participating landowners and three rotor diameters (813 feet) on the non-prevailing wind axis (site permit section 4.1). The site permit (Section 4 also

<sup>&</sup>lt;sup>71</sup> Ex. 21, Attachment A at 8.

<sup>72</sup> Ex. 21, Attachment A at 8; Ex. 6, Casey Direct at 3.

<sup>73</sup> OES Comments (Dec. 20, 2010), Attachment 2 (Comments and Recommendations of the Minnesota Office of Energy Security, Energy Facility Permitting Staff dated Oct. 13, 2010); Attachment 3 (Supplemental Comments datedOct. 20, 2010).

	establishes other setback requirements from roads and other features."
GWT	61. The Applicant has proposed to site turbines using a setback of 1,500 feet from the dwellings of non-participants and a minimum of 1,000 1,500 feet for participating landowners under their contract. The OES recommended these setbacks as permit conditions without basis, without either scientific evidence or peer-reviewed studies to support those setbacks. <sup>73</sup>
CFSS	Exception to No. 61. Regardless
	State Noise Standards
ALJ Finding 62.	62. Pursuant to Minn. Stat. § 116.07, the Minnesota Pollution Control Agency (MPCA) was charged with the responsibility to adopt standards describing the maximum levels of noise that may occur in the outdoor atmosphere. The statute provides, in relevant part, that:  [s]uch noise standards shall be premised upon scientific knowledge as well as effects based on technically substantiated criteria and commonly
	accepted practices. No local governing unit shall set standards describing the maximum levels of sound pressure which are more stringent than those set by the Pollution Control Agency. <sup>74</sup>
ALJ Finding 63.	63. The noise standards for all outdoor noise are established in Minn. R. Chapter 7030. The MPCA's nighttime noise standard in residential areas is 50 dB(A) at L50, which means that noise levels cannot exceed 50 dB(A) more than 50% of the time during one hour. This exposure is based on measurements to be made outdoors, pursuant to rules specifying equipment specifications, calibration, measurement procedures, and data documentation.
GWT	63. The noise standards for all outdoor noise are established in Minn. R. Chapter 7030. The MPCA's nighttime noise standard in residential areas is 50 dB(A) at L50, which means that noise levels cannot exceed 50 dB(A) more than 50% of the time during one hour. Only "A" weighted sound is measured. This exposure is based on measurements to be made outdoors, pursuant to rules specifying equipment specifications, calibration, measurement procedures, and data documentation.
ALJ Finding 64.	These standards describe the limiting levels of sound established on the basis of present knowledge for the preservation of public health and welfare. These standards are consistent with speech, sleep, annoyance, and hearing conservation requirements for receivers within areas grouped according to land activities by the noise area classification (NAC) system established [in another rule part].
ALJ Finding	

<sup>&</sup>lt;sup>74</sup> Minn. Stat. § 116.07. <sup>75</sup> Minn. R. 7030.0040, subp. 2. <sup>76</sup> Minn. R. 7060.0060, subps. 1-5. <sup>77</sup> Minn. R. 7030.0040, subp. 1.

65.	65. According to the MPCA, the decibel levels of common noise sources are as follows: <sup>78</sup>
	are as follows: 140 Jet engine (at 25 meters)
	130 Jet aircraft (at 100 meters)
	120 Rock concert
	110 Pneumatic chipper (at one meter) 100 Jackhammer (at one meter)
	90 Chainsaw, lawnmower (at one meter)
	80 Heavy truck traffic 70 Business office, vacuum cleaner
	70 Business office, vacuum cleaner 60 Conversational speech, typical TV volume
	50 Library Bedroom
	40 Secluded woods 30 Whisper
	20
ALJ Finding	66. The MPCA regulates noise from specific sources, without regard to the level of background noise. When the distance from a point source of sound is doubled, the
66.	sound level decreases by six decibels. For example, a sound that is measured at 60 dB(A)
	from 50 feet away is measured at 48 dB(A) from 200 feet away. To determine the cumulative impact of two sources of noise at the same level, if they are equidistant
	and at fixed locations, the decibel level would increase by three. <sup>79</sup> If the sources of
	sound are more than 10 dB apart, there is no incremental increase in decibel level, because the louder noise predominates; and when sources of noise are less than 10
	dB apart, the magnitude of increase in decibel level decreases from 3 dB down to zero.80
	2610.
GWT	66. The MPCA regulates noise from specific sources, without regard to the level of background noise. When the distance from a point source of sound is doubled, the sound
	level decreases by six decibels. For example, a sound that is measured at 60 dB(A) from 50
	feet away is measured at 48 dB(A) from 200 feet away. To determine the cumulative
	impact of two sources of noise at the same level, if they are equidistant and at fixed locations, the decibel level would increase by three. <sup>79</sup> If the sources of sound are more
	than 10 dB apart, there is no incremental increase in decibel level, because the louder
	noise predominates; and when sources of noise are less than 10 dB apart, the magnitude of increase in decibel level decreases from 3 dB down to zero. <sup>80</sup>
ALJ	
Finding	67. Accordingly, sound levels from two or more sources cannot be arithmetically added together to determine the overall sound level. Existing ambient noise levels
67.	should not be added to noise produced by a turbine to determine the level of noise at a
	receptor from all sources.
ALJ	68. A change in decibel level corresponds to a perceived change in
Finding	loudness as follows:81
68.	+/- 1 dB(A) Not noticeable
	+/- 3 dB(A) Threshold of perception

<sup>&</sup>lt;sup>78</sup> Ex. 24A at 2599, 2602. <sup>79</sup> Ex. 24A at 2599, 2602-03. <sup>80</sup> Ex. 6, Casey Direct at 3-4; Tr. 2:213-20 (Casey). <sup>81</sup> Ex. 24A at 2605.

	+/- 5 dB(A) Noticeable change
	+/-10 dB(A) Twice (or half) as loud
	+/- 20 dB(A) Four times(or one-fourth) as loud
ALJ Finding 69.	69. The human ear cannot hear lower frequencies as well as higher frequencies. The A-weighting scale is used to duplicate the sensitivity of the human ear. At 100 Hertz, the A-weighting scale filters out approximately 20 dB from an incoming signal before it is combined with levels from other frequency ranges to produce an A-weighted sound level. The C-weighting scale represents actual sound pressure as it is received by a sound level meter. <sup>82</sup>
County	Exception to Number 69:

Summary of Public Testimony In the Matter of the Application for a Certificate of Need and Large Wind Energy Site Permit for the 78 Megawatt Goodhue Wind Project in Goodhue County, Section A Turbine Noise from the ALJ's report on a hearing in Goodhue, Minnesota, July 21-22, 2010:

"Numerous residents (26) of Goodhue County objected to the noise that will be produced by the wind turbines.

An important focus of the hearing testimony and the later comments was the decibel level at which residents are thought by some to begin to suffer serious health impacts. The threshold level is vigorously disputed - and both proponents and opponents of the project point the Commission toward the underlying scientific literature.

For example, the Goodhue County Planning Advisory Commission concludes that the nighttime residential noise standard of 50-55 dB set by the Minnesota Pollution Control Agency in Minn. R. 7030.0040 does not adequately protect the health of the citizens of Goodhue County. It points the Commission to the Minnesota Department of Health's 2009 publication "Public Health Impacts of Wind Turbines." In that publication, the MDH opined that the low frequency sound generated by wind turbines is a nighttime sleep issue because the walls and windows of homes block higher frequencies better than they shield out lower frequency noise. Further, MDH concluded that Minn. R. 7030.0040 appears to underweight penetration of low frequency noise into dwellings - with the possible result of sleep deprivation. The Advisory Commission believes that the research underlying the MPCA's standard is dated and that it should not be given deference by the Commission because it is not based upon current research and does not reflect current scientific knowledge. After consulting with the Goodhue County Public Health Director, the Advisory Commission advocates for a nighttime outdoor standard of 40 dB.

Goodhue residents Bruce and Marie McNamara hired sound engineer and acoustician Richard James to conduct noise tests and provide testimony relating the AWA Goodhue project. At the McNamara's request, Richard

<sup>&</sup>lt;sup>82</sup> Ex. 24A at 2605.

James, of E-Coustic Solutions, performed studies at test sites in Goodhue County between July 20 and 22, 2010. Mr. James opined that the nighttime noise level at an isolated residential lot in Goodhue County was 20 to 25 decibels (dBA). According to AWA Goodhue's sound modeling studies, this same property will experience a background sound level of 43 dBA once the wind turbines are in place. Mr. James concluded that the sounds of nature that currently comprise the nighttime soundscape will be replaced by the sound of wind turbines.

Moreover, Mr. James indicated that a 5 dBA increase in background sound levels is noticeable to people but unlikely to generate complaints. An increase of 10 dBA, however, often causes complaints from individuals. If there is a background sound level of 45 to 50 dBA at nonparticipating properties, Mr. James predicts a set of severe health impacts. Accordingly, Mr. James urges more stringent noise standards than those called for by the MPCA or the MDH.

The Applicant takes strong issue with Mr. James' calculations, methodologies, modeling techniques and the verifiability of his methods. It asserts that the average project-related noise level is quieter than the quietest average noise level in the community.

The Applicant casts doubt on the merit of Mr. James' assessments when it argues that "Mr. James does not provide evidence of the measurements he claims to have made, does not provide an explanation of the monitoring methodology he used, and does not provide evidence concerning the quality and accuracy of the measurement equipment or if his work product has undergone a quality control review by a qualified environmental acoustician."

John Meyer, a resident of Stewartville, Minnesota, argued that the noise concerns raised by those opposing the project are exaggerated. He claimed that the decibel measurements at the home sites are taken outside the residences and that the sound experienced inside these dwellings will be significantly less. He asserted the many residential air-conditioning units produce sound levels up to 76 decibels. Mr. Meyer argued that in the absence of conclusive scientific data as to the harmful effects of wind turbine noise, the Commission should approve the project."

GWT

69. The human ear cannot hear lower frequencies as well as higher frequencies, instead, lower frequencies are felt, and not heard. The A-weighting scale is used to duplicate the sensitivity of the human ear. At 100 Hertz, the A-weighting scale filters out approximately 20 dB from an incoming signal before it is combined with levels from other frequency ranges to produce an A-weighted sound level. As above, that 20 dB represents sound four times as loud that is filtered out. The C-weighting scale represents actual sound pressure as it is received by a sound level meter. State standards do not utilize a C weighted scale.

**CFSS** 

Exception to Number 69: This interpretation of the data on Ex 24A goes far beyond any reasonable extrapolation of this data by a lay person. The ALJ's summary of the human ear sensitivity should be disregarded.

ALJ Finding 70.

70. The noise level audible in any dwelling will depend on the distance from a noise source and the attenuation provided by the surrounding environment (atmosphere.

	terrain, construction type and insulation of the
	dwelling).83
County	Exception to Number 70:
	Most significantly, the audible noise level in any dwelling will depend on the initial volume of the noise source.
В. А	applicant's Noise Study
ALJ Finding 71.	71. Based on the manufacturer's specifications for the turbines proposed for use in this project, a setback of 750 feet for one turbine would meet MPCA noise standards. In this case, because multiple turbines could potentially impact a residence, the Applicant conducted a sound modeling study in June 2010 to determine the maximum sound level from the cumulative effect of all proposed turbines.
AWA	Finding #71 should be corrected to reflect the date of the Applicant's updated noise modeling study. AWA Goodhue hired HDR to conduct noise modeling to determine the maximum expected sound level at all residences within the project area from the cumulative effect of the proposed turbines. As part of HDR's work, HDR conducted a noise study that included measuring the existing noise levels within the site. HDR measured existing sound levels within the site in June 2010.
	In addition, HDR used the Cadna-A computer model to perform an analysis of the expected cumulative sound levels from all proposed turbines within the site. HDR originally prepared a report summarizing both its background noise measurement study and its Cadna-A modeling in July 2010, in advance of the public hearing conducted by ALJ Eric Lipman. HDR refreshed its Cadna-A modeling of the projected cumulative sound levels prior to submitting direct testimony in the administrative hearing conducted by ALJ Sheehy. The results of HDR's January 2011 study of the cumulative sound levels were included in Attachment A to the Direct Testimony of Mr. Tim Casey. Therefore, AWA Goodhue requests that finding #71 be corrected as follows:
	71. Based on the manufacturer's specifications for the turbines proposed for use in this project, a setback of 750 feet for one turbine would meet MPCA noise standards. In this case, because multiple turbines could potentially impact a residence, the Applicant conducted a sound modeling study in <u>June 2010 January 2011</u> to determine the maximum sound level from the cumulative effect of all proposed turbines.
County	Exception to Number 71:
	See the discussion of actual test results done at locations in the project area at number 69 above for clear contrasting opinions of Richard James, sound engineer and acoustician.
GWT	71. Based on the manufacturer's specifications for the turbines proposed for use in this project and the assumptions used in modeling, a setback of 750 feet for one turbine would meet MPCA noise standards. In this case, because multiple turbines could potentially impact a residence, the Applicant conducted a sound modeling study in June 2010 to determine the maximum sound level from the cumulative effect of all proposed turbines.
Staff	Staff recommends modifying this finding to refer to the applicant's more recent study:

<sup>83</sup> Ex. 24A at 2601.

	71. Based on the manufacturer's specifications for the turbines proposed for use in this project, a setback of 750 feet for one turbine would meet MPCA noise standards. In this case, because multiple turbines could potentially impact a residence, the Applicant conducted a sound modeling study in June 2010 January 2011 to determine the maximum sound level from the cumulative effect of all proposed turbines.
ALJ Finding 72.	72. The study showed that existing ambient noise levels in the project area ranged from 33 to 52 dB(A) for hourly median noise. Nighttime noise in the quietest locations (away from traffic areas, near residences and farm buildings) ranged from 33 to 43 dB(A) in Location 1 and ranged from 35 to 45 dB(A) in Location 2. These results are consistent with noise levels measured in rural settings with high quality wind resources. <sup>84</sup>
GWT	72. The Applicant's study showed that existing ambient noise levels in the project area ranged from 33 to 52 dB(A) for hourly median noise. Nighttime noise in the quietest locations (away from traffic areas, near residences and farm buildings) ranged from 33 to 43 dB(A) in Location 1 and ranged from 35 to 45 dB(A) in Location 2. These results are not consistent with noise levels measured in rural settings within high quality wind resources the AWA Goodhue project footprint, as completed by Rick James, INCE, on July 21 and 22, 2010. Ex. 21, Additional Testimony of Rick James, Notebook 2.84
ALJ Finding 73.	73. The study used acoustic analysis software called Cadna-A to calculate noise levels from the proposed wind turbines. This software incorporates internationally accepted acoustical standards. In modeling the noise produced by wind turbines, the study used conservative assumptions with regard to terrain (flat), level of absorption provided by agricultural fields (70%), and wind (assumed all turbines were operating simultaneously at their highest rated operating speed). The average modeled level of noise from wind turbines, based on these assumptions, was 31 dBA; the median modeled level was 32 dBA; and the maximum modeled level was 43 dBA. The average and median noise levels calculated for the turbines are lower than the existing ambient sound conditions measured in the noise study. The maximum noise level calculated for the turbines at any residence is 7 dBA below the MPCA L50 noise limit.
County	Exception to Number 73:
	Tim Casey testified that he did not evaluate low frequency sound. Transcript Vol. 2, p. 256, L. 11-16. The Minnesota Department of Health, Impacts of Wind Turbines, May, 2009, recommended that isopleths for dBC through dBA greater than 10 decibels should also be determined.
ALJ Finding 74.	74. The study results demonstrate that all of the wind turbine sites proposed by the Applicant are located sufficiently far from dwellings to meet the MPCA noise standards. <sup>87</sup> The closest distance between an existing home and a proposed turbine in this project is 1,152 ft from the home of a participant. <sup>88</sup>

<sup>84</sup> Ex. 6, Casey Direct, Attachment A at 8, 12 & 13.
<sup>85</sup> *Id.*, Attachment A at 10-11.
<sup>86</sup> Ex. 6, Casey Direct at 5-6.
<sup>87</sup> *Id.*, Attachment A at 11.
<sup>88</sup> Ex. 6, Casey Direct at 6.

GWT

74. The study results demonstrate claim that all of the wind turbine sites proposed by the Applicant are located sufficiently far from dwellings to meet the MPCA noise standards. The closest distance between an existing home and a proposed turbine in this project is 1,152 ft from the home of a participant. 88

### GWT also recommended adding the following noise related findings:

- 75. Rick James, INCE, filed Direct Testimony and testified in person before ALJ Lipman, where Applicant AWA Goodhue had opportunity to cross-examine and submit oral rebuttal. This testimony was included in exhibits filed by both Goodhue Wind Truth<sup>26</sup> and Goodhue County<sup>27</sup>.
- 76. James' testimony had several primary points. First, that setbacks of 1,500 feet are inadequate because wind turbine noise is distinctively annoying, causing adverse health impacts from sleep disturbances and vestibular disturbances from infra and low frequency sound. Second, that background levels submitted do not adequately define background sound levels, and include a "wind noise" component resulting in a biased assessment. Third, computer model estimates of operational sound levels understate the impact of turbines on the community. Fourth, AWA Goodhue presents misleading information contrary to expert understanding of thresholds of perception and mechanisms whereby perception occurs.
- 77. <u>James' conclusion is that wind turbine noise emissions will result in sleep disturbance for a significant fraction of those who live within a mile from turbines and that chronic sleep disturbance results in serious health effects:</u>

[S]iting criteria more lenient than those recommended by WHO's 40 dBA limit for avoiding health risks... will result in a high level of community complaints of both noise pollution and nuisance. In addition, there is mounting evidence that for the more sensitive members of your community, especially children under six, people with pre-existing medical conditions, particularly diseases of the vestibular system, the organs of balance, and seniors will be likely to experience serious health risks.

78. On July 20-21, 2010, James' conducted background sound level testing, finding a range of levels:

	Background Sound Level dBA (LA90)		
Type of Receiving location	Daytime	Nighttime	Notes
Isolated Residential	30 and under	20 to 25	Residential properties located at least 2000 feet from public roads. No adjacent neighbors within 1500 feet.
Semi-isolated Residential	30 to 35	20 to 25	Residential properties located within 2000 feet of a public road that has moderate daytime traffic and light night time traffic. No adjacent neighbors.
Residential near major roads	35 to 40	25 to 30	Residential properties located on major traffic arteries that have frequent daytime traffic and light to moderate nighttime traffic.
Residential or Farm Home adjacent Farming operations	30 to 40	25 to 35	This category represents homes located near farm fields with active farming activities, such as haying, or dairy farming

C. Apr

## ALJ Finding 75.

Shadow flicker is the alternating changes in light intensity caused by 75. moving rotor blades at a given stationary location, such as the window of a home. In order for shadow flicker to occur, three conditions must be met: the sun must be shining, with no clouds obscuring the sun; the rotor blades must be spinning and be located between the receptor and the sun; and the receptor must be sufficiently close to the turbine to be able to distinguish a shadow created by the turbine. The intensity and frequency of flicker at a given receptor are determined by factors such as the sun angle and sun path, turbine and receptor locations, cloud cover and degree of visibility, wind direction, wind speed, nearby obstacles, and local topography.89

# ALJ **Finding** 76.

HDR Engineering prepared a shadow flicker analysis for the Applicant using the most recent actual coordinates of homes and turbines, digital elevation data, and physical characteristics of the turbines proposed for this project. The model incorporates sunshine probability data from the National Weather Service and wind direction data from meteorological towers in the project area. It makes conservative assumptions that the turbines will operate 100 percent of the time; that receptors can be impacted from all directions; and that no shading or screening from buildings or vegetative cover will take place.90

### GWT

Applicants were present at Goodhue County Board, Planning Commission, and Planning Commission Subcommittee, and submitted only one shadow flicker map for the

<sup>89</sup> Ex. 7, Zilka Direct at 2-3 & Attachment A.

<sup>&</sup>lt;sup>90</sup> Ex. 7, Zilka Direct at 4-5 & Attachment A.

Ordinance record. For this siting docket and contested case proceeding. HDR Engineering prepared a shadow flicker analysis for the Applicant using the most recent actual coordinates of homes and turbines, digital elevation data, and physical characteristics of the turbines proposed for this project. The model incorporates sunshine probability data from the National Weather Service and wind direction data from meteorological towers in the project area. It makes conservative assumptions that the turbines will operate 100 percent of the time; that receptors can be impacted from all directions; and that no shading or screening from buildings or vegetative cover will take place. The following that the coordinates assumptions.

## ALJ Finding 77.

77. The study modeled actual expected flicker based on these assumptions for the 289 homes located within 6,562 feet of a project turbine. The following results were obtained:

Expected Hours/Yr	No. of Red	ceptors	% of Receptors <sup>91</sup>
0	69	23.9	
0.01-10	179	61.9	
10-20	30	10.4	
20-30	7	2.4	
30-40	4	1.4	

## ALJ Finding 78.

78. Based on these results, 278 homes (96.2%) are expected to experience less than 20 hours of shadow flicker per year; 248 (85.8%) are expected to experience less than 10 hours of shadow flicker per year. Of the 11 homes that are expected to experience more than 20 hours of shadow flicker per year, five are participants and six are non-participants. The greatest amount of expected shadow flicker at the home of a participant is 39 hours, 21 minutes per year; the greatest amount of expected shadow flicker at the home of a nonparticipant is 33 hours, 11 minutes. There are 4,462 annual daylight hours in Goodhue County, which means that the maximum exposures for both participants and non-participants is less than one percent of the available daylight hours per year. 92

#### GWT

78. Based on these results, 278 homes (96.2%) are expected to experience less than 20 hours of shadow flicker per year; 248 (85.8%) are expected to experience less than 10 hours of shadow flicker per year. Of the 11 homes that are expected to experience more than 20 hours of shadow flicker per year, five are participants and six are non-participants. The greatest amount of expected shadow flicker at the home of a participant is 39 hours, 21 minutes per year; the greatest amount of expected shadow flicker at the home of a nonparticipant is 33 hours, 11 minutes. There are 4,462 annual daylight hours in Goodhue County, which means that the maximum exposures for both participants and non-participants is less than one percent of the available daylight hours per year. This does not take into account flicker at homes with more than one turbine providing shadow flicker.

# ALJ Finding 79.

79. The Commission has no setback standards that are explicitly directed at shadow flicker. The proposed site permit recommended by OES/EFP in this case would require the Applicant to provide, at least ten working days prior to the pre-

<sup>&</sup>lt;sup>91</sup> Ex. 7, Zilka Direct Attachment A at 6.

<sup>&</sup>lt;sup>92</sup> Ex. 7, Zilka Direct at 5 & Attachment A. These results are virtually identical to a study HDR conducted in July 2010. See Ex. 24A at 538-611.

	construction meeting, data on shadow flicker impacts on each residence for both participating and non-participating landowners. It further provides that the Applicant "shall provide documentation on its efforts to minimize shadow flicker impacts." In addition, the Commission's general wind permit standards require that applicants establish procedures for handling and reporting complaints to the Commission concerning any part of the LWECS in accordance with the procedures provided in permit. 94
County	Exception to Number 79:
	The State of Minnesota has not promulgated a rule concerning limitation of hours of shadow flicker. Transcript Vol. 3A, p. 87, l. 7-10. Goodhue County's ordinance does not specifically address shadow flicker. However, the ALJ concludes at number 101 below:  "101. Although the Commission's general wind permit standards do not directly address shadow flicker, the proposed site permit could include conditions to address potential problems with shadow flicker. For example, in addition to requiring documentation of the Applicant's efforts to minimize shadow flicker impacts, the Commission could require the filing of a plan to mitigate any complaints related to shadow flicker, through methods such as landscaping or use of blackout shades. It is inequitable to expect that non-participating homeowners, in particular, should be wholly responsible for mitigating those complaints. Such a permit condition would be a more targeted method of regulating potential problems with shadow flicker.  Exception to Number 101:  Goodhue County respectfully applauds the Administrative Law Judge's
	findings in support of the rights of non-participating property owners' quiet enjoyment of their property."
GWT	79. The Commission has no setback standards that are explicitly directed at shadow flicker. The proposed site permit recommended by OES/EFP in this case would require the Applicant to provide, at least ten working days prior to the pre-construction meeting, data on shadow flicker impacts on each residence for both participating and non-participating landowners. It further provides that the Applicant "shall provide documentation on its efforts to minimize shadow flicker impacts. <sup>93</sup> In addition, the Commission's general wind permit standards require that applicants establish procedures for handling and reporting complaints to the Commission concerning any part of the LWECS in accordance with the procedures provided in permit. <sup>94</sup> Careful siting, avoidance and/or shutting a turbine off are the only mitigation options.
ALJ Finding	80. The Nicollet County ordinance, upon which the County's ordinance was
80.	based, provides for a limit of 30 hours per year for any receptor within a one- mile radius of each turbine. <sup>95</sup>
GWT	80. The Nicollet County ordinance, in part upon which the County's ordinance was based, provides for a limit of 30 hours per year for any receptor within a one- mile radius of each turbine. 95
ALJ Finding	81. A 10 RD setback is not a fixed distance but is determined by the length of

<sup>&</sup>lt;sup>93</sup> OES Proposed Site Permit§ 6.2. <sup>94</sup> Ex. 21, Attachment A at 15; Proposed Site Permit, Attachment 2. <sup>95</sup> Nicollet County Ordinance § 904.1.

81.	the turbine rotor used in a particular project. In this case, a 10 RD setback amounts to 2,707 feet, or more than one-half mile from a nonparticipating dwelling. <sup>96</sup>
GWT	81. A 10 RD setback is not a fixed distance but is a fixed parameter, determined by the length of the turbine rotor used in a particular project. In this case, a 10 RD setback amounts to 2,707 feet, or more than one-half mile from a nonparticipating dwelling. <sup>96</sup>
D. <i>A</i>	Application of the Ordinance
ALJ Finding 82.	82. If the County ordinance were applied, the 10 RD setback for non-participating residences would preclude placement of 43 of the 50 turbines proposed for this project. <sup>97</sup> Although the ordinance would allow a 750-foot setback for participating owners, the 2,707-ft setback for nonparticipants essentially would "swallow" the shorter setback for participants. A single non-participating landowner could preclude the siting of a wind turbine in an area of approximately four-fifths of a square mile surrounding the non-participant's property.
County	Exception to Number 82:
	Mr. Burdick is not an engineer, nor did he provide a mapping study to support his assertion. He acknowledged at Transcript Vol. 1, p. 40 lines 2-11 Burdick Cross and p. 48 lines 19-25 through p. 49 line 24, that the Applicants made no effort to seek additional participants or to purchase additional rights after the 10 RD setback was adopted by the County:  Q You discuss two ways you acquire land rights to allow construction of your project, leases and participation agreements, correct?  A Correct.
	Q And in the participation agreement, you say that that's a situation where a landowner waives property line setbacks in return for compensation, correct? A Correct.  Q Couldn't you use these same techniques to address the county setbacks and obtain agreements or participation that would reduce the setback from the
	10 rotor diameter setbacks to the 750-foot setback minimum that's in the county ordinance?
	A Presumably that would be one way of recording participation, yes.  Q Have you explored that possibility before or since the ten rotor diameter setback was put in place by the county?
	A There's a map in my surrebuttal which shows all of the parcels which we approached for participation in the project.
	<ul><li>Q And is that since the county's ten rotor diameter setback was put in place?</li><li>A No, it is not.</li></ul>
	Q Have you revisited that issue since it became obvious it was a critical issue to your survival of your project?
	A No, we have not, largely because we pursued our project under the then- existing regulatory framework and had sufficient land control for siting the turbines and proceeded on that basis." See also testimony of Cole Robertson,
ВСТ	Transcript Vol. 2, p. 108-109, lines 22-25, 1-6.  82. If the County ordinance were applied, the 10 RD setback for non-participating

<sup>96</sup> Ex. 3, Burdick Direct at 15. One-half mile is 2,640 ft. <sup>97</sup> Ex. 3, Burdick Direct at 16 & Attachment 3F. <sup>98</sup> *Id*.

<sup>&</sup>lt;sup>99</sup> Ex. 10, Burdick Surrebuttal at 5.

residences would preclude placement of 43 of the 50 turbines proposed for this project. Although t-The ordinance would allow a 750-foot setback for participating owners, the 2,707-ft setback for non-participants essentially would "swallow" the shorter setback for participants. A single non-participating landowner could preclude the siting of a wind turbine in an area of approximately four-fifths of a square mile surrounding the non-participant's property.

# **Exception to Number 82:**

The record is not clear that the 10RD setback would "swallow" the shorter setback. The map provided by the Applicant indicates that there are a number of turbines that could be moved closer to the participating residence and be outside of the 10RD setback from non-participating residences. (See, Exhibit 3-F for location of turbines located at or near the 10RD setback.)

# GWT

82. If the County ordinance were applied, <u>AWA Goodhue claims</u> the 10 RD setback for non- participating residences would preclude placement of 43 of the 50 turbines proposed for this project. <sup>97</sup> Although the ordinance would allow a 750-foot setback for participating owners, <u>AWA Goodhue claims</u> the 2,707-ft setback for nonparticipants essentially would "swallow" the shorter setback for participants. <sup>98</sup> A single non- participating landowner could preclude the siting of a wind turbine in an area of approximately four-fifths of a square mile surrounding the non-participant's property. <sup>99</sup>

#### **CFSS**

Exception to Number 82: Mr. Burdick is not an engineer, nor did he provide a mapping study to support his assertion. He acknowledged at Transcript Volume 1, p. 40 lines 2-11 Burdick Cross and p. 48 lines 19-25 through p. 49 line 24, that the Applicants made no effort to seek additional participants or to purchase additional rights after the 10 RD setback was adopted by the County:

Q You discuss two ways you acquire land rights to allow construction of your project, leases and participation agreements, correct?

A Correct.

Q And in the participation agreement, you say that that's a situation where a landowner waives property line setbacks in return for compensation, correct?

A Correct.

- Q Couldn't you use these same techniques to address the county setbacks and obtain agreements or participation that would reduce the setback from the 10 rotor diameter setbacks to the 750-foot setback minimum that's in the county ordinance?
- A Presumably that would be one way of recording participation, yes.
- Q Have you explored that possibility before or since the ten rotor diameter setback was put in place by the county?
- A There's a map in my surrebuttal which shows all of the parcels which we approached for participation in the project.
- Q And is that since the county's ten rotor diameter setback was put in place?
- A No. it is not.
- Q Have you revisited that issue since it became obvious it was a critical issue to your survival of your project?
- A No, we have not, largely because we pursued our project under the then-existing regulatory framework and had sufficient land control for siting the turbines and proceeded on that basis."

# ALJ Finding 83.

83. The Applicant has examined whether the project could proceed under the ordinance by using fewer, larger turbines at the same locations; but because larger rotor diameters would result in an even longer setback distance, this option was not feasible. The Applicant also considered use of a smaller turbine, which would result

<sup>&</sup>lt;sup>100</sup> Ex. 3, Burdick Direct at 17.

	megawatts. <sup>101</sup> Finally, the Applicant considered acquiring more land rights so that the project could be sited with the proposed equipment in compliance with the 10-RD setback. This analysis showed that the 10-RD standard would require so much additional land (approximately seven times the acreage already negotiated with landowners) that the project would become cost-prohibitive. <sup>102</sup>
County	Exception to Number 83:
	The Administrative Law Judge states that financial impact is marginally relevant. Transcript Vol. 2, p. 157, line 19-25. The Applicant has chosen not to explore more economical alternatives such as seeking increased participation following the adoption of the County Ordinance. See number 82 above.
вст	83. The Applicant has examined whether the project could proceed under the ordinance by using fewer, larger turbines at the same locations; but because larger rotor diameters would result in an even longer setback distance, this option was not feasible. The Applicant also considered use of a smaller turbine, which would result in a shorter setback distance; but this option would reduce the project size to 36 megawatts. Finally, the Applicant considered acquiring more land rights so that the project could be sited with the proposed equipment in compliance with the 10-RD setback. This analysis showed testimony claimed that the 10-RD standard would require so much additional land (approximately seven times the acreage already negotiated with landowners) that the project would become cost-prohibitive. The Allerth of the Allerth of the control of the con
	Exception to Number 83:
	The Applicant provided no "analysis" regarding the amount of land that would be needed to accommodate the Project under the County Ordinance. The statement that the project would "become cost-prohibitive" is no less speculative than the assertion made by Belle Creek Township and others—an assertion summarily disregarded in paragraph 85that the Applicant could negotiate waivers to reduce the 10RD setback for non-participants.
GWT	83. The Applicant has examined whether the project could proceed under the ordinance by using fewer, larger turbines at the same locations; but because larger rotor diameters would result in an even longer setback distance, this option was not feasible. The Applicant also considered use of a smaller turbine, which would result in a shorter setback distance; but this option would reduce the project size to 36 megawatts. Finally, the Applicant considered but made no attempts in acquiring more land rights so that the project could be sited with the proposed equipment in compliance with the 10-RD setback. This analysis showed AWA Goodhue speculates that the 10-RD standard would require so much additional land (approximately seven times the acreage already negotiated with landowners) that the project would become cost-prohibitive, but did not provide supporting data.
CFSS	Exception to No 83: The court's analysis here is akin to letting the fox guard the hen house. One would have assumed that the ALJ has worked on enough of the cases to understand that Applicant's may be slightly biased toward their own projects and financial projections presented by Applicants may be biased toward maximizing profits for the Applicant. Therefore, by making a determination that enforcement of a local standard against an applicant is cost prohibitive based SOLEY on financial projections of the Applicant itself seems dubious at least and questionable at best.

<sup>&</sup>lt;sup>101</sup> *Id.* at 18. <sup>102</sup> Ex. 2, Robertson Direct at 4; Tr. 1:199 (Burdick).

Finding 84.	84. The County was aware when the ordinance was passed that a setback of this magnitude would leave very little area available for siting LWECS. 103
ВСТ	84. The County was aware when the ordinance was passed that a setback of this magnitude would leave very little area available for siting LWECS. 110
	Exception to Number 84:
	The County Ordinance allows for a reduced setback to be negotiated with both participating and nonparticipating landowners. Nothing in the record suggests that the County knew that AWA would choose not to avail itself of the option to negotiate reduced setbacks.
GWT	84. The County was aware when the ordinance was passed that a setback of this magnitude would may leave very little area available for siting LWECS close to non-participating residences. 103
CFSS	Exception to No. 84: This statement completely disregards the testimony of Mssrs. Burdick, Ward and Robertson where they indicated that the lack of alternative locations for the turbines in this project was a result of the Applicant not attempting to acquire additional land rights after the County Ordinance was passed. All of these officer's of the Applicant testified that while they may have made so general calculations there was no attempt to validate these projections; determine if there were other willing participants after the county passed its ordinance; nor confirm whether their truly was a need for "7 times as much land rights." The ALJ seems to be making this unsupported statement and intentionally ignoring the record.
ALJ Finding 85.	85. Although the other parties have suggested that the Applicant could renegotiate its leases and participation agreements to take advantage of the 750-foot setback allowed for participants, or could offer to pay more money to nonparticipants in order to obtain more land rights, 104 the record is clear that application of the 10-RD setback to this project (as it has been developed to date) will effectively preclude the entire project. The assertion that the Applicant might be able to negotiate waivers of this requirement with those who have declined to participate in the past is speculation that is not founded in any evidence.
County	Exception to Number 85:
ВСТ	See Number 82 and Number 83 above.  Exception to Number 85:
	See exception to Number 83 and 84.
GWT	85. Although the other parties have suggested claim that the Applicant could renegotiate its leases and participation agreements to take advantage of the 750-foot setback allowed for participants, or could offer to pay more money to nonparticipants in order to obtain more land rights, 104 the record is clear that application of the 10-RD setback to this project (as it has been developed to date) will effectively preclude the entire project. Applicant has made no attempt to either increase landowner or non-participant payments to secure increased participation or to alter participant setbacks to Goodhue County's 750 foot setback. The assertion that the Applicant might be able to negotiate

Ex. 25C; Ex. 29; Tr. 3B:23 (Wozniak).

See Post-Hearing Memorandum of Belle Creek Township at 6-7 ("The negotiated price of a limited waiver of the setback requirement would likely be less than the lease payments to an owner who agrees to turn over a portion of his property to AWA for the placement of a turbine on his property"); Goodhue County Brief at 21; Post-Hearing Brief of Goodhue Wind Truth at 6-7.

	waivers of this requirement with those who have declined to participate in the past is speculation that is not founded in any evidence.
CFSS	Exception to Number 85: The ALJ's assertion that the record "is clear" is overly broad, speculative and is not supported by the record. While Mr. Burdick is not an engineer, nor did he provide a mapping study to support his assertion. He acknowledged at Transcript Volume 1, p. 40 lines 2-11 Burdick Cross and p. 48 lines 19-25 through p. 49 line 24, that the Applicants made no effort to seek additional participants or to purchase additional rights after the 10 RD setback was adopted by the County:  Q You discuss two ways you acquire land rights to allow construction of your project, leases and participation agreements, correct?  A Correct.
	Q And in the participation agreement, you say that that's a situation where a landowner waives property line setbacks in return for compensation, correct?  A Correct.
	Q Couldn't you use these same techniques to address the county setbacks and obtain agreements or participation that would reduce the setback from the 10 rotor diameter setbacks to the 750-foot setback minimum that's in the county ordinance?  A Presumably that would be one way of recording participation, yes.  Q Have you explored that possibility before or since the ten rotor diameter setback was put in
	place by the county?  A There's a map in my surrebuttal which shows all of the parcels which we approached for participation in the project.  Q And is that since the county's ten rotor diameter setback was put in place?
	A No, it is not.  Q Have you revisited that issue since it became obvious it was a critical issue to your survival of your project?  A No, we have not, largely because we pursued our project under the then-existing
	regulatory framework and had sufficient land control for siting the turbines and proceeded on that basis."
E. 1	Evidence Regarding Health and Safety to Support the 10 RD Setback
ALJ Finding 86.	86. There is no scientific support in peer-reviewed literature for the proposition that wind turbines cause any adverse health effects in humans. Although some people respond negatively to the noise qualities generated by the operation of wind turbines, there is no scientific data to show that wind turbines cause any disease process or specific health condition. In addition, there are no known human health effects from shadow flicker generated by wind turbines in the scientific literature.
County	Exception to Number 86:
	These opinions, which here appear stated as factual conclusions, are solely the opinions of Dr. Roberts, proponent's expert. They are inconsistent with the Minnesota Department of Health Study discussed at numbers 87 – 91 herein.
ВСТ	86. There is no scientific support in peer-reviewed literature for the proposition that wind turbines cause any adverse health effects in humans. Although some people respond negatively to the noise qualities generated by the operation of wind turbines, there is no

scientific data to show that wind turbines cause any disease process or specific health

See generally Ex. 11, Roberts Surrebuttal & Attachment B.
 Ex. 11, Roberts Surrebuttal Attachment Bat 7.

Ex. 11, Roberts Surrebuttal at 6.

condition. In addition, there are no known human health effects from shadow flicker generated by wind turbines in the scientific literature. It is a significant to the scientific literature.

#### **Exception to Number 86:**

There is no legal basis for the conclusion reached by the ALJ that whether or not the WHO findings were "peer reviewed" means that there is good cause not to apply the setbacks in the County Ordinance.

The Applicant's expert stated in his report on the record that "[d]elineation and comparison of risk is a scientific process, but determination of acceptable risk is beyond the realm of science." (Roberts Report, Ex. 11-B, p. 20.) Focus on the peer-review process to the exclusion of all other health evidence is not valid, as pointed out by Dr. Roberts himself, who stated: "Application of the precautionary principle at a community or national level involves societal decisions that may include legal, economic, or political aspects."

Further, the record contains substantial evidence regarding the health effects from shadow flicker. The WHO characterizes "annoyance" as a health effect. The definition promulgated by the WHO was restated in the report of the Applicant's expert witness:

"Change in the morphology and physiology of an organism that results in impairment of functional capacity to compensate for additional stress, or increases in the susceptibility of an organism to the harmful effects of other environmental influences. Includes any temporary or long-term lowering of the physical, psychological, or social functioning of humans or human organs." (Roberts Report, Ex. 11-B, p. 38.)

The fact that the Applicant dismisses the impact of an "annoyance" on those who must bear its burden does not negate the validity of the WHO's findings.

GWT

86. There is no scientific support in peer-reviewed literature for the proposition that noise and shadow flicker from wind turbines cause any adverse health effects in humans, evidence of which was entered into the record. Ex. 24, Goodhue County Notebook: Ex. 21 Notebook 2, Testimony of Rick James and Exhibits. Although some people respond negatively to the noise and shadow flicker qualities generated by the operation of wind turbines, there is no scientific data to show that wind turbines causatione any disease process or specific health condition has not been demonstrated. However, this is not a personal injury case where causation must be proven, and the burden of proof in this case is on the Applicant. No party demonstrated or would guarantee that wind turbines are safe.—In addition, there are no known human health effects from shadow flicker generated by wind turbines in the scientific literature. However, the scientific literature.

CFSS

Exception to Number 86: These opinions, which here appear stated as factual conclusions, are solely the opinions of Dr. Roberts, proponent's expert. They are inconsistent with the Minnesota Department of Health Study discussed at numbers 87 – 91 herein.

# ALJ Finding 87.

87. In 2009, the Minnesota Department of Health evaluated the public health effects of wind turbines by reviewing the literature and modeling shadow flicker. <sup>108</sup> In reviewing the literature, the Department of Health noted that human sensitivity to sound is variable and that low frequency noise accompanied by shaking, vibration, or rattling may be less tolerable to people. It noted that noise measured on the dB(C) scale (which, as noted above, includes more low-frequency noise that is not audible

Ex. 24A at 1923-1954. Other copies appear at 2252-83, 3727-58, and 5038-69.

	to the human ear) may better predict annoyance than noise measured on the dB(A) scale. 109
County	Exception to Number 87:
CFSS	The Minnesota Department of Health conducted its study specifically in response to a request from the MNPUC. That study is still available for comment in MNPUC Docket No. E,G-999/M-07-1102 (Jan. 11, 2008). To date the MNPUC has not acted on the information provided by the Health Department or commissioned additional research from other sources or Minnesota governmental agencies as the report recommended.  Exception to Number 87: The Minnesota Department of Health conducted its study specifically in response to a request from the MNPUC. That study is still available for comment in MNPUC Docket No To date the MNPUC has not acted on the information provided by the Health Department or commissioned additional research from other sources or Minnesota governmental agencies as the report recommended.
ALJ Finding 88.	88. In its model of shadow flicker, the Department assumed a receptor 300 meters (984 ft) perpendicular to, and in the shadow of the blades of a wind turbine. This model suggested that the receptor could be in the flicker shadow of the rotating blade for almost one and one-half hours per day. The report does not indicate over what period of time this exposure could occur. The paper then provides "With current wind turbine designs, flicker should not be an issue at distances over 10 rotational diameters (1000 meters or 1 km (0.6 mi) for most current wind turbines). It is unclear whether this conclusion is based on the modeled results or on a recommendation made in the literature.
County	Exception to Number 88:
	See Number 86 and Number 87 above.
ALJ Finding 89.	89. The Department of Health made the following recommendations to assure informed decisions, and added that any noise criteria beyond current state standards used for placement of wind turbines should reflect priorities and attitudes of the community:  •Wind turbine noise estimates should include cumulative impacts (40-50 dB(A) isopleths) of all wind turbines.
	<ul> <li>Isopleths for dB(C) – dB(A) greater than 10 dB should also be determined to evaluate the low frequency noise component.</li> </ul>
	•Potential impacts from shadow flicker and turbine visibility should be evaluated. 112
County	Exception to Number 89:
	See Number 86 and Number 87 above.
ALJ	

<sup>109</sup> Ex. 24A at 1944-45. 110 Ex. 24A at 1939. 111 E. 24A at 1939. 112 Ex. 24A at 1951.

## The Department of Health also noted that the noise standards set by the 90. Finding MPCA appear to "underweight" low-frequency noise by using the dB(A) measurement. 90. Although this was not included in its recommendations, the Department noted that in other countries, a 5 dB "penalty" is added to measured levels of dB(A) as a surrogate for low-frequency noise, when the difference between measured dB(A) and dB(C) levels is more than 10 dB. 113 County Exception to Number 90: See Number 86 and Number 87 above. ALJ The Applicant's noise study modeled the cumulative impacts of all wind **Finding** turbines, as recommended by the Department of Health. Although it did not model low-91. frequency noise, because state standards do not require it, the maximum dB(A) measurement of 43 would still meet MPCA standards even if the five dB "penalty" were added to account for low-frequency noise. The Applicant also evaluated shadow flicker impacts using a much more sophisticated modeling system than the Department of Health appears to have used, and its results showed that, using a greater setback distance, 96% of homes in the project area could be exposed to some degree of shadow flicker less than 20 hours per year. County **Exception to Number 91:** See Number 86 and Number 87 above. There is no evidence in the record to support the assertion that the Applicant's evaluation was "much more" sophisticated than the Department of Health's. ALJ Some of the other parties appear to take the position that they are not **Finding** obligated to direct the Commission's attention to any evidence regarding health and 92. safety to support the setback, as this would constitute an "impermissible shift in the burden of proof" onto them and away from the Applicant. 114 The Administrative Law Judge advised these parties at the outset of this proceeding that this contested case is not a due process challenge to the ordinance. 115 The Applicant is not required to show that the County acted unlawfully in the adoption of the ordinance or that the terms of Rather, this is a contested case proceeding for the the ordinance lack a rational basis. purpose of developing the record as directed by the Commission, so that the Commission may determine for itself its obligation to consider and apply the ordinance under Minn. Stat. § 216F.081 and to determine, if appropriate, whether there is good cause not to apply any provision of the ordinance. County Exception to Number 92: This assignment by the PUC to the Administrative Law Judge was noted to be a "Contested Hearing". Certificate of Need Docket, Order Deferring Consideration of Application for Certificate of Need (Nov. 5, 2010). Minn. R. 7854.0900, Public Participation, at subpart 5, sets out the requirements of a contested case hearing. One requirement is that a material issue of fact has been raised. A second requirement is that the hearing must be conducted according to the rules of the Office of Administrative Hearings.

<sup>113</sup> Ex. 24A at 1945-47.

<sup>&</sup>lt;sup>114</sup> Goodhue County Brief at 14; Coalition for Sensible Siting Corrected Post-Hearing Memorandum at 6 (PUC "has no authority to question the County's basis or justification for its ordinances").

<sup>&</sup>lt;sup>115</sup> See First Prehearing Order14 (Dec. 8, 2010).

The rule finally provides as follows:

"For a contested case hearing, the Commission shall identify the issue to be resolved and limit the scope and conduct of the hearing according to applicable law, due process, and fundamental fairness."

Alternatively, the Commission may request the Administrative Law Judge to identify the issues and determine the appropriate scope and conduct of the hearing according to applicable law, due process and fundamental fairness.

Minn. R. 1400.7300, Rules of Evidence, provide, in part, as follows:

"Subp. 2 Evidence part of record. All evidence to be considered in the case, including all records and documents, in the possession of the agency or a true and accurate photocopy, shall be offered and made a part of the record in the case. No other factual information or evidence shall be considered in the determination of the case."

"Subp. 4 Official Notice of Facts. The Judge may take notice of judicially cognizable facts but shall do so on the record and with the opportunity for any party to contest the facts or notices."

"Subp. 5 Burden of Proof. The party proposing that certain actions be taken must prove the facts at issue by a preponderance of the evidence, unless the substantive law provides a different burden or standard...."

In the Administrative Law Judge's First Prehearing Order dated December 8, 2010, the Court stated at number 10 as follows:

"For any disputed issues of material fact, the Administrative Law Judge has determined that the Applicant would have the burden of proof."

At number 11 of the same Order, the Judge stated, in part:

"The Administrative Law Judge concludes that "good cause" is a legal standard to be applied based on the factual record to be developed in this case."

At number 14 of the same Order, the Judge states, in part:

"This contested case is not a due process challenge to the validity of the Ordinance."

In its Second Prehearing Order at number 5 dated January 4, 2011, the Court states, in part:

"It does not appear from the prehearing submissions of the parties that there are any genuine issues of material fact at this time, although there are open factual questions about the impact of applying the ordinance standards that should be developed at hearing."

The Court then goes on to set up the order of hearing for Applicant and Intervenors, provides that Applicant will submit direct testimony and Intervenors' rebuttal testimony and sets out an order for discovery. Consequently, at the time this Order was issued, discovery was just

commencing.

"Material fact" is defined as a determination of whether there is an absence of a factual issue as to a material fact <u>after</u> a careful scrutiny of the pleadings, depositions, admissions, and any affidavits on file. A material fact that will preclude issuance of a summary judgment is one that will affect the outcome of the case. The material facts need to be both disclosed and undisputed. See <u>Granell v. VFW Milton Barber Post No. 3871</u>, 357 NW2d., 431 (Mn. Ct. App. 1984); <u>Carl v. Pennington</u>, 364 NW2d., 455 (Mn. Ct. App. 1985), 40 Minn. L. Rev. 608 (1956).

Contrary to the Judge's statement that there were no material facts in dispute, at this time, the Prehearing Order Submittal of Belle Creek Township dated December 20, 2010, notes a number of material facts in dispute, the Goodhue Wind Truth Prehearing Memorandum dated December 3, 2010, contains a section entitled "Material Issues of Fact to Address in this Docket.", the Prehearing Memorandum of AWA Goodhue, LLC, dated December 20, 2010, states that "Even if there are issues of material fact, AWA is prepared to demonstrate an abundance of reasons why there is good cause for the Commission not to follow the County standards. Further, the Administrative Law Judge denied the Applicant's request to have a Motion for Summary Disposition.

In the Findings of Fact, Conclusions and Recommendations of the Administrative Law Judge dated April 29, 2011, the first mention about burden of proof comes at Findings number 92. The Court states:

"Some of the parties appear to take the position that they are not obligated to direct the Commission's attention to any evidence regarding health and safety to support the setback, as this would constitute an "impermissible shift of the burden of proof" onto them and away from the Applicant. The Administrative Law Judge advised these parties at the outset of this proceeding that this contested case is not a due process challenge to the ordinance. ... Rather, this is a contested case proceeding for the purpose of developing the record as directed by the Commission, so that the Commission may determine for itself its obligation to consider and apply the ordinance under Minn. Stat. § 216F.081 and to determine, if appropriate, whether there is good cause not to apply any provision of the ordinance."

Additionally, the County has reviewed Transcript Vol. 1, p.p. 7-24 and finds no statement of the Administrative Law Judge on the burden of proof prior to the commencement of the hearing.

Goodhue County and intervenors entered the entire record collected in its planning and ordinance development procedures to establish the factual basis on which county decisions were made. That record is cited throughout these findings as the basis for the ALJ's own conclusions and as the basis for exceptions by the intervenors. Goodhue County called two members of staff to testify at the contested case hearing.

ALJ Finding 93.

93. Subject to their arguments on burden-shifting, the County and the Coalition for Sensible Siting both cited the Minnesota Department of Health White Paper as support for the 10-RD setback. The Minnesota Department of Health did not, however, recommend a 10-RD setback. What the Minnesota Department of Health said was

that "[w]ith current wind turbine designs, flicker should not be an issue at distances over 10 rotational diameters." The Applicant has demonstrated that shadow flicker should not be a significant issue for the vast majority of participants and nonparticipants in this project area, using a 1,500-ft setback for nonparticipants.

## **County** Exception to Number 93:

The OES EFP in their recommendation to the PUC dated October 13, 2010, by Larry Hartman, 2. Best Practices for Turbine Siting Excerpt from the ALJ Lipman's summary at paragraph A. Length of Setbacks from Wind Turbines, states:

"Much of the discussion associated with setbacks relates to health and safety related issues. Clearly, on this issue there are sharp differences of opinions, with no consensus. In the literature there are peer reviewed articles, a considerable amount of grey literature and articles covering noise, health and safety. While it would be difficult to summarize or discuss these issues in detail, others have. Notable among them are the Department of Health Services in the State of Wisconsin, letter dated July 19, 2010, from Seth Foldy, State Health Officer and Administrator to Edward Marion [eDockets 08-1233, Doc Id. 201010-55414-01], and an August 13, 2009, letter from the Commissioner of the Minnesota Department of Health to Mr. and Mrs. Anderson.

### **State of Wisconsin Department of Health Services**

DPH recognizes that wind turbines create certain exposures; audible sound, lowfrequency sound, infrasound and vibration, and shadow flicker. Certain ranges of intensity or frequency of audible sound, low frequency sound, vibration and flicker have been associated with some objectively-verifiable human health conditions. Our review of the scientific literature concludes that exposure levels measured from contemporary wind turbines at current setbacks do not reach those associated with objective physical conditions, such as hearing loss, high blood pressure, or flicker-induced epilepsy.

DPH staff previously reviewed the five reports you referenced in your letter. They also reviewed over 150 reports from the scientific and medical literature (published and unpublished) pertinent to the issue of wind turbines and health. DPH has also taken time to listen to, and respond to concerns voiced by local residents, municipalities, and local health department officials from across the State of Wisconsin. We have discussed this issue with colleagues at UW School of Medicine and Public Health, the Minnesota and Maine state health departments, and the Centers for Disease Control and prevention. From this we conclude that current scientific evidence is not sufficient to support a conclusion that contemporary wind turbines cause adverse health outcomes in those living at distances consistent with current draft rules being considered by the Public Service Commission.

This is different from saying that future evidence about harm may not emerge, or that wind turbines will not change over time, or that annoyance and other quality-of-life considerations are irrelevant. DPH does not endorse a specific setback distance or noise threshold level relating to wind turbines. Nevertheless, in keeping with standard public health practice, DPH favors a

conservative approach to setbacks and noise limits that provides more-thanminimum protection to those who live or work near wind turbines. These will help minimize local impacts on quality of life and serve as a buffer against possible unrecognized health effects.

...The most valuable studies would assess subjective complaints and objective clinical measurements in the setting of controlled or known environmental exposures. Such clinical studies fall outside the scope of standard public health investigations.

As additional scientific evidence becomes available, DPH will continue to appraise its relative strength, credibility, and applicability to the issue of wind turbine development in Wisconsin.

#### **Minnesota Department of Health**

In a letter to Mr. and Ms. Anderson, [Docket No. 08-1449 (Doc. ID. 20098-40926-01)], dated August 13, 2009, MDH Commissioner, Sanne Magnan, M.D. Ph.D, responded to specific questions posed by Mr. Anderson as follows:

Are current standards in Minnesota safe? Regulatory standards protect health and safety, but whether for air, water or Noise, regulators do not set "bright line: standards without also considering cost, technical difficulties, possible benefit and alternatives. No regulatory standard offers absolute safety. The Minnesota Department of Health can evaluate health impacts, but it is the purview of regulatory agencies to weight these impacts against alternative and possible benefits.

Are the proponents of wind turbines syndrome mistaken? As noted in the "White Paper," the evidence for wind turbine syndrome, a constellation of symptoms postulated as mediated by the vestibular system, is scant. Further, as also noted, there is evidence that the symptoms do not occur in the absence of perceived noise and vibration. The reported symptoms may or may not be caused by "discordant" stimulation of the vestibular system.

Does more study of adverse effects need to be undertaken? More study may answer questions about the actual prevalence of unpleasant symptoms and adverse effect under various conditions such as distance to wind turbines and distribution of economic benefit. However, there is at present enough information to determine the need for better assessment of wind turbine noise, especially at low frequencies. Such assessments will likely be beneficial for minimizing impacts when projects are sited and designed. Also, even without further research, there is evidence that community acceptance of projects, including agreement about compensation of individuals within project areas, will result in fewer complaints. Therefore more research would be useful, but the need will have to be balanced against other research needs.

Furthermore, a state agency, the Minnesota Department of Health, has raised significant health and safety concerns and states that more study is needed as they do at pages 25-26 of the Minnesota Department of Health report dated May 22, 2009, "Public Health Impacts of Wind Turbines", at Goodhue County Exhibit 24 bate stamp 003754 and 003755.

GWT

93. Subject to their arguments on burden-shifting, tThe County and the Coalition for Sensible Siting both cited the Minnesota Department of Health White Paper as

CFSS	support for the 10-RD setback. The Minnesota Department of Health did not, however, recommend a 10-RD setback. What the Minnesota Department of Health said was that "[w]ith current wind turbine designs, flicker should not be an issue at distances over 10 rotational diameters." The Applicant has demonstrated that shadow flicker should not be a significant issue for the vast majority of participants and nonparticipants in this project area, using a 1,500-ft setback for nonparticipants. However "should" and "significant" is significant — Applicant is not willing to provide a guarantee that flicker will not be an issue.  Exception to No. 93.: Consistent with past practice in the Report, the ALJ has gone way beyond and far afield of the fact presented in this case to produce the last sentence in this paragraph. There is no citation to the record and there was no evidence presented showing the ALJ herself to be an expert on shadow flicker and therefore this point should be disregarded.
ALJ Finding 94.	94. In 1999, the World Health Organization issued a report on community noise concluding that, for a good night's sleep, the equivalent sound :level should not exceed 30 dB(A) for continuous background noise over a period of eight hours, and individual noise events exceeding 45 dB(A) should be avoided. The authors recommended that the governments adopt the guideline values as long-term targets, because the report acknowledged that about 30% of the population in European Union countries was exposed to night-time equivalent sound pressure levels exceeding 55 dB(A).
ALJ Finding 95.	95. In 2009, the World Health Organization issued an updated report on night noise guidelines for Europe. This report recommended a target night- time noise guideline of 40 dB(A) as measured outdoors, averaged over one year; and an interim target of 55 dB(A) as measured outdoors, averaged over one year, for countries that could not achieve the target level in the short term. This is an outdoor noise level, which would correspond to an indoor equivalent sound level of 15 dB(A) lower, assuming slightly open windows and some insulation in a dwelling. The report encouraged member states in the European Union to gradually reduce the proportion of the population exposed to levels over the interim target level within the context of meeting wider sustainable development objectives.
ALJ Finding 96.	96. Based on the WHO reports, others have advocated even lower night-time noise limits for rural communities. 121
ALJ Finding 97.	97. The MPCA standards are consistent with the interim target levels recently recommended by the WHO; however, regardless of the recommendations made by the WHO or others, the MPCA standards are the law in the State of Minnesota, and local authorities are not free to disregard them.
County	Exception to Number 97:

<sup>116</sup> Ex. 24A at 4474, 4480 (World Health Organization, *Guidelines for Community Noise,* Geneva 1999).

Ex. 24A at 4467, 4482, 4555.

Ex. 24A at 4467, 4462, 4555.

118
Ex. 24A, Appendix at 63, 184 (World Health Organization, *Night Noise Guidelines for Europe,* Geneva 2009)

119
Ex. 24A, Appendix at 174

Ex. 24A, Appendix at 184; Ex. 328, Vol. II, Tabs 1 & 2.

Ex. 24A, Appendix at 5 (G.W. Kamperman and R.R. James, *The "How to" Guide to Siting Wind Turbines to* Prevent Health Risks from Sound, Oct. 2008).

	The Goodhue County Ordinance does not directly regulate noise.
ВСТ	97. The MPCA standards are consistent with the interim target levels recently
20.	recommended by the WHO; however, regardless of the recommendations made by the WHO or others, the MPCA standard are the law in the State of Minnesota, and local authorities are
	not free to disregard them.
	Exception to Number 97:
	The MPCA does not establish setbacks for wind turbines, so there is nothing for Goodhue County to "disregard." The County is entitled to review scientific data and make a determination about what is the best manner for it to regulate the health, safety, and welfare of its citizens.
GWT	97. The MPCA standards are consistent with the interim target levels recently recommended by the WHO; however, regardless of the recommendations made by the WHO or others, the MPCA standards are the law in the State of Minnesota regarding A-weighted noise levels, and local authorities may not specify other, more stringent, A-weighted noise standards. are not free to disregard them. The County's Ordinance does not specify more stringent A-weighted noise standars.
ALJ	
Finding	98. There is no evidence that turbines with shorter rotor diameters necessarily
98.	generate less noise or shadow flicker than those with longer rotor diameters.  Different turbines with the same rotor diameter length have different maximum sound
	power levels, and the loudest turbines are not necessarily those
	with the longest rotor diameters. 122
County	Exception to Number 98:
	The record of these proceedings is replete with citations to the Commission's general wind permit standards which refer to 5 RD or 3 RD setbacks to protect wind access rights. See for example number 50 of these Findings. Rotor diameter is used throughout as an approximate standard for establishing impact of proposed turbines.
GWT	98. There is no evidence that turbines with shorter rotor diameters necessarily generate less <u>or more</u> noise or shadow flicker than those with longer rotor diameters. This was not addressed in the record. Different turbines with the same rotor diameter length have different maximum sound power levels, and the loudest turbines are not necessarily those with the longest rotor diameters <sup>122</sup> .
ALJ	
Finding	99. The 10-RD setback is an overbroad method of regulating both noise and shadow flicker because it would preclude the siting of wind turbines that meet
99.	state noise requirements and that are expected to generate relatively small amounts of
	shadow flicker for most homes in the project area.
County	Exception to Number 99:
	It is not within the purview of the Administrative Law Judge to challenge the Goodhue County Ordinance as "overbroad." See also Number 98 above.
GWT	99. The 10-RD setback is an <u>overbroad</u> <u>one</u> method of regulating both
	noise and shadow flicker because it would preclude the siting of wind turbines that meet state noise requirements and that are expected to generate relatively small
	amounts of shadow flicker for most homes in the project area, and extends the distance to
	one that the Minnesota Dept. of Health predicts would not generate complaints <sup>39</sup> .
ALJ	

Ex. 9, Casey Surrebuttal at 1-2.

Finding 100.	100. The County's use of a 10-RD setback, as an indirect method of regulating noise, conflicts with Minn. Stat. § 116.07, which delegates authority to regulate noise solely to the MPCA and precludes local authorities from setting more stringent standards. If the operation of the project exceeds noise standards that are permitted, the Commission has the authority to address and ensure the resolution of any complaints.
County	Exception to Number 100:
	The Goodhue County Ordinance does not regulate noise or impose noise standards. It imposes reasonable setbacks designed to protect the public health, safety, morals, welfare of the citizens of Goodhue County, the Goodhue County Wind Regulations. The proponent has not met its burden to establish by a preponderance of the evidence that there is good cause for the Commission to not apply the Goodhue County Ordinance requirement as it pertains to setbacks from residences.
GWT	100. The County's use of a 10-RD setback, as an indirect method of regulating noise, and does not describe the maximum levels of sound pressure which are more
	stringent with the MPCA and does not conflicts with Minn. Stat. § 116.07, Subd. 2 which delegates authority to regulate noise solely to the MPCA and precludes local authorities from setting more stringent standards. If the operation of the project exceeds noise standards that are permitted, the Commission has the authority to address and ensure the resolution of any complaints.
ALJ	
Finding 101.	101. Although the Commission's general wind permit standards do not directly address shadow flicker, the proposed site permit could include conditions to address potential problems with shadow flicker. For example, in addition to requiring documentation of the Applicant's efforts to minimize shadow flicker impacts, the Commission could require the filing of a plan to mitigate any complaints related to shadow flicker, through methods such as landscaping or use of blackout shades. It is inequitable to expect that non-participating homeowners, in particular, should be wholly responsible for mitigating those complaints. Such a permit condition would be a more targeted method of regulating potential problems with shadow flicker.
County	Exception to Number 101:
	Goodhue County respectfully applauds the Administrative Law Judge's findings in support of the rights of non-participating property owners' quiet enjoyment of their property.
GWT	101. Although the Commission's <u>does not have general</u> wind permit standards. <u>and Commission permitting practice</u> does not directly address shadow flicker, the proposed site permit could include conditions to address potential problems with shadow flicker. For example, in addition to requiring documentation of the Applicant's efforts to minimize shadow flicker impacts, the Commission could require the filing of a plan to mitigate any complaints related to shadow flicker, through methods such as landscaping or use of blackout shades. It is inequitable to expect that non-participating homeowners, in particular, should be wholly responsible for mitigating those complaints. <u>Such a permit condition would be a more targeted method of regulating potential problems with shadow flicker.</u>
ALJ Finding	102. For all the above reasons there is good cause not to apply this
	102. For all the above reasons, there is good cause not to apply this

<sup>123</sup> See Minn. R. 7854.1000 (commission may include in a site permit conditions that are reasonable to protect the environment, enhance sustainable development, and promote the efficient use of resources). The Administrative Law Judge notes that the 11 homes that would be subject to more than 20 hours per year of shadow flicker might be considered subject to more than minimal amounts of flicker.

102.	section of the ordinance to the project.
County	Exception to Number 102:
	The proponent has not met its burden to establish by a preponderance of the evidence that there is good cause for the Commission to not apply the County Ordinance requirement as it pertains to the 10 RD setback from non-participating dwellings.
ВСТ	102. For all the above reasons, there is good cause not to apply this section of the
	ordinance to the project.
	Exception to Number 102:
	The proponent has not met its burden to establish by clear and convincing
	evidence that the County Ordinance requirement is arbitrary or capricious as it
OWT	pertains to the 10 RD setback from non-participating dwellings.
GWT	102. F <del>or all the above reasons, The County Ordinance does not</del>
	impermissibly impinge on the MCPA's sound regulating authority. The Ordinance is
	sufficiently specific to provide a rationale means of siting that would minimize impacts
	and resulting complaints about noise and shadow flicker. There is no good cause not
	to apply this section of the ordinance to the project.

VIII. Setbacks for Roads	
ALJ Finding 103.	103. The County's ordinance provision for a commercial WECS provides for a public road setback of 1.1 times the height of a turbine, but allows for a possible reduction for minimum maintenance roads or roads with an average daily traffic count of less than ten. This provision also applies to future rights ofway if a "planned changed or expanded right-of-way is known."
ALJ Finding 104.	104. The Commission's general wind permit standards call for a minimum setback of 250 feet from the edge of the nearest road right-of-way. <sup>125</sup> In addition, the Commission typically requires the permittee to make satisfactory arrangements for road use, access road intersections, maintenance and repair of road damage with the governmental jurisdiction having authority over each road. A permittee is also required to promptly repair any private roads, driveways, or lanes that are damaged, unless otherwise negotiated with the landowner. <sup>126</sup>
GWT	104. The Commission's <u>has no general</u> wind permit standards. <u>Of permits issued, some</u> call for a minimum setback of 250 feet from the edge of the nearest road right-of-way. <sup>125</sup> In addition, the Commission typically requires the permittee to make satisfactory arrangements for road use, access road intersections, maintenance and repair of road damage with the governmental jurisdiction having authority over each road. A permittee is also required to promptly repair any private roads, driveways, or lanes that are damaged, unless otherwise negotiated with the landowner. <sup>126</sup>
ALJ Finding 105.	105. Based on the height of the turbines proposed in this case, the County ordinance would require a setback of 438 feet from the edge of all road rights of way. 127
ALJ Finding 106.	106. The Applicant's proposed site plan does not place any wind turbine within 438 feet from the edge of any road right of way. Although the County ordinance provides for a setback that is more stringent than the Commission's general wind permit standards, the Applicant's site plan would comply with both standards. 128
County	Exception to Number 106:
	The proponent has not met its burden to establish by a preponderance of the evidence that there is good cause for the Commission to not apply the County Ordinance requirement as it pertains to setbacks from road rights of way.
GWT	106. The Applicant's proposed site plan does not place any wind turbine within 438 feet from the edge of any road right of way. Although the County ordinance

<sup>124</sup> Ex. 24B, Art. 18 § 4, subd. 1.
125 Ex. 21, Attachment A at 8.
126 Ex. 21, Attachment A at 10-11.
127 Ex. 3, Burdick Direct at 10.
128 Ex. 3, Burdick Direct at 10.

provides for a setback that is more stringent than the Commission's general wind permit standards, tThe Applicant's site plan would comply with both the County's standards. 128

### IX. Setbacks for Other Rights of Way ALJ **Finding** The ordinance provision for other rights of way provides for a 107. setback of the lesser of (a) 1.1 times the total height of a turbine, or (b) the distance of the fall zone, as certified by a professional engineer, plus 10 feet. 129 The fall zone is defined as the area that is the furthest distance from the tower base in which a guyed tower will collapse in the event of a structural failure. This area is less than the total height of the structure. 130 The ordinance does not specifically define "other rights of way," but indicates that "railroads, power lines, etc." are included in this category. 131 GWT The ordinance provision for other rights of way provides for a 107. setback of the lesser of (a) 1.1 times the total height of a turbine, or (b) the distance of the fall zone, as certified by a professional engineer, plus 10 feet. 129 The fall zone is defined as the area that is the furthest distance from the tower base in which a guyed tower will collapse in the event of a structural failure. This area is less than the total height of the structure. 130 The ordinance does not specifically defines "other rights of way," but indicates that to include "railroads, power lines, etc." are included in this category. 131 ALJ **Finding** The Applicant does not propose to use any guyed towers in this project. 132 If the ordinance were applied in this case the "fall zone" language would 108. be inapplicable, and the setback from other rights of way would be 1.1 times the total height of a turbine. ALJ 109. The Commission's general wind permit standards do not specifically **Finding** address setbacks from other rights of way. These setbacks have been negotiated by 109. applicants and the entities controlling other rights-of-way within the site permit boundaries. 133 GWT 109. The Commission's does not have general wind permit standards do not specifically that address setbacks from other rights of way. These setbacks have been negotiated by applicants and the entities controlling other rights-of-way within the site permit boundaries. 133 ALJ 110. The Applicant has negotiated setback agreements with the owners of all **Finding** rights of way that would be impacted by placement of a wind turbine near their property. 134 110. GWT 110. The Applicant has yet to negotiated setback agreements with the owners of all rights of way that would be impacted by placement of a wind turbine near their property. 134 Negotiated agreements protect the rights of parties to the agreement, but would not necessarily address protection of the public health and safety. ALJ 111. If the County ordinance were interpreted to include pipeline easements,

<sup>&</sup>lt;sup>129</sup>. Ex. 24B, Art. 18, § 4, subd. 1.

<sup>&</sup>lt;sup>130</sup> Ex. 24B, Art. 18, § 2, subd. 9

<sup>&</sup>lt;sup>131</sup> Ex. 24B, Art. 18, § 4, subd. 1.

<sup>132</sup> Tr 3R·50

<sup>&</sup>lt;sup>133</sup>See, e.g., Ex. 21, Attachment A at 11 (permit condition requiring repair of private roads "unless otherwise negotiated with landowner"); OES Comments (Dec. 20, 2010), Attachment 1 at 4.

Ex. 3, Burdick Direct at 11.

Finding	application of this setback would preclude the placement of four of the 50 proposed turbines. 135
111.	
ВСТ	111. If the County ordinance were interpreted to include pipeline easements, application of this setback would preclude the placement of four of the 50 proposed turbines. Moving only four turbines is not an unreasonable burden on the Applicant, when balanced against the County's legitimate interest in preventing a turbine from falling over a pipeline.  Exception to Number 111:  The application would not preclude the placement of four of the 50 proposed turbines. It would require that four turbines be shifted from their currently proposed locations. If moving four of 50 turbines establishes good cause not to apply this standard, then it appears that the only ordinance requirements that would meet the good cause standard are ones that require no change from the what is proposed by the Applicant.
ALJ Finding 112.	112. There is no evidence in the record that any owner of a right-of-way in the project area has failed to adequately protect the right-of-way through the agreements negotiated with the Applicant.
County	Exception to Number 112:
	It is not unreasonable to prohibit installation of a tower that can fall over a gas or oil pipeline. The County setback prevents a fallen tower from reaching such a critical installation. Towers have fallen in other locations.  Testimony of Charles Burdick, Transcript Vol. 1, p. 173 line 3 through p. 174 line 6, Burdick Cross by Finstad Hammel:  "A I can't recall if the county specifies why they chose the 1.1 times the total height.  Q Okay. But you are familiar with the 1.1 times the height?  A Yes, I am.  Q Okay, and I believe his morning you said that was reasonable, but that –  A I said we did not object.  Q Okay. You were asked if it was reasonable. The applicant – or the – the applicant has proposed a distance that that's greater than that; is that correct?  A Yes.  Q So whether or not it's reasonable, I would like to ask you if you mean – if you would consider 1.1 times an acceptable distance rather than reasonable?  A As it applies to this project, yes, that's an acceptable distance.  Q Okay. In your experience, do wind turbines fall down?  A There are documented occasions of wind turbines falling, yes.  Q To your knowledge, are there occasions when the GE wind turbines that the applicant proposes to use have fallen down?  A I'm aware of one occasion where a GE turbine has fallen. I don't know if it's specifically this model or not. I would also say that it has more to do with the foundation than the turbine itself.
ВСТ	112. There is no evidence in the record that any owner of a right-of-way in the project area has failed to adequately protect the right-of-way through the agreements

Ex. 3, Burdick Direct at 11.

	negotiated with the Applicant.
	Exception to Number 112:
	It is not unreasonable to prohibit installation of a tower that can fall over a gas or oil pipeline. The County setback prevents a fallen tower from reaching such a critical installation. Towers have fallen in other locations.
GWT	112. There is no evidence in the record that the project owners and any owner of a right-of-way in the project area have addressed protection of public health and safety s failed to adequately protect the right-of-way through the agreements negotiated with the Applicant.
ALJ Finding 113.	113. For the above reasons, there is good cause not to apply this provision of the ordinance to the project.
ВСТ	113. For the above reasons, there is <u>not</u> good cause not to apply this provision of the ordinance to the project.
GWT	113. For the above reasons, there is <u>no</u> good cause not to apply this provision of the ordinance to the project.

# X. Setbacks for Public Conservation Lands ALJ Finding 114. The County ordinance provides for a setback of "3 RD Non- Prevailing and 114. 5 RD Prevailing" from public conservation lands. Public conservation lands are defined as: Land owned in fee title by State or Federal agencies and managed specifically for conservation purposes, including but not limited to State Wildlife Management Areas, State Parks, State Scientific and Natural Areas, federal Wildlife Refuges and Waterfowl Production Areas. For the purposes of this section public conservation lands will also include lands owned in fee title by non-profit conservation Public conservation lands do not include private lands upon organizations. which conservation easements have been sold to public agencies or non-profit conservation organizations. 136 ALJ **Finding** The ordinance defines prevailing and non-prevailing winds in the same 115. manner as for the property line setback (with prevailing wind defined as two fixed 1000 arcs, as opposed to wind direction determined by actual measurement). There is no definition for "non-profit conservation organization" in the ordinance. ALJ Finding The Commission's general wind permit standards provide that the wind 116. 116. access buffer (the setback of 5 RD prevailing by 3 RD non-prevailing) applies to all parcels for which the permittee does not control land and wind rights, including all public lands. As noted above, however, the Commission permits the use of actual data to determine the direction of prevailing and non- prevailing winds. The Commission's general wind permit standards also provide that setbacks from state trails and other recreational trails shall be considered on a case-by-case basis. 137 County Exception to Number 116: The ALJ acknowledges herein that there are no state standards applicable to these setbacks, rather, they "shall be considered on a case by case basis." The proponent has not met its burden to establish by a preponderance of the evidence that there is good cause for the Commission to not apply the County Ordinance requirement as it pertains to wind access. **GWT** The Commission's general wind permit standards permitting practice is to provide that the wind access buffer (the setback of 5 RD prevailing by 3 RD nonprevailing) applies to all parcels for which the permittee does not control land and wind rights, including all public lands. As noted above, however, the Commission permits the use of actual data to determine the direction of prevailing and non-prevailing winds. The Commission's general wind permit standards also provide practice has been that setbacks from state trails and other recreational trails shall be considered on a case-bycase basis. 137 This is consistent with the Commission's case-by-case permit siting. On the other hand, the County's ordinance contains specific criteria which allow it to be applied consistently and predictably.

 $<sup>^{136}</sup>$  Ex. 24B, Art. 18, § 2, subd. 25.

Ex. 21, Attachment A at 8.

ALJ Finding 117.	117. The Applicant has filed no testimony indicating that application of this setback would affect the project. The County offered no evidence as to the need for a setback of this magnitude for public lands or the reason why this setback was selected. 138
GWT	117. The Applicant has filed no testimony indicating <u>any objection or</u> that application of this setback would affect the project. The County offered no evidence as to the need for a setback of this magnitude for public lands or the reason why this setback was selected. 138
ALJ Finding 118.	118. The County's ordinance standard is more stringent because of its definition of prevailing and non-prevailing winds; but the Commission's standard could be more stringent than the ordinance if state trails or recreational trails were involved. The Administrative Law Judge concludes that this portion of the ordinance is overbroad because the definition of prevailing and non-prevailing winds uses a fixed proxy in lieu of actual data. The ordinance is also ambiguous because it fails to define a "non-profit conservation organization." There is good cause not to apply this section of the ordinance to the project.
County	Exception to Number 118:
GWT	It is not within the purview of the Administrative Law Judge to determine that the County Ordinance is "overbroad". The County's ordinance contains specific criteria which allow it to be applied consistently and predictably. The definition also includes "land owned in fee title by a non-profit conservation organization" is sufficiently clear to allow consistent application and interpretation of the ordinance. The proponent has not met its burden to establish by a preponderance of the evidence that there is good cause for the Commission to not apply the County Ordinance requirement as it pertains to setbacks from public conservation lands.  118. The Applicant has not objected to application of the County's ordinance standard is more stringent because of its definition of prevailing and non-prevailing winds; but the Commission's standard could be more stringent than the ordinance if state trails or recreational trails were involved. The Administrative Law Judge concludes that this portion of the ordinance is overbroad because the definition of prevailing and non-prevailing winds uses a fixed proxy in lieu of actual data. The ordinance is also ambiguous because it fails to define a "non-profit conservation organization.", and has not met its burden
	to establish by clear and convincing evidence that the County Ordinance requirement is arbitrary or capricious as it pertains to setbacks from public conservation lands.
	There is no good cause not to apply this section of the ordinance to the project.
ALJ Finding 119.	119. The County's ordinance provision for a commercial WECS provides for a wetlands setback of either (a) 1,000 feet, or (b) "3 RD non-prevailing and 5 RD prevailing," but it does not define the term "wetland." The wind direction is defined in the same manner as for property line setbacks, using a 100° arc instead of actual measurements. It is unclear from the ordinance when a 1,000-ft setback would be required, as opposed to a 3 RD by 5 RD setback.
ВСТ	119. The County's ordinance provision for a commercial WECS provides for a wetlands setback of either (a) 1,000 feet, or (b) "3 RD non-prevailing and 5 RD prevailing," but it does not define the term "wetland." The wind direction is defined in the same manner

 $^{138}$  The Nicollet County ordinance has a similar "public conservation lands" setback, but that ordinance provides for a setback of 1.1 times the total height. See Nicollet County Wind Energy Conversion Systems Ordinance  $\S 801.1$ .

as for property line setbacks, using a 100° arc instead of actual measurements. It is unclear from the ordinance when a 1,000-ft setback would be required, as opposed to a 3 RD by 5 RD setback.

The Second Prehearing Order states: "If there is ambiguity in the ordinance, the Applicant should address the ambiguities as best it can and should describe the range of potential impacts, depending on how the ordinance is interpreted." (Second Prehearing Order, ¶ 5, p. 8.)

#### ALJ Finding 120.

120. The County's witnesses recalled very little if any discussion of the wetlands setback in the meetings that led to passage of the ordinance. This provision was modeled on the Nicollet County ordinance. 139

#### County

#### Exception to Number 120:

Michael Wozniak testified at Transcript Vol. 3B, p. 52, line 11 through p. 54 line 13:

"Q Okay. You were asked some questions, Mr. Wozniak, about your experience with other kinds of setbacks from wetlands. Do you recall that?

A I was asked about my experience with setbacks.

Q All right. I don't mean to put words in your mouth. I'm sorry. My question regards the 1,000-foot setback and I'm wondering if you can tell us any other types of developmental activity in Goodhue County that have a 1,000-foot setback?

Judge Sheehy: From anything?

By Ms. Hammel:

Q From a wetland, excuse me.

A For the most part the county doesn't have direct setback requirements from wetlands. Although since many of the wetlands are located in shoreland or floodplain areas, there are – those areas are excluded from various kinds of land use activities and so they are effective setbacks.

Q And do you recall what kind of land use activities those -

A I'll give you an example -

Judge Sheehy: Wait, you've got to let her ask the question.

By Ms. Hammel:

Q I asked what sort of land use activities those might be.

A I could give one example, that would be wireless communication facilities and cell towers, that sort of thing.

Q And do you recall the reason for setback from those?

A The county's regulations governing those facilities were adopted in 1999 and so it's a little hard for me to remember all the reasons. But basically because those areas are environmentally sensitive areas and floodplains subject to inundation periodically, and shoreland areas, there was an aesthetic factor.

And also the county's wild and scenic district. We have the Cannon River, which is a state wild and scenic river through Goodhue County, and that district which has an irregular boundary was excluded in terms of wireless facilities.

Q All right. It's not all wetlands then, it's only particular wetlands?

A Well, there are a variety of issues that came into account in respect to excluding those areas. The fact that a large percentage of the county's

<sup>139</sup> Tr. 38:14 (Wozniak); Tr. 2:304 (Hanni). The Nicollet County ordinance, however, defines a wetland as USFW Types III, IV, and V. See Nicollet County Wind Energy Conversion Systems Ordinance § 801.1.

wetlands are in those areas was one consideration. Q Do those areas overlap with any of the project area? A With this project area? Q Yes. A Well, there are a number of public waters in this project area that are bounded by shoreland areas." GWT The County's witnesses recalled very little if any discussion of the wetlands setback in the meetings that led to passage of the ordinance. The county does have protections of wetlands, shorelands and its wild and scenic district, for the purpose of protection of areas subject to flooding and for aesthetic reasons. Much of this protected area is within the project area boundary<sup>28</sup>. This provision was modeled on the Nicollet County ordinance. 139 ALJ **Finding** 121. In the General Wind Permit Standards Docket, the DNR initially 121. recommended a 1,000 foot setback from all wetlands, but it ultimately recommended deferring action on that proposal. The Commission consequently retained its practice of prohibiting placement of turbines in wetlands, but requiring no specific setback. The Commission indicated its willingness to consider this issue in the future when and if the record were further developed. 140 County Exception to Number 121: The Commission's specific decision not to develop standards for wetlands' setbacks specifically creates the presumption that County regulations are necessary. GWT In the General Wind Permit Standards Docket, the DNR initially 121. recommended a 1,000 foot setback from all wetlands, but it ultimately recommended deferring action on that proposal. The Commission consequently retained its has a practice of prohibiting placement of turbines in wetlands, but requiring no specific setback. presumes regulation by other entities, in this case, the County. The Commission indicated its willingness to consider this issue in the future when and if the record were further developed. 140 ALJ **Finding** In siting turbines near wetlands, the Commission generally defers to the 122. requirements of other state, local, and federal agencies charged with regulating wetlands. The proposed site permit requires the Applicant to provide a desktop and field inventory of potentially impacted native prairies, wetlands, and any other biologically sensitive areas within the site and to submit the results to the Commission and the DNR. The proposed site permit also requires compliance with all permits or licenses issued by various state and federal agencies, including Minnesota Pollution Control Agency storm water permits and a DNR license to cross public lands and water, public waters work permits, and state protected species consultations. The Commission's permit standards would allow an electric collector and feeder line to cross or be placed in public waters or public water wetlands, subject to permits obtained from the DNR and other government entities. County Exception to Number 122: Goodhue County is one of the "state, local, and federal agencies charged with regulating wetlands", therefore, the Commission should defer to the Goodhue County Ordinance.

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<sup>&</sup>lt;sup>140</sup> Ex. 21 at 4.

GWT	122. In siting turbines near wetlands, the Commission generally defers to the requirements of other state, local, and federal agencies, such as Goodhue County, charged with regulating wetlands. The proposed site permit requires the Applicant to provide a desktop and field inventory of potentially impacted native prairies, wetlands, and any other biologically sensitive areas within the site and to submit the results to the Commission and the DNR. The proposed site permit also requires compliance with all permits or licenses issued by various state and federal agencies, including Minnesota Pollution Control Agency storm water permits and a DNR license to cross public lands and water, public waters work permits, and state protected species consultations. The Commission's permit standards practice would allow an electric collector and feeder line to cross or be placed in public waters or public water wetlands, subject to permits obtained from the DNR and other government entities.
Finding 123.	123. Wetlands are regulated by the Board of Water and Soil Resources, the County Soil and Water Conservation District, the U.S. Army Corps of Engineers, and the DNR. <sup>141</sup>
County	Exception to Number 123:
	The Goodhue County Board also regulates wetlands through its Zoning Ordinance and Conditional Use Process. See Finding number 125 herein.
GWT	123. Wetlands are regulated by the Board of Water and Soil Resources, the County Soil and Water Conservation District, the U.S. Army Corps of Engineers, and the DNR, and the Goodhue County Board through its Zoning Ordinance and Conditional Use Permitting Process. 141
ALJ Finding 124.	124. The Applicant submitted a wetlands delineation report prepared by Westwood Professional Services to the St. Paul District of the U.S. Army Corps of Engineers and the Goodhue County Soil and Water Conservation District, in support of a wetland boundary and type determination requested under Minn. R. 8420.0310. The report delineated and located portions of 45 wetlands within the 4.10 sq-mile project construction area, defined as all areas that would potentially incur temporary or permanent disturbance by construction of wind turbine generators, access roads, underground electrical collection cables, crane paths, and substations. All of the wetlands are expected to be regulated under the Minnesota Wetland Conservation Act, and 40 of them are also expected to be regulated under the federal Clean Water Act. Most of the wetlands in this area are associated with ditches and channelized drainages, which are linear features that are difficult to avoid. All but two of the delineated wetlands are substantially disturbed by ditching, sedimentation, and tillage from agricultural activities. <sup>142</sup>
ALJ Finding 125.	125. The Applicant has met twice with the Technical Evaluation Panel (composed of employees of the Board of Soil and Water Resources, the County Soil and Water Conservation District, and the U.S. Army Corps of Engineers). Four wetlands were eliminated from the project construction area because of specific impacts, and they were replaced with different wetlands. Although the permitting process is not yet final, the Applicant has determined to date that 0.225 acres of wetlands would be permanently impacted by access roads and subject to replacement through a wetland bank credit. <sup>143</sup>
ALJ	

<sup>141</sup> Tr. 3A:12.
142 Ex. 5, Peterson Direct at Attachment A.
143 Ex. 5, Peterson Direct at 4-6.

Finding 126.	126. Based on current plans, the turbine nearest to a delineated wetland would be 275ft away. 144
ALJ Finding 127.	127. Wetlands are shaped irregularly, and it is difficult to apply a distance setback framed in terms of wind direction to an irregular shape. Assuming a constant 5-RD setback (1,353 ft) applied to each wetland in the project area, this setback requirement would eliminate 45 of the proposed 50 turbines. This "worst case" analysis might overstate the impact somewhat, but it is difficult to be more precise based on the record.
ВСТ	127. Wetlands are shaped irregularly, and it is difficult to apply a distance setback framed in terms of wind direction to an irregular shape. Assuming a constant 5-RD setback (1,353 ft) applied to each wetland in the project area, this setback requirement would eliminate 45 of the proposed 50 turbines. This "worse case" analysis might overstates the impact somewhat, but it is difficult to be based on the record more precise and the Applicant made no effort to determine the actual impact of the wetland setback, despite clear direction in the PUC's Second Prehearing Order to do so. The Order stated that the Applicant had to determine the range of possible impacts, depending on how the ordinance is interpreted. It chose not to. The Applicant's expert testified that while it would be difficult to accurately establish the 3-RD/5-RD setback, it was not impossible.  Exception to Number 127:  The Applicant made no effort to accurately determine the impact of this setback, and it simply assumed a worst-case scenario in order to support its position that the Goodhue County Ordinance should not be applied to its project. The language of the Second Prehearing Order is clear that the Applicant is to determine a range of potential impacts. Its failure to do so should not be overlooked nor rewarded.
ALJ Finding 128.	128. There is no evidence that wetlands require a setback of this magnitude to protect the environment. Wetlands and wind turbines are mutually exclusive, in that wetlands are typically located in areas of low elevation, and wind turbines are located at higher elevations. It would not be possible to build a turbine tower in land saturated with water and meet required construction and engineering standards. It
DNR	Finding 128 states the following: "There is no evidence that wetlands require a setback of this magnitude to protect the environment." The magnitude referred to is likely the 5 rotor diameter distance discussed in Finding 127. This section of the report also discusses turbine distances of 1000 feet and 3 rotor diameters and Finding 128 may also refer to those distances. Though available information regarding turbine setbacks from wetlands is preliminary and at times based upon studies that are older, the statement that there is "no evidence" regarding these sizes of turbine setbacks may be misleading. A report from the Buffalo Ridge studies, conducted in Minnesota, stated that "Turbines with avian mortality were significantly (p=0.05) closer to wetlands (436 m [1430.45 feet]) than turbines without avian mortality (594 m [1948.82 feet]) (Johnson, 2000)." Also, the Handbook of Inventory Methods

<sup>144</sup> Ex. 5, Peterson Direct at 4.
145 Ex. 3, Burdick Direct at 13 & Attachment 3-E.
146 Tr. 3A:61 (Peterson).
147 Tr. 3A:54 (Peterson).

and Standard Protocols for Surveying Bats in Alberta recommended that, ideally, turbines should be positioned in open, flat areas at least 500 meters (1640.42 feet) from bodies of water, riparian habitats, and forest edges (Vonhoff, 2002). The California Bat Working Group recommended that projects should avoid placing turbines within 500 meters (1640.42 feet) of still flowing water bodies, riparian and forest edges and known hibernacula (California Bat Working Group, 2006). Also, the topic of wetland buffers from various types of infrastructure other than turbines is widely researched. When considering available information, please note that Buffalo Ridge studies were conducted in one region of Minnesota and researched older turbine technology. Also, estimates of appropriate turbine setbacks available in literature are somewhat preliminary. However, it is important to consider that there is information available to suggest that further discussion of wind farm infrastructure and appropriate distances to wetlands would be useful in project planning. The DNR looks forward to participating with the Department of Commerce and Public Utilities Commission in continued analysis of existing and future research regarding this topic. ALJ **Finding** 129. The types of wetlands that are typical in the project construction area are 129. not good habitats for birds. 148 A setback requirement of 1,000 feet or more might place a turbine tower near a forested area and possibly result in more avian impacts than if the turbine were sited closer to a wetland. 149 GWT 129. The types of wetlands that are typical in the project construction area are not good habitats for birds. 148 A setback requirement of 1,000 feet or more might place a turbine tower near a forested area and possibly result in more avian impacts than if the turbine were sited closer to a wetland. (speculation, no citation) The Minnesota DNR recommends a 1,000 foot setback from all wetlands, sreams, rivers and lakes in the State Public Waters Inventory and the National Wetlands Inventory. 25 DNR Finding 129 states: "The types of wetlands that are typical in the project construction area are not good habitats for birds." This statement is likely too broad of a summary for an area the size of a wind project with multiple types of wetlands. One reviewing the report should consider this finding with caution. It is likely that in a predominantly agricultural area, some wetlands would be affected by farming and may provide lower quality habitat than others. However, even lower quality wetlands may provide important habitat. For example, flocks of migratory birds often use seasonally flooded wetlands in cropped lands as important migratory stopover locations. Thank-you for your consideration of DNR input regarding the Goodhue Wind Project. Thankyou also for your consideration of previous comment letters regarding the Goodhue Wind Project as project summaries are prepared for PUC permit decisions. Please contact me with any questions. ALJ Finding 130. The County's setback provision is ambiguous, in that it is unclear from the 130. terms when a setback of 1,000 feet or more would be required. It is also a crude method of protecting wetlands, compared to the individualized analysis of the impacts on the quantity, quality, and biological diversity of wetlands conducted by the Technical Evaluation Panel that represents all the regulating agencies. For all the above reasons, there is good cause not to apply this provision of the ordinance to the project. County Exception to Number 130:

id.

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<sup>&</sup>lt;sup>148</sup> Tr. 3A:26, 36-37 (Peterson).

Although there are many classes of wetlands, the County definition includes all wetland classes, as such, it is not ambiguous. The Minnesota DNR recommended "a 1,000 foot setback from all wetlands, streams, rivers and lakes listed in the State Public Waters Inventory and those listed in the National Wetlands Inventory." See p. 3 of the Matter of Establishment of General Wind Permit Standards for the Siting of Wind Generation Projects Less than 25 Megawatts, Docket No. E,G-999/M-07-1102, Order Establishing General Wind Permit Standards (Jan. 11, 2008) (General Wind Permit Standards Order). For ease of reference, a copy of this Order and its attached Ex. A was received in evidence as Ex. 21. A. Wetland Setbacks. The proponent has not met its burden to establish by a preponderance of the evidence that there is good cause for the Commission to not apply the County Ordinance requirement as it pertains to setbacks from wetlands.

BCT

130. The County's setback provision is ambiguous, in that it is unclear from the terms when a setback of 1,000 feet or more would be required. It is also a crude method of protecting wetlands, compared to the individualized analysis of the impacts on the quantity, quality, and biological diversity of wetlands conducted by the Technical Evaluation Panel that represents all the regulating agencies. For all the above reasons, there is good cause not to apply this provision of the ordinance to the project. The Applicant has failed to make a good faith effort to determine the impact of the wetland setback on the Project as currently proposed. Therefore, based upon the record and the evidence submitted by the Applicant, there is not good cause not to apply this provision of the ordinance to the Project.

#### Exception to Number 130:

The Applicant's duty was made clear in the Second Prehearing Order. It chose not to follow the PUC's directive, and therefore the wetland setback must be applied to the Project.

GWT

130. The County's setback provision is ambiguous, in that it is unclear from the terms when a setback of 1,000 feet or more would be required. It is also a crude method of protecting wetlands, compared to less specific than the individualized analysis of the impacts on the quantity, quality, and biological diversity of wetlands conducted by the Technical Evaluation Panel that represents all the regulating agencies. For all the above reasons, Because the Commission generally defers to the requirements of other states, local, and federal agencies charged with regulating wetlands. there is no good cause not to apply this provision of the ordinance to the project.

XII. Setbacks for Other Structures	
ALJ Finding 131.	131. The County Ordinance provides for a setback of commercial WECS from "other structures" of "[t]he fall zone, as certified by a professional engineer plus 10 feet or 1.1 times the total height." The ordinance does not define "other structures." As noted above, the definition of "fall zone" applies only to guyed towers; because this project would not involve guyed towers, that portion would not be applicable. The ordinance therefore would call for a setback of 1.1 times the total height for "other structures."
GWT	131. The County Ordinance provides for a setback of commercial WECS from "other structures" of "[t]he fall zone, as certified by a professional engineer plus 10 feet or 1.1 times the total height." The ordinance does not defines "other structures." through its adoption of the International Building Code. As noted above, the definition of "fall zone" applies only to guyed towers; because this project would not involve guyed towers, that portion would not be applicable. The ordinance therefore would call for a setback of 1.1 times the total height for "other structures."
ALJ Finding 132.	132. The Applicant has not identified this provision of the ordinance as one that would impact this project.
GWT	132. The Applicant has not <u>objected to or</u> identified this provision of the ordinance as one that would impact this project.
ALJ Finding 133.	133. Because of its ambiguity as to the type of structure it would apply to, there is good cause not to apply this ordinance provision to the project.
County	Exception to Number 133:
	The International Building Code, as adopted by Goodhue County, defines "structures". The proponent has not met its burden to establish by a preponderance of the evidence that there is good cause for the Commission to not apply the County Ordinance requirement as it pertains to setbacks from structures.
GWT	133. Because there is no objection from the Applicant. of its ambiguity as to the type of structure it would apply to, there is no good cause not to apply this ordinance provision to the project.

150 Ex. 24B, Art. 18, § 4, subd. 1.

	XIII. Setbacks for Other Existing WECS and Internal Turbine Spacing	
ALJ Finding 134.	134. The County ordinance provides for a setback from other existing WECS and internal turbine spacing of "3 RD,non-prevailing and 5 RD prevailing." In this section of the ordinance, prevailing wind appears to be defined differently than in other sections pertaining to setbacks. "Prevailing wind" is defined to mean the predominant wind direction in Goodhue County; non-Prevailing wind is defined as the non-dominant wind direction in Goodhue County. 151	
ALJ Finding 135.	135. The Commission has no general permit standards pertaining to internal turbine spacing, but the proposed site permit provides that turbine towers shall be spaced no closer than three RD in the non-prevailing wind directions and five RD on the prevailing wind directions. If required during final micro-siting of the turbine towers to account for topographic conditions, up to 20 percent of the towers may be sited closer than the above spacing, but the permittee shall minimize the need to site the turbine towers closer. <sup>152</sup>	
County	Exception to Number 135:	
	The ALJ acknowledges that the Commission has no standards for internal turbine spacing. The requirements of the proposed site permit are not standards and not authoritative unless adopted in the final site permit. The Commission has no standard governing this topic, therefore, Goodhue County's regulation is presumptively valid. The proponent has not met its burden to establish by a preponderance of the evidence that there is good cause for the Commission to not apply the County Ordinance requirement as it pertains to internal turbine spacings within an LWECS site plan.	
GWT	135. The Commission has no general permit standards pertaining to internal turbine spacing, butand the proposed site permit provides that turbine towers shall be spaced no closer than three RD in the non-prevailing wind directions and five RD on the prevailing wind directions. If required during final micro-siting of the turbine towers to account for topographic conditions, up to 20 percent of the towers may be sited closer than the above spacing, but the permittee shall minimize the need to site the turbine towers closer. <sup>151</sup>	
ALJ Finding 136.	136. The County ordinance and the proposed site permit are similar, but the ordinance does not allow for closer spacing of up to 20 percent of the towers. It is more stringent, but the Applicant has not indicated that it has any objection to application of this provision or that it would impact the project in any way.	
GWT	136. The County ordinance and the proposed site permit are similar, but the ordinance does not allow for closer spacing of up to 20 percent of the towers. It is more stringent, but the Applicant has not indicated that it has any objection to application of this provision or that it would impact the project in any way. There is no good cause not to envorce the Goodhue County Ordinance.	

<sup>151</sup> Ex. 24B, Art. 18, § 2, subds. 18 and 21. Proposed Site Permit§ 4.10.

XIV. Setbacks for Bluffs	
ALJ Finding 137.	137. The County ordinance provides for a setback for commercial WECS of 1,350 feet from the top of bluffs over the Mississippi and Cannon Rivers and 500 feet from the top of other bluffs. <sup>153</sup>
County	Exception to Number 137:
	County Ordinance Article 18, § 4, subd. 1, establishes setbacks from bluff tops, not Article 19, as noted in footnote number 153.
GWT	137. The County ordinance provides for a setback for commercial WECS of 1,350 feet from the top of bluffs over the Mississippi and Cannon Rivers and 500 feet from the top of other bluffs. County Ordinance Article 18, § 4, subd. 1, establishes setbacks from bluff tops, which are common in Goodhue County.
ALJ Finding 138.	138. The Commission has no setback standard for bluffs and has not addressed setbacks from bluffs in site permits, as bluffs have not been a factor in previous LWECS site permit dockets. <sup>154</sup>
ALJ Finding 139.	139. The project area does not include any bluffs, and the Applicant has not indicated that this ordinance provision would impact the project in any way.
ALJ Finding 140.	140. Although some type of setback for bluffs would be reasonable if there were bluffs in the project area, there appears to be no reason to apply this ordinance provision to the project.
County	Exception to Number 140:
	As stated by the ALJ herein, the proponent has not met its burden to establish by a preponderance of the evidence that there is good cause for the Commission to not apply the County Ordinance requirement as it pertains to setbacks from bluff tops.
GWT	140. Although some type of <u>sS</u> etbacks for bluffs would be reasonable if there were bluffs in the project area, <u>and</u> there appears to be no reason <u>no good cause not</u> to apply this ordinance provision to the project. <u>Application of the ordinance would have no impact on the project.</u>

Ex. 248, Art. 19, § 4, subd. 1.

OES Comments (Dec. 20, 2010), Attachment 1 at 6.

# XV. Discontinuation and Decommissioning ALJ Finding Section 5, subdivision 12 B of the County ordinance requires that WECS 141. shall have a decommissioning plan outlining the anticipated means and cost removal at the end of the serviceable life or upon becoming a discontinued use. Subdivisions 12 C through 12 E of the County ordinance require an applicant to fund decommissioning with a cash escrow or irrevocable letter of credit in an amount equal to 125% of the cost estimate prepared by a competent party to ensure that decommissioning is completed as required by the ordinance. The ordinance does not specify when the cash or irrevocable letter of credit is to be provided to the County, who would hold the cash or letter of credit, how any cash would be invested, or how the County would obtain access to the funds if that became necessary. County Exception to Number 141: The specific language of Article 18 requires "cash escrow or an irrevocable letter of credit in an amount equal to 125% of the cost estimate prepared by a competent party..." Article 18, Section 5, subd. 12(E). A competent party is defined as an individual "approved by the County; such as a professional engineer, a contractor capable of decommissioning or a person with suitable expertise or experience with decommissioning." Article 18, Section 5, Subd. 12(c). GWT Section 5, subdivision 12 B of the County ordinance requires that WECS plan outlining the anticipated means and cost shall have a decommissioning removal at the end of the serviceable life or upon becoming a discontinued use. Subdivisions 12 C through 12 E of the County ordinance require an applicant to fund decommissioning with a cash escrow or irrevocable letter of credit in an amount equal to 125% of the cost estimate prepared by a competent party to ensure that decommissioning is completed as required by the ordinance. The ordinance does not specify when the cash or irrevocable letter of credit is to be provided to the County, who would hold the cash or letter of credit, how any cash would be invested, or how the County would obtain access to the funds if that became necessary. The specific language of Article 18 requires "cash escrow or an irrevocable letter of credit in an amount equal to 125% of the cost estimate prepared by a competent party..." Article 18, Section 5, subd. 12(E). A competent party is defined as an individual "approved by the County; such as a professional engineer, a contractor capable of decommissioning or a person with suitable expertise or experience with decommissioning." Article 18, Section 5, Subd. 12(c). Additional details are to be addressed in a Development Agreement. ALJ Finding 142. The Commission's rule, Minn. R. 7854.0500, subp. 13, requires applicants 142. to include information regarding decommissioning of the project and restoring the site, including a description of the anticipated life of the project; the estimated decommissioning costs in current dollars; the method and schedule for updating the costs of decommissioning and restoration; the method of ensuring that funds will be available for decommissioning and restoration; and the anticipated manner in

GWT

142. The Commission's rule, Minn. R. 7854.0500, subp. 13, requires applicants to include information regarding decommissioning of the project and restoring the site, including a description of the anticipated life of the project; the estimated

which the project will be decommissioned and the site restored. The Commission's rule

does not require a cash escrow or irrevocable letter of credit.

ALJ Finding 143.	decommissioning costs in current dollars; the method and schedule for updating the costs of decommissioning and restoration; the method of ensuring that funds will be available for decommissioning and restoration; and the anticipated manner in which the project will be decommissioned and the site restored. The Commission's rule does not require a cash escrow or irrevocable letter of credit. Like the County Ordinance, the Commission's rule does not specify when the cash or irrevocable letter of credit is to be provided to the Commission, who would hold the cash or letter of credit, how any cash would be invested, or how the Commission would obtain access to the funds if that became necessary.  143. The Applicant has proposed that the cost estimate and funding be provided in year 15, which is approximately halfway through the project's expected useful life of 25 to 30 years. A requirement to fund the decommissioning cost in year 1 versus year 15 would add approximately \$1.5 million to the cost of the project.
County	Exception to Number 143:
	The total cost will not vary as both the Commission and the County require decommissioning at project end.
GWT	143. The Applicant has proposed that the cost estimate and funding be provided in year 15, which is approximately halfway through the project's expected useful life of 25 to 30 years. Goodhue County's decommissioning fund requirement begins at the same time that decommission becomes a necessity, upon construction. A requirement to fund the decommissioning cost in year 1 versus year 15 would add approximately \$1.5 million to the cost of the project of a \$179 million project, less than 1% of the total cost. 156
Finding 144.	144. The ordinance is ambiguous in that it does not describe what is to be done with the cash or irrevocable letter of credit, who would hold the cash or how it would be invested, when it was to be given to the County, or how the County would obtain access to the funds. The Commission's rule requires more specific information about the development of the cost and the schedule for updating it. A requirement to fund decommissioning cost at the beginning of the project is not unreasonable for a project of this magnitude; however, the ambiguities in the ordinance would make it difficult to apply in its current form. For these reasons, there would be good cause not to apply this ordinance provision.
County	Exception to Number 144:
	The necessary funds are to be provided in such a way as to assure "that decommissioning of the commercial WECS is completed as required." Article 18, Section 5, subd. E of the Goodhue County Zoning Ordinance.  The proponent has not met its burden to establish by a preponderance of the evidence that there is good cause for the Commission to not apply the County Ordinance requirement as it pertains to pre-payment for decommissioning.
GWT	144. The ordinance is ambiguous in that it does not describe what is to be done with the cash or irrevocable letter of credit, who would hold the cash or how it would be invested, when it was to be given to the County, or how the County would obtain access to the funds. The Commission's rule requires more specific information about the development of the cost and the schedule for updating it, but also does not describe the specifics, as above, and is not more specific than the Goodhue County Ordinance. A requirement to fund decommissioning cost at the beginning of the project is not unreasonable for a project of this magnitude.; AWA Goodhue has not met its burden to establish that the Ordinance is

Ex. 2, Robertson Direct at 10.
Ex. 2, Robertson Direct at 11.

arbitrary and capricious and.;however, the ambiguities in the ordinance would make it difficult to apply in its current form. For these reasons, there would be is no good cause not to apply this ordinance provision.

145. Section 6, subdivisions 1 through 3 of the County ordinance require that a commercial WECS shall offer to perform at least two pre-construction stray voltage tests at all registered feedlots within the proposed project boundary and within a one-mile radius beyond the proposed project boundary. The results of any test are to be provided to property owners, the MPUG, local utilities, and the County. If a registered feedlot owner within the project boundary subsequently has a stray voltage test performed, and it is found that the cause of the stray voltage is attributed to the commercial WECS project, the project owners are required to pay for all costs associated with the testing and correcting of the problem.

# XVI. Stray Voltage Testing

### ALJ **Finding** 146.

146. This issue was of particular concern to one member of the County's Planning Advisory Commission. 157 The County included the stray voltage provisions in the ordinance because:

Whether or not this is a conclusively documented phenomenon, we felt a good baseline should [be] established by requiring pre-construction analysis to aid in evaluating the validity of potential future claims and prevent unnecessary conflict. 158

#### County

# Exception to Number 146:

Stray voltage testing is required by Article 18, Section 6, of the Goodhue County Ordinances on Wind Energy Conversion Systems to establish a baseline for feedlots potentially impacted by the Goodhue Wind project's Although stray voltage is not a likely condition associated with present day wind farm generator system design, there is little documentation to disprove a relationship. Experts rely on their understanding of the design of properly operating and installed systems which utilize separation between wind turbine generators with their collector system of electric lines and farm electrical supply lines. However, AWA Goodhue Wind's expert witness, Mr. Pete Malamen, employed by Consulting Engineers Group, admitted that, under some conditions, a "fault" in the system could allow current to enter the farm system wiring and potentially expose livestock to electrical shock.

- "Q Okay. Page 5, part 3, Stray Voltage and Wind Projects. And you've just given your explanation of why you say there is no project - no problem with stray voltage on wind projects. Your testimony, I believe in there, in that section 3 with stray voltage, there's a section that says there are no ground currents generated in the wind farm collection system because of the type of transformers used at each turbine. Under normal operation, there is no intentional current in a ground wire, either when the turbine is not operating or when it's operating at its maximum generation. You qualify that statement, then, by saying under normal operation.
  - Are there conditions under abnormal operation where current may flow in the ground wire of a wind project?
- The only case that I'm aware of where current could flow in the ground Α wire of a wind project is during a fault condition, when there's an electrical fault.
- What is an electrical fault condition? Q
- That would be a nonstandard condition, in my opinion. This is where there's a -- an electrical fault on a distribution system would be similar to an electrical fault in a home, where there's something that's failed and the protective device has to clear that fault.
- So if you had a wind distribution system, a wind generation system, you Q could have a condition where the -- through a failure of the equipment the electricity travels on the ground system where it's not supposed to, then, right?

<sup>&</sup>lt;sup>157</sup> Tr. 38:10 (Wozniak).

<sup>&</sup>lt;sup>158</sup> Ex. 24, Hanni Rebuttal at 2.

- A Yes, but that condition would only last for a few tenths of a second.
- Q Could it recur?
- A Generally not. The protective -- these are all underground cables, the protective devices at the substations are generally set for a one -- what's referred to as a one-shot operation when you're dealing with underground cables.
- Q Okay. You said generally not, does that mean it can't recur or that it could recur?
- A I guess I'm not following your question.
- Q Well, it sounds to me like you're qualifying your statement again by saying that sometimes it can happen more than once in a given situation. Is that correct?
- A The fault would be cleared, like I said, within a few tenths of a second.
- Q So the cow gets a shock and remembers it for a while. Does the cow get another shock, then?
- A I'm not following your question, sir.
- Well, I'm just asking if you can have the same situation occur from a wind generating system that you have in the system that you describe as causing stray voltage. And I think you told me under some conditions when equipment malfunctions it can create a similar situation once in a while, right?
- A Yes, a fault current would flow for a few tenths of a second and then -- until the protective device would clear.
- Q So there would be current flowing for a short period of time. Now, would that be possible for that to recur in that system again?
- A That same fault probably would not occur. There could be another fault down the road sometime.
- Q Okay. But you just said again, and you qualified it, probably would not recur. Does that mean that it won't recur or that it could recur? So I get one shock one minute and five minutes later I get another shock from the same cause. Is that what you're saying is possible? Not probable, but possible?
- A During a fault condition, the fault current which -- would flow for a very short period of time and a protective device would operate to clear the fault." Transcript Vol. 1, pgs. 209-212

Furthermore, the diagram submitted by Mr. Malamen as Exhibit 4 with attachment A establishes that there is a physical connection between the turbine generating system and on farm electrical supply system at the 69 KV line utilized by the wind project:

- "Q Okay. Now, can you put your diagram back up there so that we can refer to that once more, please?
  - Now, correct me if I'm wrong, but it looks to me like you have drawn a diagram here which had the farm delivery system on the right, the wind generator system on the left, and you have them both connected to the same 69 kilovolt transmission line. Is that correct?
- A That is correct.
- Q So there is in your diagram a direct connection between -- potentially between these two systems, right?
- A The connection is via the grounding conductors, and in electrical work, generally all the grounding conductors are always tied together. There is no connection on the phase-type conductors." Transcript Vol. 1, p. 212-213

It is a reasonable exercise of regulatory authority in a rural county where many hundreds of livestock feedlots already exist in the area where wind farms are

	proposed or may be considered for Goodhue County to act to protect its existing lawful businesses. In the approximate 12,000 acres area of the proposed project, there are many registered feedlots. The requirement for baseline stray voltage testing is not exclusionary, imposes relatively small costs compared to projected investment returns on potential developers and will aid greatly in providing comprehensive information for ongoing regulatory decision making and future planning. Even Mr. Kalass who is a participant in the AWA Goodhue Wind Project agreed at Vol. 1, pg. 251, lines 9-15 that potential "stray voltage" associated with the turbine project concerned him.  "Q Does it concern you that others had provisions written into their agreements for stray voltage testing?
	<ul> <li>A Does it that they have testing or just the concern that it could possibly happen?</li> <li>Q The concern that it could happen.</li> <li>A Yes, it's a concern."</li> </ul>
GWT	146. This issue was of particular concern to one member of the County's Planning Advisory Commission. The County included the stray voltage provisions in the ordinance because:
	Whether or not this is a conclusively documented phenomenon, we felt a good baseline should [be] established by requiring pre- construction analysis to aid in evaluating the validity of potential future claims and prevent unnecessary conflict. 158
ALJ Finding 147.	147. The Commission has not previously included any requirements pertaining to stray voltage in site permits for wind farms because there is no scientific evidence that wind farms cause stray voltage. 159
County	Exception to Number 147:
	OES Comments are not authoritative in and of themselves. They only carry weight to the extent that they are supported by facts in the record.
GWT	147. The Commission has not previously included any requirements pertaining to stray voltage in site permits for wind farms. because <u>tT</u> here is no scientific evidence that wind farms cause stray voltage and there is no scientific evidence that they do not cause stray voltage. 159
ALJ Finding 148.	148. "Stray voltage" is the term used to refer to neutral-to-earth voltage that appears on grounded surfaces in buildings, barns, and other structures. It is generally caused by electrical problems in the wiring on a farm or the interconnection between a farm and the local utility distribution system. It is condition that may exist between the neutral wire of a service entrance and grounded objects in buildings. At a farm served by single-phase electrical service, the grounded conductors are connected together at the service point (the point where the farm's grounding system is connected to the utility's grounding system). As electrical load at the farm increases, the return current to the substation increases, and, depending on the resistance of the ground, small voltages may be measured between a grounding conductor in a barn and an isolated ground rod. If an animal makes contact with metal that is connected to a ground conductor, a small current may flow through the animal from the ground to the piece of metal. 160
ALJ Finding	149. Stray voltage is not associated with transmission lines. Wind projects

DES Comments (Dec. 20, 2010), Attachment 1 at 6. Ex. 4, Malamen Direct at 4; Ex. 24A at 2591-94.

149.	have their own substations and transformers, and the collection system functions as a separately derived system. In addition, wind projects do not generate ground or neutral currents because of the type of transformer used at each turbine. Under normal operation, there is no intentional current in the ground wire. All current flows in the insulated underground conductors that connect the generators to the substation, which is connected to the transmission grid through dedicated 69 kV lines. <sup>161</sup>
GWT	149. Stray voltage is not associated with transmission lines. Stray voltage is associated with distribution systems. Wind projects utilize a collection system, essentially the reverse of a distribution system, with the same components and at the same voltage (34.5kV), connecting the turbines <sup>30</sup> . Wind projects also have their own substations and transformers, and the collection system functions as a separately derived system. yet the systems are connected together, "the connection is via the grounding conductors, and in electrical work, generally all the ground conductors are always tied together. <sup>31</sup> In addition, wind projects do not generate ground or neutral currents because of the type of transformer used at each turbine. Under normal operation, there is no intentional current in the ground wire. However, stray voltage is "stray" voltage, and not intentional. <sup>32</sup> All current flows in the insulated underground conductors that connect the generators to the substation, which is connected to the transmission grid through dedicated 69 kV lines. <sup>161</sup>
Staff	See additional exceptions made by the public, included as relevant documents to this briefing paper, Document ID: 20115-62636-01.
ALJ Finding 150.	150. Although an electrical fault could send current into the ground wire of a wind project for a few tenths of a second, until it is cleared, there is no evidence that current would flow between grounding conductors in the manner required to create stray voltage.
County	Exception to Number 150:
GWT	See Exception to Number 146 above.  See Goodhue Wind Truth's Exceptions document for specific language and suggested modifications.
ALJ Finding 151.	151. There is no evidence that any wind farm operation has ever caused stray voltage problems of any sort. No reports of stray voltage have been associated with any of Minnesota's existing wind farms. 164
County	Exception to Number 151:  See Exception to Number 147 above.
GWT	151. There is no evidence that any wind farm operation has ever caused stray voltage problems of any sort. 163 No reports of stray voltage have been associated with any of Minnesota's existing wind farms. 164 However, even participant landowners are concerned about stray voltage. 34 Zumbro Falls, in nearby Wabasha County was the site of a recent landmark stray voltage decision and award 35.
ALJ Finding 152.	152. There are approximately 150 feedlots within the project area and within one mile of the permit boundary. 165

Ex. 4, Malamen Direct at 5-6; OES Comments (Dec. 20, 2010), Attachment 3 at 3.

Tr. 1:209-12 (Malamen).

Ex. 4, Malamen Direct at 6-7.

OES Comments (Dec. 20, 2010), Attachment 3 at 3.

Ex. 4, Malamen Direct at 8.

GWT	152. There are approximately 150 feedlots <u>and dairy farms</u> within the project area and within one mile of the permit boundary. 166
ALJ Finding 153.	153. The requirement to conduct two pre-construction stray voltage tests could result in a delay of seven months and would add approximately \$1.2 million to the cost of the project. 166
ALJ Finding 154.	154. The Applicant agreed to do pre- and post construction stray voltage testing for three to five landowners who are participants in the project. <sup>167</sup>
ALJ Finding 155.	155. In the absence of any evidence that stray voltage is associated with wind farm operations, there is good cause not to apply these ordinance provisions to the project.
County	Exception to Number 155:  The proponent has not met its burden to establish by a preponderance of the evidence that there is good cause for the Commission to not apply the County Ordinance requirement as it pertains to the requirement for stray voltage testing.
GWT	155. In the absence of any evidence that stray voltage is associated with wind farm operations, Because applicants have agreed to pre- and post-construction stray voltage testing for concerned participant landowners, non-participant landowners who request testing should also have that option. There is no good cause not to apply these ordinance provisions to the project.

<sup>166</sup> Ex. 2, Robertson Direct at 10. <sup>167</sup> Tr. 1:185-86 (Burdick).

XVI. Miso	XVI. Miscellaneous Sections.	
ALJ Finding 156.	156. <b>In section 3, subdivision 6,</b> the County ordinance requires a commercial WECS to "provide proof of liability insurance covering the towers/project covering the lifespan of the project from the initial construction to final decommissioning."	
ALJ Finding 157.	157. The Applicant does not object to this requirement, contending that the Power Purchase Agreements approved by the Commission and the Development Agreement negotiated with the County contain similar provisions that require the Applicant to obtain insurance and set certain limits. 169	
ALJ Finding 158.	158. The Commission's general permit standards do not explicitly require liability insurance, but liability insurance is a requirement of the Power Purchase Agreements (the approval of which is a condition of the site permit). The ordinance could be applied without conflicting with any of the Commission's general permit standards.	
GWT	158. The Commission's <u>has no general permit standards <del>do not</del>that</u> explicitly require liability insurance, but liability insurance is a requirement of the Power Purchase Agreements (the approval of which is a condition of the site permit). The ordinance could be applied without conflicting with any of the Commission's general permit standards. <u>There is no good cause not to apply the County's Ordinance.</u>	
ALJ Finding 159.	159. <b>In section 5, subdivision 6</b> , the County's ordinance requires a commercial WECS to adhere to, but not exceed, FAA permits and regulations. It further provides that red strobe lights are preferred for night-time illumination to reduce impacts on migrating birds, and that red pulsating incandescent lights should be avoided.	
ALJ Finding 160.	160. The Commission's general wind permit standards provide that no turbines, towers or associated facilities shall be located so as to create an obstruction to navigable airspace of public and private airports in Minnesota or adjacent states or provinces. The required setbacks or other limitations must be determined in accordance with the requirements of the Minnesota Department of Transportation Division of Aviation and the Federal Aviation Administration (FAA). With regard to turbine lighting, towers shall be marked as required by the FAA and there shall be no lights on the towers other than what is required by the FAA.	
ALJ Finding 161.	161. It is unclear whether the County ordinance requires something different than the FAA requires in terms of lighting the towers, but it appears that the ordinance is generally consistent with the Commission's permit standards and is not more stringent. The FAA has issued a Determination of No Hazard for all 50 turbines in the current layout. <sup>171</sup> The ordinance could likely be applied without conflicting with the	

168 Ex. 248, Art. 18, § 3, subd. 6.
169 Ex. 2, Robertson Direct at 11.
170 Ex. 21 Attachment A at 9, 13.
171 Ex. 3, Burdick Direct at 23.

	general wind permit standards.
GWT	161. It is unclear whether the County ordinance requires something different than the FAA requires in terms of lighting the towers, but ilt appears that the ordinance is generally consistent with the Commission's permit standards and is not more stringent. The FAA has issued a Determination of No Hazard for all 50 turbines in the current layout. The ordinance could likely be applied without conflicting with the general wind permit standards. There is no good cause not to apply the County's Ordinance.
ALJ Finding 162.	162. <b>In section 5, subdivision 8,</b> the County's ordinance requires that all feeder lines equal to or less than 34.5 kV, installed as part of a WECS, shall be buried where reasonably feasible.
ALJ Finding 163.	163. The Commission's general wind permit standards provide that feeder lines measuring 34.5 kV may be placed overhead or underground within public rights-of-way or on private land adjacent to public rights-of-way if a public right-of-way exists, except as necessary to avoid or minimize human, agricultural, or environmental impacts. Feeder lines may be placed on public rights-of-way only if approval or the required permits have been obtained from the responsible government unit. In all cases, the permittee is required to avoid placement of feeder lines in locations that may interfere with agricultural operations. <sup>172</sup>
County	Exception to Number 163:
	The Applicant is not a public utility and is only allowed to use public right of way where the responsible governmental body has ownership and grants permission to use public right of way.
GWT	163. The Commission's has no general wind permit standards provide that regarding feeder lines measuring 34.5 kV may be placed overhead or underground within public rights-of-way or on private land adjacent to public rights-of-way if a public right-of-way exists, except as necessary to avoid or minimize human, agricultural, or environmental impacts. Feeder lines may be placed on public rights-of-way only if the applying entity is a public service corporation (public utility) and has received approval or the required permits have been obtained from the responsible government unit. In all cases, the permittee is required to avoid placement of feeder lines in locations that may interfere with agricultural operations.
ALJ Finding 164.	164. The Applicant does not object to application of this ordinance provision, because it plans to bury all communication and feeder lines when reasonably feasible. 173
ALJ Finding 165.	165. The Commission's approach here is similar to that in negotiating setbacks to private rights-of-way-the owner of the right of way controls the decision whether the feeder line is to be overhead or underground. The proposed site permit provides that feeder lines may be overhead or underground, and that locations "shall be negotiated with the affected landowner(s)."
GWT	165. The Commission's approach here is similar to that in negotiating setbacks to private rights-of-way-the owner of the right of way controls the decision whether the feeder line is to be overhead or underground. The proposed site permit provides that

<sup>&</sup>lt;sup>172</sup> Ex. 21, Attachment A at 10. <sup>173</sup> Ex. 3, Burdick Direct at 23.

	feeder lines may be overhead or underground, and that locations "shall be negotiated with the affected landowner(s).
ALJ Finding 166.	166. It is hard to say that the ordinance is "more stringent" than the Commission's general wind permit standard, because the ordinance requires "burial where reasonably feasible" and the Commission's standard requires the Applicant to do whatever the landowner wants to be done. These standards are virtually identical. It would not be necessary to apply the ordinance to achieve the same result.
GWT	166. It is hard to say that the ordinance is "more stringent" than the Commission's general wind permit standard, because the ordinance requires "burial where reasonably feasible" and the Commission's standard requires the Applicant to do whatever the landowner wants to be done. These standards are virtually identical. It would not be necessary to apply the ordinance to achieve the same result. There is no good cause not to apply the ordinance.
ALJ Finding 167.	167. <b>Section 5, subdivision 10,</b> of the County's ordinance requires a commercial WECS to provide a cash escrow or irrevocable letter of credit in an amount equal to 125% of the cost to repair anticipated damages to public infrastructure, including public roads and drainage systems as determined by the road authority. The funds would be held until the County issues a written release stating that the applicant has returned all routes to pre-construction condition.
ALJ Finding 168.	168. The Commission's general wind permit standards require an applicant to "make satisfactory arrangements" for road use, access road intersections, maintenance and repair of damages, with the governmental jurisdiction having authority over each road. The permittee is to notify the permitting authority of such arrangements upon request. <sup>174</sup>
ALJ Finding 169.	169. The Applicant has not objected to this provision of the ordinance. Again, there appears to be no conflict between the ordinance and the Commission's standard. The ordinance provision could be applied without conflicting with the Commission's general permit standards.
GWT	169. The Applicant has not objected to this provision of the ordinance. Again, there appears to be no conflict between the ordinance and the Commission's standard permitting practice. The ordinance provision could be applied without conflicting with the Commission's general permit standards permitting practice. There is no good cause not to apply the County Ordinance.
ALJ Finding 170.	170. Section 7, subdivisions 1 and 2, require the applicant to provide an acoustic study that demonstrates the project will be compliant with State of Minnesota Noise Standards. The study shall include the estimated dB(A) levels at all receptors within one mile of the nearest turbine within a project area and shall include accumulated sound within the project.
ALJ Finding 171.	171. The Commission's general wind permit standards require compliance with Minnesota Noise Standards at all residential receivers. There appears to be no conflict between the ordinance and the Commission's standards. The Applicant provided an acoustic study that demonstrates the project will comply with State of

Ex. 21, Attachment A at 11.

	Minnesota Noise standards.
GWT	171. The Commission's has no general wind permit standards, and all permits require compliance with Minnesota Noise Standards at all residential receivers. There appears to be no conflict between the ordinance and the Commission's standards. The Applicant provided an acoustic study that demonstrates predicts that the project will comply with State of Minnesota Noise standards.
ALJ Finding 172.	172. The definitions section of the ordinance contains a definition of a "Qualified Independent Acoustical Consultant" as a person with full membership in the Institute of Noise Control Engineers/INCE, or other demonstrated acoustical engineering certification. The Independent Qualified Acoustical Consultant can have no financial or other connection to a WECS developer or related company. 175
GWT	172. The definitions section of the ordinance contains a definition of a "Qualified Independent Acoustical Consultant" as a person with full membership in the Institute of Noise Control Engineers/INCE, or other demonstrated acoustical engineering certification. The Independent Qualified Acoustical Consultant can have no financial or other connection to a WECS developer or related company. This requirement is meant to assure objectivity in testing rather than utilize modeling and testing by a party of interest.
Finding 173.	173. It does not appear that the term Qualified Independent Acoustical Consultant is used elsewhere in the ordinance, so it is unclear why this term is defined. If the Commission were to apply the ordinance, this reference should be excluded because of its ambiguity.
County	Exception to Number 173:  The ordinance is not ambiguous and the Qualified Independent Acoustical Consultant is specifically defined. The requirement for an independent acoustical study is an attempt to assure objectivity in the results of the study. The proponent has not met its burden to establish by a preponderance of the evidence that there is good cause for the Commission to not apply the County Ordinance requirement as it pertains to the requirement for an independent Acoustical Consultant to conduct an acoustic study of the proposed LWECS.
GWT	173. There is no good cause not to apply the ordinance. It does not appear that the term Qualified Independent Acoustical Consultant is used elsewhere in the ordinance, so it is unclear why this term is defined. If the Commission were to apply the ordinance, this reference should be excluded because of its ambiguity. (this is not ambiguous, it is specific)
ALJ Finding 174.	174. In section 9, subdivision 5, the ordinance requires the applicant to "minimize or mitigate" interference with electromagnetic communications, such as radio, telephone, microwaves, or television signals caused by any WECS. In addition, it requires the applicant to notify all communication tower operators within two miles of the proposed WECS, and it further provides that no WECS shall be constructed so as to interfere with County or Minnesota Department of Transportation microwave transmissions.
ALJ Finding 175.	175. The Commission's general wind permit standards for electromagnetic interference require the permittee to submit a plan for conducting an assessment of television signal reception and microwave signal patterns in the project area. The

<sup>175</sup> Ex. 248, Art. 18, § 2, subd. 26.

	assessment shall be designed to provide data that can be used to determine whether turbines and associated facilities are the cause of any disruption or interference that may occur after the turbines are placed in operation. The permittee "shall be responsible for alleviating any disruption or interference" caused by the turbines or any associated facilities. <sup>176</sup>
GWT	175. The Commission's <u>has no general</u> wind permit standards for electromagnetic interference, <u>but all permits</u> require the permittee to submit a plan for conducting an assessment of television signal reception and microwave signal patterns in the project area. The assessment shall be designed to provide data that can be used to determine whether turbines and associated facilities are the cause of any disruption or interference that may occur after the turbines are placed in operation. The permittee "shall be responsible for alleviating any disruption or interference" caused by the turbines or any associated facilities. <sup>176</sup>
ALJ Finding 176.	176. Because the Commission's standards regarding electromagnetic interference are more stringent than those contained in the ordinance, there would be good cause not to apply this ordinance provision.
County	Exception to Number 176:  The County Ordinance specifically regulates some areas not delineated in the state permit language and the state specifically lists other related fields. The two sets of regulations must be read and applied together so that the more restrictive requirements apply in each case.
GWT	176. Because the Commission's <u>does not have</u> standards, <u>but Commission</u> <u>practice</u> regarding electromagnetic interference are more stringent than those contained in the ordinance, there would be good cause not to apply this ordinance provision <u>and apply the Commission's more stringent permit conditions</u> .

<sup>&</sup>lt;sup>176</sup> Ex. 21, Attachment A at 12.

#### XVII. Motion to Strike

# ALJ Finding 177.

177. On April 6, 2011, the Applicant moved to strike the brief filed by the Coalition for Sensible Siting on the basis that it misstates facts, contains assertions of fact that are unsupported by the record, and was not timely filed.

### ALJ Finding 178.

178. In response to the motion, the Coalition for Sensible Siting submitted a corrected post-hearing memorandum on April 8, 2011, indicating that the inaccuracies in the first brief were due to its inability to pay for a transcript and that the late filing (by approximately four. hours) resulted in no prejudice to any party. Goodhue Wind Truth also filed a letter supporting the receipt of the corrected memorandum.

### ALJ Finding 179.

179. The filing was late, but it caused no prejudice to the Applicant. Accordingly, the motion to strike is granted in part and denied in part as follows: The post-hearing memorandum filed by the Coalition for Sensible Siting on April 1, 2011, is struck from the record; and the corrected post-hearing memorandum filed by the Coalition for Sensible Siting on April 8, 2011, is deemed to be timely received.

# ALJ Recommendation

Based on the above Findings of Fact and Conclusions, the Administrative Law Judge makes the following:

The Administrative Law Judge recommends that the Commission take action in accordance with the above Findings of Fact and Conclusions.

## County

## Exception to Recommendations – Number XVIII:

Goodhue County respectfully requests that the Public Utilities Commission interpret and apply each and every subdivision of Minn. Stat. § 216F to:

- 1. Allow all counties, pursuant to Minn. Stat. § 216F.081, to adopt regulations to be considered and applied by the MNPUC in review site permit applications for all LWECS in each county.
- 2. Complete pending dockets and all necessary research and testimony to establish rules governing all aspects of LWECS siting.
- 3. To apply each and every aspect of Goodhue County's Article 18 of the Zoning Ordinance to evaluate the permit application currently submitted by AWA Goodhue Wind, LLC.
- 4. To require compliance or a duly authorized variance by AWA Goodhue Wind, LLC, to each and every aspect of Goodhue County's Article 18 of the Zoning Ordinance before a permit may be issued.
  - 5. In the alternative, to deny a permit to AWA Goodhue Wind, LLC, if it fails to

	meet criteria of Goodhue County's Article 18 of the Zoning Ordinance.
	6. Goodhue County respectfully requests an opportunity to present oral argument at the PUC hearing considering this permit application.
CFSS	Exception: For the reasons stated herein above and the inconsistencies, failure to follow Minnesota State law and a request to disregard the fabricated facts documented by Judge Sheehy herein, the Coalition for Sensible Siting respectfully requests the PUC to reject this Report.