Umatilla County

Department of Land Use Planning



DIRECTOR TAMRA MABBOTT

LAND USE PLANNING, ZONING AND PERMITTING

CODE ENFORCEMENT

SOLID WASTE COMMITTEE

SMOKE MANAGEMENT

GIS AND MAPPING

RURAL ADDRESSING

LIAISON, NATURAL RESOURCES & ENVIRONMENT September 4, 2015

MEMO

RE:

TO: Board of Commissioners

FROM: Tamra Mabbott

CC: Doug Olsen, County Counsel

Interested Parties

September 9, 2015 Hearing

Comments to EFSC for Wheatridge Wind Energy Facility

As you know, at your request, Planning Commission held a public hearing on August 27th to hear public testimony on the proposed Wheatridge Wind Energy Project (Wheatridge). At the hearing, Planning Commission heard a report from staff and Attorney Wendie Kellington, whom the county retained to provide a legal analysis of the project. Planning Commission also listened to hours of testimony from the public, adjacent landowners and the applicant.

After the hearing was closed, the commission deliberated, asked questions and then voted unanimously to support the legal analysis provided by Ms. Kellington. As part of their recommendation to you, they also requested that Ms. Kellington and staff incorporate the issues raised by the public.

The attached July 16, 2015 memo to the Board from Sarah Esterson, Energy Facility Siting Council, Siting Analyst, outlines the role and expectations of Umatilla County regarding the Wheatridge application. That memo references a comment deadline of August 31, 2015. However, in order to provide adequate time for public involvement, Oregon Department of Energy agreed to grant the county an extension. September 21, 2015 is the county deadline to submit comments to EFSCon the Wheatridge Site Certificate Application.

At your hearing on September 9th you will hear a brief report from staff and Attorney Kellington and then you may open the meeting for public testimony. After the hearing and your decision, staff will prepare Findings for signature and then submittal to EFSC.

Packet Table of Contents

- 1. July 16, 2015 memo from Sarah Esterson, EFSC Siting Analyst with request for Special Advisory Group review of the complete Application for Site Certificate.
- 2. Draft Minutes from August 27, 2015 Planning Commission hearing.
- 3. September 2, 2015 memo, legal analysis and attachments from Attorney Wendie Kellington.
- 4. Exhibits submitted at August 27, 2015 Planning Commission Hearing.
- 5. Packet submitted to Planning Commission on August 20, 2015. Maps of the project, Application Exhibit K (Land Use) are included.





625 Marion St. NE Salem, OR 97301-3737 Phone: (503) 378-4040 Toll Free: 1-800-221-8035 FAX: (503) 373-7806 www.Oregon.gov/ENERGY

To:

Umatilla Board of County Commissioners, Special Advisory Group for the proposed

Wheatridge Wind Energy Facility

George Murdock, Commissioner - Chair Larry Givens, Commissioner - Vice Chair Bill Elfering, Commissioner - Position #3

Sent via email: George.murdock@umatillacounty.net; larry.givens@umatillacounty.net;

bill.elfering@umatillacounty.net; tamra.mabbott@umatillacounty.net

From:

Sarah Esterson, Energy Facility Siting Analyst

Oregon Department of Energy

625 Marion Street NE Salem, OR 97301 Phone: 503-373-7945

Email: WRW.comments@state.or.us

Date:

July 16, 2015

Subject:

Request for Special Advisory Group review of the complete Application for Site

Certificate for the proposed Wheatridge Wind Energy Facility

Introduction

On July 1, 2015, the Oregon Department of Energy (department), as staff to the Energy Facility Siting Council (EFSC or Council), determined Wheatridge Wind Energy, LLC's (applicant) preliminary Application for a Site Certificate (pASC) for the Wheatridge Wind Energy Facility (proposed facility) to be complete. On July 13, 2015, the applicant filed with the department its Application for Site Certificate (ASC). Because the proposed facility is located within Umatilla and Morrow counties, the Umatilla Board of County Commissioners was appointed as a Special Advisory Group (SAG) by EFSC, as required under ORS 469.480(1), which states that EFSC must designate as a SAG the governing body of any local government within whose jurisdiction the facility is proposed to be located. The department records show that EFSC appointed the Umatilla Board of County Commissioners as a SAG for the proposed facility on November 2, 2012, prior to issuance of the Notice of Intent by the department. Pursuant to Oregon Revised Statute (ORS) 469.350(2) and OAR 345-015-0200, the department requests your review and comment on the ASC. The comment deadline is **August 31, 2015**; however, please reply as soon as possible.

Oregon Department of Energy

Proposed Facility Overview

The applicant proposes to construct and operate a wind generation facility with a maximum nominal generating capacity of 500 megawatts (MW) within Morrow and Umatilla counties, Oregon. The proposed facility is comprised of up to 292 turbines divided into two groups: a western group of turbines (Wheatridge West) and an eastern group of turbines (Wheatridge East). Wheatridge West and Wheatridge East are electrically connected by an intraconnection corridor comprised of up to two parallel overhead 230-kilovolt transmission lines, each no longer than 35 miles in length. Exhibit B of the ASC contains detailed descriptions of the proposed facility, project components and related and supporting facilities, including but not limited to access roads, an electrical collection and control system, substations, and operations and maintenance buildings. Exhibit C of the ASC contains detailed maps showing the proposed facility location. If you are unfamiliar with the proposed facility location, please review this exhibit first to orient yourself to the project location. A summary of the proposed facility and EFSC review status is presented in Table 1.

Table 1: Summary of Proposed Facility and EFSC Review Status

Facility Name	Wheatridge Wind Energy Facility
Applicant	Wheatridge Wind Energy, LLC
Proposed Facility	Wheatridge Wind Energy, LLC, proposes to construct and operate a wind generating facility with a maximum nominal generating capacity of 500 megawatts (MW). The proposed facility is comprised of up to 292 turbines divided into a western group and eastern group, electrically connected by an 'intraconnection' corridor.
Location	Wheatridge West is located entirely within Morrow County, approximately 5 miles northeast of Lexington and approximately 7 miles northwest of Heppner. Wheatridge East is located approximately 16 miles northeast of Heppner and encompasses land in both Morrow and Umatilla counties. The intraconnection corridor is located entirely within Morrow County.
Required Approval	Site Certificate from the Oregon Energy Facility Siting Council
Review Status	ASC completeness determination issued July 1, 2015; complete ASC supplement filed on July 13, 2015; 45-day agency/SAG review period (July 16 to August 31, 2015)
Agency & SAG Review/ Comment Deadline	August 31, 2015

EFSC Review Process

Before it is authorized to construct and operate the proposed facility, the applicant must obtain a site certificate from EFSC. To obtain a site certificate, the applicant must demonstrate that the proposed facility meets the EFSC standards established under ORS 469.501 and OAR Chapter 345, divisions 22 and 24, as well as all other applicable statutes, rules, and standards including those of other state and local agencies identified in the Project Order. The department serves as staff to EFSC and conducts the ASC review process. As part of this process, the department requests reviewing agencies and SAGs to provide evaluation and recommended conditions of approval based on their applicable statutes, rules and substantive criteria.

During the pASC review process for the proposed facility, the department has publically issued the following key documents:

- Notice of Intent (NOI): applicant filed the NOI on February 22, 2013 (department notified reviewing agencies of NOI on March 13, 2013)
- Project Order: department issued a Project Order outlining the application requirements on May 22, 2013
- Preliminary Application for Site Certificate (pASC): applicant filed the pASC on December 19,
 2014 (department notified reviewing agencies of pASC on January 7, 2015)
- Complete ASC: applicant filed the complete ASC on July 13, 2015 (department notified reviewing agencies of complete ASC on July 16, 2015)

The key documents listed above are available on the project web page for Wheatridge Wind Energy Facility at http://www.oregon.gov/energy/Siting/Pages/WRW.aspx. The department website also describes the ASC process in more detail at www.oregon.gov/energy/siting/process.shtml.

SAG Roles and Responsibilities

The Umatilla Board of County Commissioners is asked to perform several important functions during this ASC review process. In order to be approved by EFSC, the applicant must demonstrate that the information provided in the ASC demonstrates compliance with the applicable substantive criteria of the Umatilla County land use regulations and comprehensive plan. The applicant's land use compliance assessment is contained in Exhibit K of the ASC. The SAG should review the application materials related to compliance with their jurisdiction's land use regulations (Exhibit K) and provide:

- a) An assessment of the accuracy and completeness of the applicable substantive criteria the applicant identified in the ASC; and
- b) A comment letter or email from the SAG on the proposed facility's demonstration of compliance with the applicable substantive criteria for a land use decision under ORS 469.504(1)(b).

Applicable substantive criteria are those criteria from the Umatilla County comprehensive plan and land use regulations that apply to the proposed facility. The applicable substantive criteria are defined in EFSC rules as the criteria and standards that Umatilla County would apply in making all land use decisions necessary to site the proposed facility in the absence of an EFSC proceeding (Oregon Administrative Rules 345-021-0050(6)). Those applicable substantive criteria, as well as any local interpretations the Commissioners may have made regarding the criteria are incorporated into the ODOE and EFSC review process. The criteria are those that were in effect on the date the pASC was submitted to the department, December 19, 2014.

SAGs may rely on planning staff to evaluate compliance with local land use requirements, but responses must be submitted by, or clearly state that they are submitted on behalf of, the SAG.

Submitting Comments on the Application for Site Certificate

Please reply with your comments as soon as possible, but **no later than August 31, 2015.** Attached to this memorandum is a table that lists each exhibit of the ASC and the potential applicable reviewing agency or SAG. This table is intended to be a useful tool for review but is not intended to be an exhaustive list of the exhibits to be reviewed by each agency. Therefore, please review the ASC as necessary to provide the most complete and thorough report as the ASC relates to Umatilla County. Additionally, please review the entirety of the exhibits, including any attached appendices. For your convenience, you may use the enclosed form, or provide the comments by separate letter. After your review of the ASC, if the Umatilla Board of County Commissioners has no comment, please provide that response. Please mail or email your response to Sarah Esterson, at:

Sarah Esterson, Energy Facility Siting Analyst Oregon Department of Energy 625 Marion Street NE Salem, OR 97301

Phone: (503) 373-7945

Email: WRW.comments@state.or.us

Cost Recovery

Costs associated with reviewing the ASC and preparing comments are eligible for reimbursement. In order to receive reimbursement, ODOE must have an interagency or intergovernmental agreement in place with your organization. If you do not have an agreement and would like to establish one, please contact ODOE's financial analyst Sisily Fleming at sisily.fleming@state.or.us or 503-378-8356.

List of Exhibits and Suggested Reviewing Agency

Reviewing agencies are encouraged to review all exhibits. However, recognizing there is a large volume of information and your time and resources are limited, the following table was created to help you more efficiently review the ASC.

Suggested Reviewing Agency	Exhibit	Exhibit Title
All	А	Applicant Information
All	В	Project Description
All	С	Project Location
All	D	Applicant's Organizational, Managerial, and Technical Expertise
All	Е	Permits Needed for Construction and Operation
Umatilla and Morrow Counties (Special Advisory Group)	F	Adjacent Property Owners Name and Addresses
SAG, DEQ, State Fire Marshal	G	Materials Analysis
SAG, DOGAMI, Agriculture	н	Geological and Soil Stability
SAG, DEQ, Agriculture, DLCD, ODFW	J.	Soil Protection
SAG, DSL, DEQ	J	Wetlands and other Jurisdictional Waters
SAG, DLCD, ODFW, Agriculture, OPRD	К	Land Use (Compliance with Statewide Planning Goals)
DEQ, OPRD, ODFW, SHPO, Agriculture	L	Protected Areas
PUC	М	Financial Capability
SAG, OWRD, DEQ, ODFW	0	Water Use
ODFW, Agriculture, Tribal Governments	Р	Fish and Wildlife Habitats and Species
ODFW, Agriculture, Tribal Governments	Q	Threatened & Endangered Plant & Animal
OPRD, ODF, SAG, DLCD, ODOT, Tribal Governments	R	Scenic Resources
SHPO, Tribal Governments	S	Historic, Cultural, and Archeological Resources
SAG, OPRD, ODFW, ODF	Т	Recreational Opportunities
SAG, ODOT, Adjacent Cities and Counties	U	Public Services
DEQ, SAG	V	Generation of Solid Waste and Wastewater
SAG, PUC	w	Facility Retirement and Site Restoration
DEQ, ODFW	Х	Noise Generation
PUC	AA	Electric and Magnetic Fields associated with Transmission Line
All	ВВ	Additional Information Requested by Department
All	СС	Statutes, Rules, and Ordinances
All	DD	Specific Standards for Wind Energy Facilities/Transmission Line

Example Comment Letter Template

MEMORANDUM

TO: Sarah Esterson

Energy Facility Siting Analyst Oregon Department of Energy

Sent via email to: WRW.comments@state.or.us

FROM: [Name, Title]

[Department/Agency] [Street Address]

[City, State Zip Code]

[Phone #] [Email]

DATE: [Date]

RE: [Agency Name's] Comments on the complete Application for Site Certificate for the

Wheatridge Wind Energy Facility

General Comments: [Include general comments here.]

Specific Comments: [If there are comments or edits related to a specific section in the ASC, please include in the comment table below. Please utilize the table format on the following page— this will allow easier collating of comments from multiple agencies on any particular exhibit. Insert additional rows as needed.]

Please note the applicable statutes, rules, regulations and ordinances of interest to your agency and include in your comments whether your agency needs additional information to review the amendment request for compliance with those statutes, rules or ordinances. If the applicant will need permits from your agency, please describe the current status of permit applications, if any have been received.

Wheatridge Wind Energy Facility Complete Application for Site Certificate Reviewing Agency Memo

Wheatridge Wind Energy Facility Comments on the complete Application for Site Certificate From Umatilla County Board of County Commissioners DATE	Comment					
	Page, Sentence Reference (as needed)					
	Exhibit Section No.					



To: Tamra Mabbott
From: Wendie Kellington
Date: September 2, 2015

Re: Wheatridge Energy Facility

On March 18, 2013, the Oregon Department of Energy (ODOE) appointed the Umatilla County Board of Commissioners as a "Special Advisory Group" (SAG) to provide specific input regarding the proposed Wheatridge Wind Energy Facility (Wheatridge). The SAG input requested by ODOE was to identify the applicable substantive criteria that apply to the Wheatridge wind energy proposal and to determine whether the Wheatridge Applicant (Applicant) supplied adequate evidence in its Application, to demonstrate the proposal complies with the County identified applicable substantive criteria. Under ORS 469.504(1)(b)(A) and (5), the "applicable substantive criteria" at issue are:

"The * * * applicable substantive criteria from the affected local government's acknowledged comprehensive plan and land use regulations that are required by the statewide planning goals and in effect on the date the application is submitted, and with any Land Conservation and Development Commission administrative rules and goals and any land use statutes that apply directly to the facility under ORS 197.646."

On April 12, 2013, the Umatilla County Board of Commissioners identified the state and local applicable substantive criteria that applied to the proposed Wheatridge facility.

On August 27, 2015, the Umatilla County Planning Commission considered public testimony regarding whether the Wheatridge Application (Application) supplied enough evidence to demonstrate compliance with the applicable substantive criteria that the County identified. After the public hearing, the Planning Commission deliberated and made a recommendation to the Umatilla County Board of Commissioners that the Application did not comply with County identified County applicable substantive law. Specifically, the Planning Commission determined that the Application failed to comply with:

- UCDC 152.616(HHH)(5)(b) regarding identifying the locations of all wind farm "components";
- UCDC 152.616(5)(c)(3) requiring that the transmission route be established;
- UCDC 152.616(HHH)(5)(d)(1) requiring compliance with UCDC 152.061,
- UCDC 152.061 requiring the proposal not have significant adverse impacts on accepted farming practices and not significantly increase the cost of accepted farming practices; and

• UCDC 152.616(HHH)(5)(h) and (h)(4) requiring an Emergency Management Plan and Emergency Response Plan that identifies and addresses fire hazards and mitigation therefore for "all phases of the life of the Wind Power Generation Facility".

The Board of Commissioners will consider the Planning Commission's recommendation on September 9, 2015 and adopt a formal Resolution to forward to ODOE (EFSC) regarding whether it determines the Wheatridge Application contains sufficient evidence to demonstrate compliance with applicable County substantive criteria.

Understanding the Application

Exactly what the Application proposes is seemingly inconsistent at times and is also unclear. For this reason we spend some time at this juncture in this memorandum to explain key features of the Application. However, whether the proposal is adequately articulated and explained to enable an evaluation of its compliance with SAG identified criteria, is a question considered by the Planning Commission and that must be decided by the Board of Commissioners.

Reduced to its essentials the Application proposes:

- (1) Wind Turbines, roads other infrastructure. Either 292 wind turbines or 200 wind turbines, spread between two Wheatridge Project areas Wheatridge West and Wheatridge East, are proposed to be placed on EFU zoned land. Application Exhibit B "Project Description", p 4 Table B-1. However, the notification portion of the Application, treats the project as a 292 turbine project. See Application Exhibit F, p 1. Similarly, the "Land Use" segment of the Application treats the project as a 292 turbine project. See Application Exhibit K, p 1. The number of turbines that will be included in the project, will depend on the type of turbine the Applicant decides to purchase. Regardless of the number of turbines deployed, the project will be a 500 MW project. Id. Roads and other infrastructure will be established to support the wind turbines. However, whether the Application provides adequate evidence to establish the Application meets all County SAG identified standards, including the direct and cumulative impacts of 292 turbines on accepted farming practices and the costs of accepted farming practices among other things, are land use issues that the Board of Commissioners must determine.
- (2) "Intraconnection Line(s)". Intraconnection²" is the connection between the proposed windfarm and the grid. Intraconnection for the proposed project is noncommittal, instead four "options" are listed. See Application Exhibit B "Project Description", p 8-9. According to the Application, Intraconnection is uncertain because the Intraconnection route selected "will depend on the point of interconnection to the BPA grid, likely either the planned Longhorn or Stanfield substation and on the number of Project Substations." The Application is careful not to disclose these Interconnection points. Therefore, the four intraconnection "options" are necessarily

¹ With either 30 or 35 of these wind turbines in Umatilla County, and the balance in Morrow County.

² Intraconnection lines are built by the wind developer and are distinguished from "Interconnection".

Interconnection are the Gen-Tie lines that are the UEC or Columbia Basin Electric Cooperative (CB) constructed connections to the BPA system.

speculative since the point of *Intra*connection depends on undisclosed *Inter*connection. It appears regardless of where Intraconnection is ultimately established, that Intraconnection does not pose as serious a *direct* adverse impact on farming, as the various "conceptual" Interconnection possibilities. However, the *cumulative* adverse effects on farming and aesthetic values from more turbines and Intraconnection including substations, was of concern to the Planning Commission, particularly to the extent that these attracted transmission and more wind farms to the already burdened area.

The Application only evaluates *one* of the four "Intraconnection" options for compliance with the state's "corridor assessment" criteria. Application Exhibit B "Project Description", p 9-13. That single option that was evaluated against the "corridor assessment criteria," is "Option 1." The Application states Option 1 (and no other) was evaluated because it is the "longest route" of Intraconnection. This option, however, is apparently almost entirely located in Morrow County, and leads to the potential "Strawberry" substation, which in turn is served by the potential "Longhorn" substation. It does not appear that the Application provided any required "corridor assessment" for any other intraconnection option. This means there is apparently no "corridor assessment" of the type that is required by state law for any "Intraconnection" option that would be located principally in Umatilla County.

Moreover, it is not clear whether or the extent to which Intraconnection options located primarily in Umatilla County (Options 3 or 4 explained at Application Exhibit B, "Project Description", p 9), were evaluated against the County SAG identified criteria. On this, the Application states:

"Wheatridge West is located entirely within Morrow County, approximately 5 miles northeast of Lexington, and approximately 7 miles northwest of Heppner. Wheatridge West is bisected by Oregon Highway 207 (OR-207). Wheatridge East is located approximately 16 miles northeast of Heppner and encompasses land in both Morrow and Umatilla Counties. The Intraconnection Corridor is located primarily within Morrow County and adjoins to the southeastern portion of Wheatridge West and the southern portion of Wheatridge East." Application Exhibit K, "Land Use", p 1. (Emphasis supplied.)

This seems to suggest that the *only* intraconnection evaluated against the SAG identified land use standards in Application Exhibit K, is Option 1. Recall, Option 1 heads west to the potential Strawberry substation then hooks into the *inter*connection route that then heads north to the potential Longhorn substation, all of which is located almost entirely in Morrow, not Umatilla County. If Option 1 intraconnection was the intraconnection option evaluated for land use

³ Application Exhibit K "Land Use," p 19, suggests that 0.04 acres of Option 1 (0.02 in high value farmland and 0.02 not in high value farmland) is in Umatilla County. However, this appears to be wrong because under any Option, more than 0.04 acres will underlie Intraconnection in Umatilla County in order to connect Wheatridge West and East; although the least amount of Intraconnection in Umatilla County, occurs under Option 1. Necessarily, it seems, that the amount of land taken for these the two options shown on the Exhibit K chart in Umatilla County should be different. Further, the same values on the same chart are attributed to "Option 3" as "Option 1" and there is obviously much more than 0.04 acres of land taken for Intraconnection in Umatilla County for Option 3.

compliance, then that would in turn suggest very little or no consideration was given to SAG identified criteria for project intraconnection in Umatilla County (Options 3 and 4).

On the other hand, a chart and some of the map exhibits to the Application's Exhibit K, suggest Intraconnection Option 3 (mostly located in Umatilla County) was considered, although these chart/maps are difficult to harmonize with the above quoted statement which ostensibly frames the scope of the land use analysis in the Application. *Compare* Application Exhibit B "Project Description" p 9 with Application Exhibit K, "Land Use" p 1, and 19 *and also* Figure K-6 and K-6.1- to 18 through K-8. "Option 3" is the *shortest* route overall.

The chart at Application Exhibit K "Land Use", p 19, appears to incorrectly identify the amount of land underlying Intraconnection facilities in Umatilla County under Option 1 or 3 as being limited to 0.04 acres. *See* Footnote 3 to this Memorandum.

"Option 4" appears not to have been evaluated at all against County SAG identified criteria in the Application, regardless of whether the narrative which purports to frame the analysis or the chart/maps, are utilized.

At the Planning Commission hearing, the Applicant pointed out that each of the 4 Intraconnection "options" are similar, and so identifying impacts associated with one "Option" is adequate to evaluate the impacts of any option listed in the Application. While that may be an accurate statement, the Application's reservation of other, undisclosed Interconnection options not listed in the Application, makes clear that Intraconnection might be those "conceptual" options in the Application or *some that are wholly different.* If Interconnection is wholly different from the concepts discussed in the Application, then necessarily Intraconnection (which depends on Interconnection), is also then wholly uncertain. If we really don't know with any certainty where *any* Intraconnection is located, then it seems plausible that there may be an Intraconnection "option" that is not shown in the Application that has different or more severe adverse impacts.

3. <u>Grid Connection or Interconnection</u>. At the Planning Commission hearing, the Applicant reinforced that without Interconnection, there would be no project. The Planning Commission noted that Interconnection appears to be the land use issue of the greatest concern to area constituents. The Planning Commission was concerned that Interconnection to the grid, is entirely "conceptual" according to the Application. *See* Application Exhibit B "Project Description", p 3. In this regard, the Application states:

"The specific location of the future Gen-tie Line(s) is *not yet known*; however, several potential routes have been identified and are shown as *conceptual* alignments in the [Application] (see Figures C-4a/b/c/d)." (Emphasis supplied.) Application Exhibit B "Project Description" p 3.

⁴ On this the Application states: "These two points of interconnection are the most likely and are shown throughout this ASC [Application for Site Certificate] as illustrative of the Project's grid interconnection options, *but other options may exist.*" (Emphasis supplied.) Application Project Description, Exhibit B, p 3.

The Application states that the Gen-Tie lines will be 230 kv transmission lines "to be owned by Umatilla Electric Cooperative (UEC) or UEC in partnership with the Columbia Basin Electric Cooperative (CB), but operated by BPA. The Gen-tie Line(s) will be permitted by UEC and/or CB separately from the Wheatridge Project; therefore, this application does not address impacts associated with the Gen-tie Line(s) and their associated substation(s)." (Emphasis supplied.) Id.

At the hearing the Applicant stated it was not required as a matter of *state law* to show Interconnection. The Applicant cited an administrative rule to support this statement – OAR 345-001-0010(51). That administrative rule requires an Applicant to show all transmission and substations that "would not be built *but for* construction or operation" of the wind farm. The Applicant asserted that the transmission to serve the proposed wind farm would have extra capacity and so would not be built "but for" the proposed Wheatridge wind farm. From here, the Applicant concluded no transmission need be disclosed on the Application.

There were two points made in response.

First, the County only has the Application to go on and evaluate. The Application contemplates the Gen Tie "Interconnection" line to be a 230 kv line. Application Exhibit B, p 3, 6, 8. A 230 kv line carries between 300-500 MW. See Attachment 2, p 4 to this Memorandum. The proposal is for a 500 MW wind farm. Therefore, the only evidence in the Application is that the transmission to serve the proposed Wheatridge Wind Farm would not be built "but for" serving the Wheatridge wind farm. Rather, the evidence establishes that the anticipated gen tie line can only serve Wheatridge, there is no "extra capacity" promised or contemplated in the Application, and the Planning Commission so concluded. If other gen tie lines are ultimately built in the area, they will be built to serve some other project, not the proposed one.

Second, regardless, of how *state law* standards might be applied and interpreted, *ODOE asked the County SAG* to determine whether the Application meets *County standards*. As explained below, the Planning Commission determined that the Application fails to provide the location routes, lines and substations for transmission as required by the County code; and as such failed to provide adequate information to establish compliance with County farm impact standards in the County code at UCDC 152.061. The Planning Commission recommended that the Board of Commissioners determine that the Application fails to meet the County's acknowledged applicable local land use requirements – the applicable substantive law.

The County Identified Applicable Substantive Criteria and the Applicant's Response

A copy of the County letter to ODOE identifying the applicable substantive criteria is included in the Board of Commissioners' packet. Particular County SAG identified applicable substantive criteria with which the Planning Commission determined the Application is deficient are

identified in this Memorandum.

UCDO 152.616(HHH)

The Wheatridge Applicant's response to the applicable substantive law that the County SAG identified, is Application Exhibit K. In sum, the Applicant either did not address the applicable substantive law that the County SAG identified or argued it met a "majority" of those standards. Application Exhibit K, p 1. The Applicant's responses are summarized below, with our comment:

"152.616(HHH) Application Requirements

"Response: UDCO 152.616(HHH)(5) lists information that would be required as part of an application for a County Conditional Use Permit. The information submitted as a part of this application and information that will be provided as a condition of approval attached to the Site Certificate satisfy all of the information requirements identified by Umatilla County." Application Exhibit K, p 6.

The Applicant's statement above does not establish that the Application has supplied adequate evidence to demonstrate compliance with the County SAG identified applicable substantive law. Specifically, the Application fails to comply with UDCO 152.616(HHH)(5)(b) and (5)(c)(3), and (5)(h). These failures in turn mean the Application fails to provide adequate evidence to demonstrate compliance with UCDO 152.616(5)(d)(1).

A detailed explanation of the County standards follows.

UCDC 152.616(HHH)(5)(b) requires a map showing the location of components of the proposed wind power generation facility. The County has interpreted this provision to require a map showing the location of all of the components related to the facility, which includes the routes and location of transmission facilities to connect the project to the grid, as well as substations to serve the proposal. The requirement to provide this map is an applicable substantive criteria because it will have a meaningful impact on a decision to approve or deny the proposal.

Similarly, UCDC 152.616(HHH)(5)(c)(3) requires identification of the route and plan for transmission facilities connecting the project to the grid. This similarly is an applicable substantive criteria because it will have a meaningful impact on the decision to approve or deny the proposal. Identifying the route for transmission and plan for transmission facilities, enables a meaningful evaluation of impacts and helps to identify other applicable substantive criteria included within the development code based on the zoning of the subject property. As noted above, this information must also be depicted on the map required by UCDC 152.616(HHH)(5)(b).

The SAG identified criteria require that transmission and substation locations be disclosed. If those key components are unknown and speculative as the Application

states, then the County's typical response to such a land use application defect would be that the project is simply premature or deficient and cannot be approved.

According to the Application, transmission and substations could be located anywhere:

"The specific location of the future Gen-tie Line(s) is not yet known; however, several potential routes have been identified and are shown as conceptual alignments on figures in the ASC (see Figures C-4a/b/c/d). With the proposed Intraconnection Line(s) and multiple Substations, the Project is designed to accommodate a variety of Gen-tie Line route options. Several likely points of interconnection to the BPA transmission system exist, including the planned Stanfield substation near Stanfield, Oregon (Umatilla County) and the planned Longhorn substation at the Port of Morrow, Oregon (Morrow County). These two points of interconnection are the most likely and are shown throughout this ASC as illustrative of the Project's grid interconnection options, but other options may exist. The timeline and control of the interconnection options are largely established by BPA and other transmission customers in the area, which means the Project's construction timeline requires flexibility to be able to start construction when the interconnection facilities are ready."

UCDC 152.616(HHH)(5)(d)(1) requires a demonstration of compliance with UCDO 152.061. This is an applicable substantive criteria as well. The deficits above, mean the Application's compliance with this standard is relatedly, deficient. If the location of the project in its entirety is not identified, then it is impossible to evaluate the proposal's compliance with UCDO 152.061. UCDO 152.061 requires that all conditional uses in an EFU zone demonstrate compliance with the following two approval standards:

- "(A) Will not force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; and
- "(B) Will not significantly increase the cost of accepted farm or forest practices on lands devoted to farm or forest use."

UCDC 152.616(HHH)(h) requires an "Emergency Management Plan" and "Emergency Response Plan" for fire hazards for "all phases of the life of the Wind Power Generation Facility".

Based on evidence presented at the hearing, the Planning Commission determined the Application fails to comply with UCDC 152.616(HHH)(5)(h) concerning an Emergency Management Plan and Emergency Response Plan for fire hazards for all phases of the Wind Power Generation Facility. Evidence was presented at the Planning Commission hearing that wind turbines can ignite either from a technical malfunction associated with turbine operation or lightning strike. Evidence was presented that the 38 turbine "Vansycle" wind energy project had two turbine fires which occurred in the winter, establishing fires can and do happen. The speaker posited the concern that such fires were they to occur in hot, dry, windy summer

months would pose a serious hazard that has not been adequately addressed in the Application. The evidence presented was that the Application establishes that there is no plan to deal with the fires occurring on the turbine.

Moreover, the evidence presented was that the windy conditions that make wind farm locations desirable, add to the hazard associated with fire at these facilities. Additionally, evidence presented was that fires associated with wind farms pose special control challenges because water bearing aircraft are restricted from operating in the area due to "wake turbulence" and the likelihood of burning/flying debris makes it more difficult for firefighting personnel to fight a wind farm fire using traditional methods. In this regard, fire engines may be unable to deliver fire pressure sufficient to reach or extinguish a turbine fire. The applicable fire agencies here, indicated they did not have capacity for high angle rescue or confined spaces rescue and this was of concern to the Planning Commission. This is not to say the Planning Commission decided that fire associated with wind farms cannot be controlled as a general matter, but rather it decided that an analysis of available resources including the admitted lack of resource's to reach fires on the turbines themselves, special locational issues and a detailed plan for management and response to fire hazards spanning the life of the project, is important and are required by the County code and the Application failed to provide such required analyses and plans.

Additional County Standards Identified at Planning Commission Public Hearing

Public testimony at the public hearing before the Planning Commission pointed out that the Application seeks a Site Certificate spanning six (6) years in order to await Interconnection to be worked out and established to serve the project. Public testimony pointed out that under the UCDC 152.613(D) the applicable substantive law makes "Utility Related Conditional Use Permits" "void" after a maximum period of two years. Accordingly, it appears that the proposal that seeks a six (6) year period is unlawful under County UCDC 152.613(D).

Evaluating Impacts - UCDO 152.061 (Individual and Cumulative Effects) and State Cumulative Effect Standards

As explained above, UCDO 152.061 requires analysis of the significant impacts from the facility on accepted farming practices and on the costs of farming. This same standard as it appears in ORS 215.296(1) has been interpreted by the Oregon Court of Appeals to require not only evaluation of individual impacts from a proposed development, but also the "cumulative effects" of that facility on farming operations and costs. *Von Lubken v. Hood River County*, 118 Or App 246, 251 (1993).

This SAG identified standard intersects with ODOE's wind "cumulative effect" standard established in OAR 345-024-0015. This recognizes that potential adverse effects attend the selection of transmission routes and substation locations; carrying the potential for adverse cumulative impacts. A copy of that state "Cumulative Effect" standard is Attachment 1 to this memorandum.

OAR 345-024-0015 does not allow EFSC to ignore impacts from related or supporting facilities of a wind energy project. Rather, OAR 345-024-0015 imposes on EFSC an independent, mandatory obligation on EFSC's authority, that to issue a Site Certificate, EFSC "must find that the applicant can design and construct the facility to reduce cumulative adverse environmental effects in the vicinity by practicable measures, including but not limited to the following. * * * * ORS 469.300(14) defines "facility" to include the "energy facility together with any related or supporting facilities." ORS 469.300(24) defines "related or supporting facility" to include transmission facilities proposed by the Applicant. As noted above, there is no reasonable question that transmission is necessary to the Application or that the Applicant only proposes a wind farm if transmission is extended to it. Moreover, the evidence from the Application is that the size of the Gen Tie transmission that the Application anticipates is 230 ky which can carry 300-500 MW and the proposal is for a 500 MW facility. These undisputed facts make it clear that the anticipated Gen Tie transmission line would not be established "but for" the Wheatridge wind farm. This appears to mean that as a matter of state administrative rule (OAR 345-001-0010(51)), EFSC must determine that transmission is required to be shown on, and evaluated in, the Application as a matter of state law. The Applicant's claim to the contrary appears to be mistaken.

Regardless, as noted, the County is only interested in County SAG identified applicable substantive law and, as the Planning Commission determined, the Application fails to establish compliance with County SAG identified standards. However, the Planning Commission also noted that the Application's failure to adequately address SAG identified requirements, not only means a recommendation of denial is warranted for failure to meet SAG identified standards, it also appears to make the Application unapprovable by EFSC. This failure also appears to fail to satisfy the state's "Cumulative Effects" standard as well as the County cumulative effects standard inherent in UCDC 152.061.

Board of Commissioner's Evaluation

The Board of Commissioners is required to advise ODOE (EFSC) on the following two issues:

- 1. Whether the Wheatridge Application as proposed including turbines, roads and related infrastructure, both with and without consideration of the two Umatilla County (although speculative), potential intraconnection and interconnection transmission lines and routes and substation(s), complies with Umatilla County SAG identified standards;
- 2. Whether the Application as proposed including turbines, roads and related infrastructure, both with and without consideration of the two Umatilla County (although speculative), potential intraconnection and interconnection transmission lines and routes and substation(s), meets UCDO 152.061 which requires that the energy facility:

- "(A) Will not force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; and
- "(B) Will not significantly increase the cost of accepted farm or forest practices on lands devoted to farm or forest use."

This will require the Board of Commissioners to consider five key issues associated with the proposed facility:

- 1. Compliance and effects of proposed turbines (presume 292 turbines), roads and related infrastructure;
- 2. Compliance and effect of proposed "intraconnection" lines to connect "West Wheatridge" and East Wheatridge" to the point of "Interconnection";
- 3. Compliance and effects of the conceptual transmission interconnection lines leading to the potential Stanfield substation as shown as a possibility on the Application;
- 4. Compliance and effects of potential transmission (both interconnection and intraconnection) and substations being "conceptual" only, rather than a concrete energy facility proposal;
- 5. Whether the Application contains an adequate Emergency Management Plan and Emergency Response Plan to deal with fire hazards, not only during construction, but also during the life of the Wheatridge Wind Power Generation Facility.

Role of Oral Assurances

Before the Planning Commission, the Applicant indicated its internal discussions with UEC were that UEC would not site a line that was harmful to high value agriculture or unwanted by area residents. However, the Applicant's oral assurances are unenforceable and not a part of the Application. They are also betrayed by what the Application specifically states – that various Interconnection options in Umatilla County are possible. Further, there is and has vigorous long standing opposition by area farmers whose land would have to be condemned to serve such Umatilla County routes, that strongly oppose those routes. Nevertheless, the Application was "deemed complete" by EFSC in July 2015 and that Application contains the "conceptual" and strongly opposed Umatilla County transmission routes.

Accordingly, the County must evaluate the Application. Given the Application expressly reserves the right to establish transmission to serve the proposed windfarm anywhere, potential Umatilla County routes cannot be ruled out.

The Applicant presented a letter and a notice from UEC that the Applicant claimed establishes that UEC does not intend to site a transmission line that was harmful to and

opposed by high value agricultural operations. Unfortunately, the UEC letters and notice the Applicant cites, do not support the Applicant's claims in this regard.

The August 24, 2015 UEC letter the Applicant supplied for the record, indicates that a compromise may have been reached for the proposed B2H line (having no apparent connection to Wheatridge); that UEC was "not proposing any transmission line" in Umatilla County, and "Transmission line routes should, to the extent possible, be based on consensus with affected landowners, developers, utilities and counties (local jurisdictions)".

The August 20, 2015 UEC "notice" the Applicant provided at the Planning Commission hearing states "please be assured that [UEC] will not impinge on your property without discussions with you first."

UEC did not send representatives to the Planning Commission hearing.

The Planning Commission determined:

- The Application claims a potential 230 kv Gen Tie line to serve Wheatridge, might be constructed by UEC and might run through Umatilla County;
- The potential routes for such Umatilla County lines was provided by UEC to the County and are illustrated on the map attached to the County notice of the Planning Commission hearing;
- Whether UEC intends to discuss transmission routes with affected landowners before taking farms or farm land for transmission facilities does not say that UEC waives its power to condemn farms for transmission routes or make the "conceptual" routes shown on the Application any less likely, and the Applicant's claims along these lines are unsupported;
- The Planning Commission recommends that the County obtain an enforceable commitment from UEC that it will not establish transmission lines and substations in the Umatilla County areas established as "conceptual" in the Application.
- The Planning Commission determined that nothing in the Application enables the County to ignore the Application's express reservation of the right to situate, and contemplation that transmission and substations may be situated, in Umatilla County.

EFSC Options if Application Does not Provide Sufficient Evidence to Establish Compliance with SAG Identified Criteria

Where an Application fails to provide adequate evidence to establish compliance with SAG identified approval criteria, EFSC lacks authority to approve the project, except in the specific limited circumstances described below.

The particular situation presented by the Wheatridge Application is unusual because the Applicant has failed to respond at all to two SAG identified standards and that failure significantly influences the Application's ability to comply with other SAG identified

standards. In other words, the Planning Commission determined that the Applicant's failure to identify the location and route for transmission and substation location(s) means the Applicant has not addressed two SAG identified criteria and has failed to perform the impact analysis required by UCDO 152.061 for the facility.

The consequences of these apparent failures appears to mean that EFSC has only limited options to approve the proposal.

First, it is important to understand that EFSC may not interpret SAG identified criteria.

Further, EFSC may not approve a proposal that does not meet SAG criteria, except under limited circumstances discussed in this section.

More detail on how this works, follows.

ORS 469.504(5) states EFSC "shall apply the criteria identified by the SAG." Accordingly, EFSC is required to apply SAG identified criteria, regardless of whether the Applicant has done so. Compliance with applicable SAG standards may not be deferred or otherwise conditioned to occur at some later point, in a process that would not apply the SAG criteria in equivalent processes. See Willamette Oaks, LLC v. City of Eugene, 232 Or App 29 (2009) (TPR is written to require resolution of whether uses significantly affect a transportation facility be decided prior to approving a zone change and cannot be deferred to a subsequent permit approval); see also Columbia Riverkeeper v. Columbia County, __ Or LUBA ___ (LUBA No. 2014-017/018) (goal exception standards are not permitted to be deferred to a permit proceeding).

Further, OAR 345-022-0000(3)(b)⁵ prohibits EFSC from using its public interest "balancing" authority to excuse noncompliance with SAG identified criteria.

Accordingly, an Applicant's failure to establish compliance with SAG identified standards means EFSC has two options: EFSC may attempt to independently determine the proposal complies with applicable Statewide Planning Goals or to take an exception to "one or more" Statewide Planning Goals.

EFSC Option 1 – Finding Goal Compliance

EFSC can approve a project that does not comply with the applicable substantive law identified by the SAG, by establishing that the proposed facility complies with the "Statewide Planning Goals." EFSC rarely if at all attempts to establish Goal compliance independent of SAG identified criteria and, instead, traditionally relies on the SAG identified standards. However, if EFSC were inclined here to consider avoidance of County standards and determine Goal compliance on its own, in such circumstances it is

⁵ "(3) Notwithstanding section (2) of this rule, the Council shall not apply the balancing determination to the following standards: * * * (b) The land use standard described in OAR 345-022-0030 * * *."

the Applicant's burden to establish its entitlement to a finding of Goal compliance. This is evident from OAR 345-021-0010(1)(k)(iv).

However, even if the Applicant were to ask, and EFSC were to agree to invoke this extraordinary authority to avoid County SAG identified requirements and apply the Goals directly, it appears that determining the project complies with applicable Statewide Planning Goals would be very difficult in this case. This is because UCDO 152.616(HHH)(5) has been acknowledged to be in compliance with all Statewide Planning Goals. UCDO 152.616(HHH) implements Goals 1 (Citizen Involvement), 2 (Land Use Planning) and 3 (Agricultural Lands), Goal 7 (Areas subject to natural Hazards), and Goal 11 (Public Facilities) among other Goals. Accordingly, the proposal's failure to comply with the acknowledged County SAG identified standards, would appear to mean that the proposal fails to comply with the Statewide Planning Goals. Moreover, Goal 2 requires all land use decisions have an "adequate factual base". Where the core problem is that an Applicant has failed to provide any factual base for compliance with SAG identified standards (UCDO 152.616(HHH) (5)(b), (5)(c)(3) and UDCO 152.061), it seems impossible for EFSC to establish Goal 2 compliance, at a minimum. Similarly, the undisputed fact that area firefighters lack high angle resources to fight wind turbine fires and associated rescue efforts appears to mean the proposal fails to comply with Goals 7 and 11.

If EFSC is unable to determine Goal compliance based on the Application as submitted, then EFSC may consider approval of a project that fails to comply with SAG identified standards, by taking a Goal exception of the types described in OAR 340-022-0030(4).

EFSC Option 2 - Exceptions

It is important to note at the outset, that it is the Applicant's burden to establish entitlement to any exception. This is evident from the requirement in OAR 345-021-0010(k)(v) that obliges the Applicant to justify any needed exception.

It seems there would be little doubt that EFSC would not be in a position to take a "developed" or "irrevocably committed" exception to Goal 3 per OAR 340-022-0030(4)(a) or (b), for any of the area around the Wheatridge wind farm to authorize transmission or substations, because the entire area is currently successfully utilized for agriculture. Further, a developed and committed exception to Goals 1 or 2 seems inappropriate, for obvious reasons.

A "reasons" exception under OAR 345-022-0030(4)(c), may be similarly unlikely. The key failures of compliance with SAG criteria, as noted above include the Applicant's failure to identify the routes and location of transmission facilities and substations. Importantly, the Applicant makes no claim of adequate "reasons" to support the failure to provide information about the project to enable the evaluation of the facility as the Applicant envisions it. The Application contains no evidence to justify a reasons exception to the opportunity for meaningful citizen input that Goal 1 requires, to

evaluate the wind energy facility's compliance with the SAG identified criteria. Approving an exception means that the public will never have a meaningful opportunity to evaluate the "facility." No exception has ever been granted for this in the past and it is hard to imagine adequate reasons can be stated to justify bypassing Goal 1.

Further, there is no evidence in the Application to support that there are "reasons" to justify refusal to identify both intra and interconnection transmission routes to enable a meaningful evaluation of the discrete and cumulative adverse impacts from the facility on high value agricultural operations as would be required by Goal 3. Simply stating that the Gen-tie route and thus intraconnection routes and substations are unknown does not supply a reason why they are unknown or what stands in the way of them being known or even whether any of the "conceptual routes" or "options" are feasible.

Moreover, the Application does not support that transmission routes and substation locations are unknown to the Applicant, in fact. In this regard, the Application supplies enough information to conclude that transmission facility locations, route and substations are not unknown. Specifically, the Applicant is clear that there will be no project without interconnection. Moreover, the proposal is a multimillion dollar 500 MW wind farm, one of the largest in Oregon. It is being developed in "partnership" with "Map Royalty, Inc." which offers investors an investment in Wheatridge. Application Exhibit A, p 2. The Applicant exists to "secure the real estate rights, permits and interconnection rights necessary to construct and operate a wind energy facility within the project footprint." Application Exhibit D, p 2. It is not subject to reasonable dispute that interconnection to the grid is a part of the project. The Bank of Eastern Oregon has indicated its willingness to provide a \$17,500,000 letter of credit for the construction of the proposed wind power facility, subject to approval of the application. Application Exhibit M, Attachment M-2. There is nothing to suggest that a small regional bank would contemplate making that investment without assurance of project financial feasibility which includes a certain transmission route and substation to serve the facility to connect it to the grid.

If intraconnection and interconnection transmission facility locations, route and substations were disclosed, then not only would the project be capable of being meaningfully evaluated against the SAG identified criteria, but also ODOE's "corridor selection assessment" requirements in OAR 345-021-0010(1)(b) would be properly applied and addressed. On the latter, recall, the Application only applies the state OAR 345-021-0010(1)(b) "corridor assessment" to intraconnection "Option 1" which is predominately in and runs the entirety of required *inter*connection through Morrow County. The corridor selected and studied for intraconnection predetermines the corridor for interconnection. It appears only studying Option 1 Intraconnection, fails to comply with OAR 345-021-0010(1)(b). While compliance with OAR 345-021-0010(1)(b) is not a SAG criteria concern, the apparent failure to comply with OAR 345-021-0010(1)(b) underscores the interrelated problems posed by the Application's ambiguities and omissions on compliance with key SAG identified criteria.

A reasons exception for failure to comply with County SAG identified fire hazard planning and response is similarly unlikely. The fact that local fire agencies lack adequate resources to respond to the high angle rescue or confined spaces rescue needs presented by the Application would not likely meet a Goal 7 or 11 exception. Further, the lack of "high angle" resources would seem to say that the affected agencies lack resources to fight fires occurring on wind turbines themselves. Again, this lack of required safety facilities makes it unlikely that a Goal exception of any type could be granted.

The Application's Evaluation of Impacts

• Limited Area for Evaluation

The Applicant evaluated impacts only from development of the wind farm, its "Intraconnection Lines⁶" and an area ½ mile around the boundary of these. This is the "Project Site" evaluated in the Application. From this limited "Project Site", the Applicant concluded that the Wheatridge proposal will not force a significant change in accepted farm practices or significantly increase the cost of farm practices. It did not address cumulative adverse impacts from the project including new transmission or substations to connect the project to the grid. This limited "Project Site" area that the Applicant evaluates is shown on Application Exhibit K-5, which was included in the Planning Commission's packet. Importantly, as noted variously in this Memorandum, the Applicant provides no analysis of impacts on farming practices or costs from interconnection transmission facilities, route or substations, even the ones identified in the Application are speculative. The Application does not evaluate the impact of the eventual selection of particular intraconnection options either on the necessary interconnection selection that is associated with each such intraconnection option and the impacts on accepted farm practices or their costs of these selections.

Project Feasibility

There is no evidence that any "possible" interconnection transmission route is in fact possible or feasible. There is no evidence that a Stanfield substation to serve the project is "possible" or feasible. As such, the Application fails to evaluate the impact to farming practices and costs of a developed multimillion dollar windfarm with no connection to the grid.

On feasibility, it is worth noting there are two significant feasibility hurdles. One relates to the fact that any arrangement between UEC and the Applicant, if there is one, with respect to the intraconnection line is not disclosed. ORS 35.015 forbids UEC from condemning farms or homes if it intends to convey "fee title or a lesser interest than fee title" to a private party – like Wheatridge. *See also Kelo v. City of New London*, 545 US 469, 125 S Ct 2655, 162 L Ed 2d 43 (2005). If it is intended to convey any interest to Wheatridge or another private entity, no such condemnation may lawfully occur. Moreover, for UEC to construct such lines, permission must be sought from the PUC for the same. ORS 758.015. As far as the County is aware, no such petitions have been submitted to the Oregon PUC. Therefore, there is inadequate information in the Application to ascertain whether interconnection is feasible in any case.

⁷ This Application Figure K-5 relies on Option 1 intraconnection.

⁶ As noted, these are the lines that connect Wheatridge East and Wheatridge West together. The particular routes for these lines and associated substations are at this point speculative, as explained above.

It further is evident from the Application that it is infeasible to establish that any needed high angle fire and rescue needs can be met. Similarly, the evidence is that to the extent needed, confined spaces rescue cannot be provided by area emergency responders.

 Practical Issue With Failure to Commit to Transmission Routes and Components

The Applicant's failure to evaluate the cumulative effects of its project, even as it limitedly describes it, on accepted farming practices and the costs of accepted farming practices makes meaningful evaluation of the project illusory. This is because in order for this project to be an energy "facility" as the Applicant in fact contemplates it, means it requires transmission. It is one thing to upgrade existing transmission facilities (as is ostensibly possible along Butter Creek Highway), and quite another to build wholly new transmission facilities to serve the project as is clearly required and anticipated. If existing transmission facilities along the Butter Creek Highway are not to be upgraded to serve the project and new transmission is to be built to serve the project instead, then the cumulative impact of this and other windfarms and their transmission facilities on the continuation of accepted farming practices and their costs in the area must be, and has not been, addressed.

In this regard, the "area" affected by this cumulative impact issue is at least the area proximate to the "intratransmission" options, as well as the two "potential" interconnection transmission routes and potential substations disclosed in the Application, as well as other proximate farming areas already squeezed by energy facilities. The Board of Commissioners should consider the Planning Commission recommendation on what those cumulative impacts would be from a 500 MW windfarm in this particular area and the fact that such a facility requires transmission.

Cumulative Effect of More Turbines

Moreover, the cumulative adverse environmental effects of an additional 500 MW windfarm turbines and related infrastructure, in addition to all the other turbines and infrastructure in the area, have not been evaluated, including adverse effects of more turbines and infrastructure on farming, aesthetic values and fire hazards.

How the Applicant Addressed Potential Adverse Effects

The Applicant essentially concludes⁸ the Wheatridge Project has no adverse effects on farm practices or the cost of farm practices in the limited area the Application studies,

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⁸ See Application Exhibit K, p 20.

because:

- a. Construction is temporary;
- b. Land lost to farming "due to siting of permanent project improvement is a de minimus percentage of the total farm use land in Umatilla County; therefore the inability to use the land for farm purposes is not significant;
- c. The applicant pays for roads and project facilities and the cost of these does not fall on farmers;
- d. Access roads for the Project will benefit agricultural land users through improved access to farm fields and "resulting in lower fuel costs";
- e. Farmer lessees will approve site plans for development on leased land;
- f. "Wheatridge has confirmed that *no landowners in the Project Area* utilize aerial spraying of pesticides or fertilizers; the Project would not affect the application of pesticides or fertilizers using ground based methods." (Emphasis supplied);
- g. Wheatridge will control weeds;
- h. Wheatridge will record a covenant not to sue "against *its Project leasehold interests* with regard to generally accepted farming practices on adjacent farmland." (Emphasis supplied.);
- i. Construction and operation of the Project will implement dust and erosion control measures and limiting disturbance areas as "practicable";
- j. Wheatridge will consult with "area landowners" during construction and operation to "reduce or avoid any adverse impacts to farm practices or surrounding lands and to avoid any increase in farming costs."
- k. Disturbances from roadways, temporary utility requirements and laydown areas will be minimized and after construction temporary facility areas will be restored.
- 1. "The Project is designed and legally structured such that the cost burden of constructing and maintaining access roads and other facilities would not fall on the landowner and would not increase the cost of farming for affected landowners." Participating landowners will be compensated.

The Planning Commission took testimony, evaluated and recommended that the Board of Commissioners advise EFSC that the Applicant inadequately established compliance with the direct and cumulative effects on farmland impacts standards of UCDO 152.061. Those standards are reproduced below again for convenience:

- "(A) Will not force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; and
- "(B) Will not significantly increase the cost of accepted farm or forest practices on lands devoted to farm or forest use."

The Planning Commission determined the adverse impacts associated with the proposed Wheatridge Wind Power Facility project are not limited to the ½ mile impact area

around Intraconnection Option 1 and 292 turbines spread between Wheatridge West and Wheatridge East. Rather, a "covenant not to sue" for accepted farming practices on wind farm "leasehold" interests does not protect affected farm practices not associated with leasehold interests. Further, impediments proposed by the project — with and without Intraconnection transmission being considered — to aerial spraying on farms in the area have not been adequately addressed. Both the Intraconnection lines as well as the wind turbines themselves adversely compromise non-leasehold area farms ability to conduct area aerial spraying.

EFSC Cannot Grant a "Variance"

The Applicant asks that "to the extent the Project cannot comply with an applicable criterion, EFSC should approve a variance to the applicable criterion * * *." Application Exhibit K, p 1. EFSC has no authority to grant a "variance." Had the Applicant applied for a CUP from the County, conceivably the Applicant might have been able to also apply for a variance from the County, under County approval standards. But the Applicant elected to seek approval through the EFSC process, which does not include rights to "variances."

The Applicant indicated at the hearing that it did not mean to suggest that it would seek a variance to any Umatilla County standards but rather only to Morrow County standards. That may be the case, but the Application is not so limited. Specifically, in this regard the Application Exhibit K "Land Use" at p 1, states:

"OAR 345-022-0030, Land Use

(1) To issue a site certificate, the Council must find that the proposed facility complies with the statewide planning goals adopted by the Land Conservation and Development Commission.

"Wheatridge has elected to address EFSC's land use standard by obtaining a land use determination from EFSC pursuant to Oregon Revised Statutes (ORS) 469.504(1)(b). EFSC's rules state that an applicant seeking EFSC's land use approval must identify the "applicable substantive [land use] criteria" of the relevant local governments and must describe how the proposed facility complies with those criteria, as well as any Land Conservation and Development Commission (LCDC) rules, goals, or land use statutes that apply directly to the facility under ORS 197.646(3). If an applicant cannot demonstrate compliance with one or more of the applicable substantive criteria, the applicant must describe how the proposed facility complies with the Statewide Planning Goals adopted by the LCDC, or alternatively, warrants a goal exception (OAR 345-021-0010(1)(k)). This exhibit demonstrates that the Project complies with the majority of the applicable local substantive criteria from the comprehensive plans and zoning codes for the jurisdictions in which the Project is located, and to the extent the Project cannot comply with an applicable criterion, EFSC should approve a variance to the applicable criterion or a goal exception." (Emphases supplied.)

Nothing about the above quoted statement suggests its application is limited to Morrow County. Therefore, the Umatilla County Board of Commissioners are required to determine whether a variance can be granted by EFSC as the Application seeks. This legal analysis and the Planning Commission both have determined a variance is not within EFSC's authority to grant.

Fire Hazard Mitigation Plan and Response Plan

With respect to fire hazards and a plan for fire management and fire emergency response, the Application contains the following statements:

"2.8 Fire Protection

"Fire protection service in the analysis area is provided by a number of agencies including the Boardman Rural Fire Protection District, the Ione Rural Fire Protection District, the Heppner Volunteer Fire Department, and the Echo Rural Fire Protection District. Wheatridge will provide to all involved fire departments construction plans, phasing information, and locational information for all Project facilities, including Project access.

"2.9 Attachments U-3 through U-6 are a record of correspondence with the Heppner Volunteer Fire Department, Ione Rural Fire Protection District, Echo Rural Fire Protection District, and Boardman Rural Fire Protection District confirming that the construction and operation of the Project would not impede their abilities to provide emergency services. As the Project is outside the boundaries of the city of Lexington and is completely within the rural fire protection districts of Heppner, Ione, and Echo, any emergency fire response would be by one of these three rural fire protection districts and any assistance by another fire department would be in the service of one of these three rural fire protection districts." Application Exhibit U, p 10.

"3.8 Fire Protection

"The greatest risk of fire on a wind farm occurs during construction, particularly from metal cutting and welding as needed to construct the steel reinforcing cages for turbine foundations. In addition, fire hazards can result from workers smoking, refueling vehicles and equipment, and operating or parking vehicles and other equipment off roadways in areas of tall dry grass that could ignite upon contact with hot vehicle parts (e.g., mufflers or catalytic convertors).

Fire danger during construction can be significantly reduced through the implementation of safe working practices, such as maintaining adequate firefighting equipment and water supplies on hand during operations that carry a high fire risk, conducting metal cutting and welding within a cleared or graveled area, and preventing parking of vehicles in areas with high, dry grass. The following list provides a summary of typical fire prevention measures that will be implemented during Project construction:

"Fire Prevention

During periods of high fire danger, potential sources of fire ignition (vehicle exhaust systems, cigarettes, matches, propane torches, sparks from various hot work operations, etc.) must be used with extra precaution.

"Vehicles

- 1. Plan and manage the work and the movement of vehicles. No off-road driving is to be done while working alone.
- 2. General Contractor will be responsible for identifying and marking the path for all off-road vehicle travel.
- 3. All vehicle travel off-road is to stay on the identified path.
- 4. In the event a vehicle gets stuck, shut the engine off. Periodically inspect the area adjacent to the exhaust system for evidence of ignition of vegetation. Do not "rock" the vehicle to free it, rather, pull it out. Inspect the area after the vehicle has been moved.
- 5. In tall grass (i.e., tall or taller than the exhaust system of the vehicle(s)), pre-wet the area with water prior to driving on it with vehicles.

"Fueling

- 1. General Contractor will designate a location for field fueling operations at each construction yard. Any fueling of generators, pumps, etc. shall take place at this location only.
- 2. Fuel containers, if used, shall remain in a vehicle or equipment trailer, parked at a designated location alongside county R/W. No fuel containers shall be in the vehicles that exit the R/W with the exception of one five gallon container that is required for the water truck pump.

"Smoking

1. Smoking shall only be allowed in the designated smoking areas on the project.

"Fire Suppression and Emergency Preparedness

"The site will be equipped with the following including instruction in proper use:

- 1. Each vehicle used onsite shall have a fire extinguisher of sufficient type and capacity to suppress small fires around vehicles. Vehicle occupants shall be familiar with the location of these fire extinguishers. All employees who may have a need to use a fire extinguisher shall be current in their training on the general principals of fire extinguisher use and the hazards involved with incipient stage firefighting.
- 2. Prior to start of construction work activities, contact the local fire department and advise them of work type, location, and probable duration.
- 3. Prior to performing hot work (anything that creates a spark or an open flame is considered hot work) fire suppression equipment must be immediately available, hot work must only be done on road or turbine pad surfaces cleared of vegetation, and the on-site Fire Safety Supervisor must be notified.
- 4. A fire watch, equipped with a suitable fire extinguisher, shall be maintained for a period of 60 minutes after completion of work in a specific area and at the end of each day's activities.

"Emergency Notification and Follow Up

"The following course of action should be taken if an emergency situation develops:

- 1. Evacuate as necessary. Maintain site security and control if possible. If crews are working at different areas of the site, a designated meeting location will be created for all people to gather.
- 2. Notify proper emergency services (fire, ambulance, etc.) for assistance.
- 3. Notify site management on radio channel #1 of any possible fires.
- 4. Prepare a summary report of the incident as soon as possible after the incident.
- "During the operation and maintenance phase of the Project, fire danger will be minimal. Wind turbines contain a number of safety features designed to provide increased fire protection, for example, fully independent braking systems and emergency shutoff devices. In addition, the turbine models considered would be equipped with internal fire suppression systems in the nacelles. The O&M Buildings will be equipped with fire protection equipment in accordance with Oregon Fire Code, and the Substations, Collector Lines, and other electrical connections will be built to National Electrical Safety Code (NESC) standards. Typical maintenance activities would not carry a significant fire risk, while maintenance vehicles would drive and park on maintained gravel roads and turbine pads, avoiding hazards associated with driving or parking in tall dry grass. Given the inherent fire-safety features of Project components and the relatively small number of new temporary and permanent residents, significant new demands on fire protection forces are not anticipated.
- "Wheatridge has contacted all of the fire protection providers listed below: see Attachments U-3, U-4, U-5, and U-6.
- "Morrow County:
- Heppner Volunteer Fire Department: Fire Chief Rusty Estes Ione Rural Fire Protection District: Fire Chief Virgil L. Morgan Boardman Rural Fire Protection District: Fire Chief Marc Rogelstad Umatilla County: Echo Rural Fire District: Fire Chief Merle Gehrke
- "All have indicated that the construction and operation of the Project will not impact their ability to provide fire protection services to their respective districts. *Additionally, all have stated that they do not have the ability to perform high altitude rescues.*" Application Exhibit U, p 24-25. (Emphases supplied).

It should be noted that affected rural fire protection districts indicated they <u>did not</u> have the capacity to provide either (1) "high angle" or (2) "confined space" rescue. The responses of the affected fire districts contained in the Application materials, are at Attachment 3 to this memorandum. The evidence at the hearing established, and the Planning Commission determined, that these deficits were untenable and failed to establish compliance with the SAG identified applicable substantive law. Among concerns expressed was that the fires associated with wind turbines require precisely "high angle" rescue and response which all affected fire department stated they cannot provide.

<u>Issues Considered by the Planning Commission Regarding the Failure to Comply</u> with UCDO 152.061 (Farm Impact Standards)

• There is no "Project" to Evaluate

Commentators noted that the "Project" is for an energy "facility" which is as a matter of state law is defined to include transmission and substations whereas here, they would not be built "but for" the Wheatridge Wind Energy Facility". ORS 469.300(14) and (24); OAR 345-001-0010(51). They also noted that without transmission, the Application admits the "facility" cannot and will not exist. Commentators explained the concern that regardless of state law, the County identified SAG standards require the route for transmission and all components be identified and the Application fails to do either.

Thus, the Planning Commission determined that the Application is either unapprovable as premature or must be denied as noncompliant with applicable standards. The statutory and rule program for energy facilities does not contemplate approval of "conceptual", speculative, contingent applications. If, as commentators suspect, intra and interconnection transmission route and substation(s) are known, they must be disclosed for a "facility" to be approved by EFSC. However, "conceptual", speculative, or contingent facilities are not a "facility" as defined and without a "facility" there is no "project" that can be meaningfully evaluated against SAG identified criteria.

Per the requirements of OAR 345-021-00110(1)(c), an application is required to supply "Information about the location of the proposed facility, including (A) A map showing the proposed locations of the energy facility site, all related and supporting facility sites * * * (B) A description of the location of the proposed energy facility site, the proposed site of each related or supporting facility * * *." The Application here, however, fails to describe the locations of all transmission lines in and between the project areas making it impossible to meaningfully evaluate the proposal. Identification of the location of proposed facilities is necessary to enable the required evaluation of impacts to agriculture and is also necessary to enable a determination of whether the Application contains sufficient evidence to establish compliance with the "applicable substantive criteria."

Land Use Impacts Have not Been Identified or Evaluated by the Applicant

The Application has failed to analyze the effects on agricultural practices and costs of any new transmission routes' and substations and the direct and cumulative effects of both on farm operations, especially circle irrigated farmland, compared with alternatives that do not require new facilities and improvements. The commentators note that this creates a disadvantage for farmers and others seeking to evaluate the Application. As such, the Applicant made no effort to identify significant adverse impacts on land use as required and the Application is unresponsive to applicable standards.

> Agricultural Impacts Raised by Commentators to Date (Including Written Comments Objecting to the NOI for the Project)

Agricultural Policy and Occupying Pivot Irrigation Corners with Transmission Towers

Oregon land use policy favors and protects high value irrigated crop land. ORS 215.243(2) ("The preservation of a maximum amount of the limited supply of agricultural land is necessary to the conservation of the state's economic resources and the preservation of such land in large blocks is necessary in maintaining the agricultural economy of the state and for the assurance of adequate, healthful and nutritious food for the people of this state and nation"). The siting of energy facilities, is not immune to this important state agricultural land use policy. To the contrary, the siting of energy facilities is required to comply with state agricultural lands policy. ORS 469.504(b). The Application impermissibly ignores the substantial impacts on agricultural practices caused by transmission corridors, in contravention of the requirements of state law that requires energy facilities pay particular attention to agricultural impacts.

The importance of Oregon agricultural land use policy to the instant Application cannot be overstated. Farmland is scarce and decreasing. This is especially true for irrigated farmland in the project area. The scarcity of valuable irrigated farmland resource is aggravated by the proposal which contemplates the potential for new transmission facilities on such land to reach the Stanfield substation, and also on such land located within a critical groundwater area. With limited surface and groundwater availability, new or expanded water rights are difficult and, in some instances, impossible to obtain. Correspondingly then, little if any new irrigated farmland can be developed in the area.

Despite the unavailability of new water rights, additional lands are being developed and irrigated as a result of new irrigation techniques and water storage programs. Because of the ease and affordability of modifying existing irrigation systems, newly developed and irrigated lands tend to be located in the corners of existing irrigated circles. Placement of towers in circle corners prevents farmers from the valuable opportunity to efficiently and affordably develop new irrigated cropland. Placement of wind turbines on farms means any irrigation must avoid towers. Essentially turbines make the large swaths of the farmland on which they sit, off limits to irrigation. The applicant has not explained whether the areas upon which the turbines are proposed to be situated have irrigation rights that will be compromised or lost. The loss of use of these circle pivot corners to irrigation due to towers, removes the incentive to improve irrigation efficiency and increases the scarcity and cost of high value irrigated farmland which are discouraged under state agricultural land use policy. The loss of irrigability or irrigation rights for active farms underlying wind turbine sites due to turbine location, diminishes the viability of the farms upon which turbines are situated, which adversely impacts that farming practice of irrigation and certainly increases its cost. The Application does not address these issues. The state's policy of protecting high value irrigated farmland is not furthered by any utility siting on the limited supply of irrigated cropland in the area.

Irrigation and Water Delivery Systems

The Applicant's failure to address impacts of the proposal on irrigated crop circles causes it to miss that it will cause significant and ongoing impacts on the irrigated crop circles and impose severe limitations on their agricultural use. The Application fails to deal with impacts related to electrical and magnetic interference with irrigation equipment. Landowners monitor and control irrigation systems through sensitive wireless systems and controls. The Application fails to address whether and to what extent these may be affected by overhead power lines and strong electrical and magnetic currents. Additionally, transmission line's currents are likely to exacerbate electrolysis that corrodes metal pipelines, parts, and controls which are the fundamental core of circle irrigation systems. This is a problem not only for high voltage lines but also smaller intra-transmission lines connecting the proposed east and west Wheatridge areas. The Applicant must address whether the proposed location of lines or towers will interfere with, or require any limitations on, or modifications of (1) the configuration or operation of above ground irrigation systems including center pivot irrigation equipment, electric equipment and controls, pump stations and controls, and all other above ground equipment necessary and useful for crop irrigation, (2) the configuration or operation of all underground water delivery systems including pipes, valves, controls, meters, and all other equipment necessary and useful for irrigation water delivery, and (3) the full benefit, use, and enjoyment of all easements, licenses, or other agreements relating to the installation, repair, replacement, and use of water delivery systems.

Additionally, placement of towers and turbines affects the maintenance and operation of underground pipelines, pump stations, and controls, many of which are located in circle corners. Nothing in the Application contemplates or addresses the maintenance or replacement of above or below ground irrigation pipelines that may be beneath a transmission line tower.

Chemical Application / Mowing Interference

Irrigated crops require frequent application of herbicides, pesticides, fertilizers, and other chemicals both by air and ground application methods. Overhead lines and transmission towers as well as wind turbines themselves, complicate, limit, and in some instances prevent aerial chemical application which requires more expensive, more invasive, more damaging, and less effective chemical treatments and applications (all of which can result in crop damage and decreased yields). Ground application of herbicides to control weeds under and around transmission towers is similarly affected. Additionally, the transmission towers and turbines prevent mowing, which is a common and environmentally preferred weed control method.

A special note about aerial spraying is owed at this juncture.

While the Application states that there is no aerial spraying of pesticides or fertilizers in the "Project Area", that does not support a conclusion that the Application meets any of the standards "does not force a significant change in accepted farming practices"; or "significantly

increase the cost of accepted farming practices" or has no adverse "cumulative effect" on farming practices *affected by* the proposal.

It is impossible to evaluate the potential adverse effects on aerial spraying from the facility, when miles of interconnection transmission and substations are not disclosed. The Application's failure to make a commitment about the location or route for transmission lines or substations to serve the wind farm, means it is impossible to evaluate the project's effect on aerial spraying operations that it will indisputably compromise. However, the "potential" two alternate interconnection routes located in Umatilla County, demonstrate how severe the adverse impact on aerial spraying on area farms will be regardless of the location of transmission. Either of the potential transmission routes will force a significant change to accepted farming practices (aerial spraying) and will significantly increase the cost of pesticide and fertilizer application on affected farms. There can be no doubt that either of the potential transmission routes will appreciably reduce safety to both the pilots of the crop duster aircraft and the surrounding public.

Regarding pilot safety, crop dusting requires the pilot to fly at altitudes as low as 10-15 feet above the ground, well below the height of the transmission lines which the Application states will be 80-150 feet tall. Transmission lines have a low profile and are difficult for pilots to see. This creates a collision hazard that could lead to the aircraft crashing and resulting in a loss of life to the pilot and the public should the aircraft crash in an area occupied by persons on the ground. Statistical data and studies conducted by governmental aviation safety agencies and industry trade groups unquestionably support the conclusion that transmission lines present a clear danger to agricultural aviation operations. A recent study released by the National Transportation Safety Board showed that collision with ground obstacles resulted in 16 accidents in 2013 and continues to be the number one threat to the pilots who provide this critical service to America's food production industry. The Study explains:

"A review of the accidents that occurred in 2013 revealed trends consistent with historical accident data for the Part 137 GA sector: the top three defining events were in-flight collision with an obstacle (16), loss of aircraft control, and system or component failure (both powerplant and non-powerplant). Because it is consistently one of the most common (and often fatal) accident types, obstacle collision remains a top industry concern." National Transportation Safety Board. 2014. Special Investigation Report on the Safety of Agricultural Aircraft Operations. Special Investigation Report NTSB/SIR-14/01. Washington, DC.

Thus, if there is aerial spraying anywhere along either proposed transmission route, then those operations will have to stop or be significantly changed.

Demonstrating the seriousness of the problem is that crop dusters have little choice regarding their approach to a crop. This is because aerial spraying approaches are guided by prevailing winds. The prevailing winds in the area of the two alternate potential transmission routes are

from the West/Southwest during the growing months. See below:

PREVAILING WIND DIRECTION														
STATION	1	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1
ASTORIA AIRPORT, OR (KAST).	E	E	E	E	S	W	W	NW	NW	NW	E	E	E	1
AURORA AIRPORT, OR (KUAO).	1	S	S	S	S	S	S	N	N	N	S	S	S	1
BAKER CITY AP, OR (KBKE). W	1	ESE	ESE	ESE	N	N	NNW	NNW	NNW	NNW	N	ESE	ESE	1
BURNS MUNI AP, OR (KBNO). W	1	E	E	WNW	NW	NW	WNW	WNW	WNW	WNW	WNW	E	E	1
CORVALLIS AP, OR (KCVO). WI	1	S	S	S	S	WNW	NW	NW	NW	WNW	S	S	S	1
EUGENE AIRPORT, OR (KEUG).	-1	S	S	S	S	N	N	N	N	N	S	S	S	1
HERMISTON MUNI AP, OR (KHRI)	1	WSW	S	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW	S	WSW	10

The potential routing of the transmission lines is along a North-South line which bisects the fields. This makes it impossible to maintain a spray pattern consistent with effective agricultural operations because the planes would no longer be able to spray upwind and downwind to the crops, it would restrict them to a side spray which is undesirable from a crop application perspective but also an environmental one. From a crop application perspective, side spray creates the greatest amount of drift and consequently loss of product. A side spray operation requires more product and more spraying passes, adding greater expense. Moreover, this greater drift and amount of pesticide needed to be applied presents environmental concerns. Manufacturers have indicated on their labeling that reduced amount of chemical is needed per acre if and only if the application is performed in the most effective way; a condition that side spray cannot meet. The key component in minimizing the drift is to apply the product into a consistent wind (headwind). Because of precision patterning and flow control systems used in today's applications, a 6 inch accuracy on spray patterns using as little as 1 gallon per acre of water-chemical mixture is achieved with very little adverse environmental impact so long as product is applied into a consistent headwind.

The perceived if not actual safety of the public who live and work in the vicinity of farms that utilize a crop dusting service is compromised if a crop duster is forced to spray in a pattern that results in significant drift. The direction that a crop dusting pilot sprays a chemical is based on the direction of the wind. By adjusting the direction of the flight path in accordance with the direction of the wind, the pilot is able to prevent chemicals from blowing off the intended fields and into populated areas. However, the potential alternative transmission routes eliminate two important directions of flight path that would are needed to reduce drift. Thus, the proposal makes impossible for much if not all of the growing season the crop dusting flight pattern that is needed to (1) stay safe, (2) spray according to the label, (3) spray in a way that is cost effective, and (4) spray in the way least likely to result in drift. The spray pattern necessitated by either of the two "potential" transmission routes will significantly change and increase the cost of crop dusting which is an accepted farming practice. This is because crop dusting will no longer be possible without exposing the farmer to increased costs associated with crop dusting and claims by people who perceive that their exposure to drift has or could cause them harm.

The Application makes no effort to address this issue. Compounding the problem is that among those either living or working in the area that would be affected by overspray directly caused by either of the proposed transmission routes, are the Wheatridge employees and contractors.

The claim that "Wheatridge will record a covenant not to sue against its Project leasehold interests * * *" provides no protection to those farmers who are not "Project leasehold interests."

Equipment Use

Large equipment is used to farm under and around a transmission line, including tall cranes sometimes used in the repair or replacement of pumps and buried pipelines. The Application must address the height restrictions or parameters along the corridor to allow farmers to ascertain any possible equipment incompatibilities.

Moreover, with respect to the Owner's crop storage sheds, tower locations and height restrictions can easily interfere the large and tall equipment used to load and unload crops.

Requires an Unapprovable Goal 3 Exception

Applicant further impermissibly fails to quantify the number of high value farmland acres that will be permanently removed from production under the proposal including the two transmission options identified. It appears that the proposed facility will remove more than 12 acres high value farmland from production and, therefore, it requires a Goal 3 exception of the type described in OAR 660-033-130(17). A Goal 3 exception essentially requires selecting the reasonable alternate with the least impact to agriculture. ORS 197.732(2)(c)(A)-(D); see also ORS 469.504(2); OAR 345-021-0010(1)(b)(D)(iv) (requiring selection of route with "[1]east percentage of the total length of * * * transmission line that would be located within lands that require zone changes, variances or exceptions").

A Goal 3 exception would not be required for transmission entirely within an existing corridor and no showing is made about why existing corridors cannot be used. Using the existing transmission corridor will avoid or minimize the permanent loss of high value farmland from production. Similarly a program or practice is presumably in place along the existing corridor for controlling noxious weeds and pests. Selection of a new alignment with new transmission facilities to transmit to the Longhorn Substation require new and significant losses of high value farmland and the implementation of new, different, or more Application improperly avoids any discussion or analysis of these simple but significant comparisons between the Applicant's available options.

Cumulative Impacts from Other Possible Transmission Corridors

The proposed facility appears to be in yet another proposed project with wholly new transmission facilities in the same area as the Boardman-Hemingway and Perennial Wind Chaser transmission projects, and potentially others (Heppner Wind). The Applicant should be required to perform a cumulative impacts analysis of the proposal on the agricultural operations in the area, in light of potential transmission facilities to and from proposed, expected, and/or foreseeable electricity generation sources in the area. The Applicant should be required to describe project impacts in light of the cumulative impacts of all of these developments on affected agricultural operations.

Memorandum: Board of Commissioners Umatilla County Wheatridge Energy Facility

Electric and Magnetic Fields and Fluxes

There are serious concerns regarding interference with agricultural devices from electric and magnetic fields and fluxes. An additional problem, however, is that high voltage transmission lines increase consumers' increasing critical concerns about the growing conditions for crops and produce grown under or near high voltage power lines. OAR 345-024-0090 requires the Applicant to address human health and property damage impacts from EMF on soil, irrigation water and crops. Public health concerns about human health impacts may decrease the value of the farmers' crops and the Applicant should address existing studies (or acknowledge the lack thereof) on effects of EMF on crops and food safety and apply siting mitigation to avoid (1) food safety risks, and (2) lost farm / property value due to public perception of food safety risks. EFSC has noted its power to deal with concerns regarding Electric and Magnetic Fields (EMF) in the Columbia Crossing Project Order (p 30): "Although the Council does not have an EMF Standard, it does have a statutory mandate to adopt any conditions needed to ensure public health and safety. This mandate provides the regulatory basis for any findings or conditions, including setbacks, based on EMF considerations."

No Showing that the Transmission Contemplated Can be Permitted Under ORS 215.275

ORS 215.275 requires an applicant to establish that the siting of new transmission facilities on land zoned EFU is necessary. This reasonably should mean that it includes that there are no existing available alternate transmission facilities or corridors with fewer agricultural impacts. The Application fails to make any effort to show the feasibility of compliance of the facility (as defined in ORS 469.300(14) and (24), as well as OAR 345-001-0010(51), which includes transmission and substations that would not be built "but for" the project as here), with ORS 215.275.

No Showing that Transmission Facility can be Permitted if ORS 215.283(1)(u) Applies

The Facility is on EFU zoned land. Therefore, ORS 215.283 applies. As such this standard is a criterion to be satisfied. Transmission from the project substations to the grid beyond is either considered a "utility facility necessary for public service" per ORS 215.283(1)(c)(B) and ORS 215.274 (Associated transmission lines necessary for public service) or may potentially be considered per ORS 215.283(1)(u), as a "utility facility service line." ORS 215.283(1)(u) permits "Utility facility service lines" on land zoned EFU, but only under certain conditions. The Application's uncertainty about Interconnection makes it unclear exactly what is contemplated by the Application. Concerning the latter, utility facility service lines are defined as "utility lines and accessory facilities or structures that end at the point where the utility service is received by the customer and that are located on one or more of the following:

- "(A) A public right of way;
- "(B) Land immediately adjacent to a public right of way, provided the written consent of all adjacent property owners has been obtained; or

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"(C) The property to be served by the utility."

To the extent ORS 215.283(1)(U) applies, the transmission corridor terminating at the speculatively identified Stanfield substation, to the extent it is disclosed, does not appear to be in a public right of way, does not have consent of adjacent property owners and is not on property owned by the Applicant utility. Therefore, because it does not comply with these requirements, the Facility's transmission corridor may not be an authorized route under state statutes governing EFU lands.

Proposal Cannot Meet Standard for Commercial Utility Facilities in ORS 215.283(2)(g) / ORS 215.296

ORS 215.283(2)(g) authorizes "Commercial utility facilities for the purpose of generating power for public use by sale" if certain standards are met. Those standards are listed in ORS 215.296(1) and require a finding that the proposal does not do either of the following:

- (a) Force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; or
- (b) Significantly increase the cost of accepted farm or forest practices on surrounding lands devoted to farm or forest use."

The Application makes no effort to show that the facility as that term is defined in state and local law, meets these requirements and all indications are that if the transmission route to the speculative Stanfield Substation is selected, then the project cannot meet these requirements.

Other Concerns about Proposal Mentioned by Commentators

Aesthetic and Property Value Impacts

As stewards of the land in times of increasing environmental awareness and sensitivity, Planning Commission heard testimony that the proposed Wind Power Generation Facility will decrease the value of area properties both aesthetically and productively, as well as economically.

Aesthetically, the transmission lines and wind turbines will detract from the properties' natural appearance and condition, especially given its proximity to highways and the undeveloped vistas beyond. For the reasons set forth above, farm families have stated that they believe that the proposal will decrease the value of farms.

DIVISION 24 SPECIFIC STANDARDS FOR SITING FACILITIES

Specific Standards for Wind Facilities

345-024-0010

Public Health and Safety Standards for Wind Energy Facilities

To issue a site certificate for a proposed wind energy facility, the Council must find that the applicant:

- (1) Can design, construct and operate the facility to exclude members of the public from close proximity to the turbine blades and electrical equipment.
- (2) Can design, construct and operate the facility to preclude structural failure of the tower or blades that could endanger the public safety and to have adequate safety devices and testing procedures designed to warn of impending failure and to minimize the consequences of such failure.

Stat. Authority: ORS 469.470, ORS 469.501

Stat. Implemented: ORS 469.501

345-024-0015

Cumulative Effects Standard for Wind Energy Facilities

To issue a site certificate for a proposed wind energy facility, the Council must find that the applicant can design and construct the facility to reduce cumulative adverse environmental effects in the vicinity by practicable measures including, but not limited to, the following:

- (1) Using existing roads to provide access to the facility site, or if new roads are needed, minimizing the amount of land used for new roads and locating them to reduce adverse environmental impacts.
 - (2) Using underground transmission lines and combining transmission routes.
- (3) Connecting the facility to existing substations, or if new substations are needed, minimizing the number of new substations.
- (4) Designing the facility to reduce the risk of injury to raptors or other vulnerable wildlife in areas near turbines or electrical equipment.
 - (5) Designing the components of the facility to minimize adverse visual features.
- (6) Using the minimum lighting necessary for safety and security purposes and using techniques to prevent casting glare from the site, except as otherwise required by the Federal Aviation Administration or the Oregon Department of Aviation.

Stat. Authority: ORS 469.470, ORS 469.501

Stat. Implemented: ORS 469.501

Specific Standards for Surface Facilities Related to Underground Gas Storage Reservoirs

345-024-0030

Public Health and Safety Standards for Surface Facilities Related to Underground Gas Storage Reservoirs

To issue a site certificate for a proposed surface facility related to an underground gas storage reservoir, the Council must make the following findings:

Treasure Valley Electric Plan - Community Advisory Committee

Transmission Line Briefing Paper

What is a transmission line and why are they necessary?

- A transmission line is used to conduct electricity between two points. Without high voltage transmission lines, generation would have to be located at or near where the energy is used.
- The electrical energy must go through numerous transformations between the generator and its end use
 - o For example, a generator might produce electricity at 15,000 volts. A transformer will step this voltage up to a suitable transmission voltage, say 345,000 volts. Once the energy reaches a load area such as the Treasure Valley, the voltage is stepped back down at a source substation to a lower voltage (230,000 volts) for transmission within the load area.
 - The 230,000-volt electricity is transmitted to hub substations throughout the area where it is transformed to 138,000 volts
 - The 138,000-volt electricity is transmitted to lower voltage distribution substations located closer to the end use where it is again stepped down to a lower voltage (13,800 volts)
 - From this substation, the electricity is transmitted via distribution feeders (low voltage transmission lines) to individual transformers where the voltage is stepped down to its end use voltage and then fed into homes and businesses

What are the different types of transmission lines and how do they work?

- Extra-high voltage (230,000; 345,000; 500,000 volt) Used for transmitting electrical energy over great distances
 - Higher voltage lines are more efficient than lower voltage lines. A higher voltage transmission line will result in fewer losses than a transmission line with a lower voltage.
 - Higher voltage lines often have "bundled" conductors, meaning that multiple wires are hung from the same insulator. This increases the amount of power that can be carried on a single circuit.
 - The Idaho Power system loses between 2 and 3 percent of its energy due to line losses on the extra-high voltage transmission

Attachment 2, Page 2 of 8

Idaho Power, TVEP Community Advisory Committee

- Sub-transmission lines (69,000; 138,000; 161,000 volt) Used for transmitting electrical energy between substations that are close to one another (up to approximately 100 miles). These lines will typically not carry as much energy as the extra-high voltage lines.
- Distribution lines (13,800; 34,500 volt) Used for transmitting energy to its end use, including commercial facilities, small factories or a small transformer outside a group of houses

Where does the Treasure Valley's current supply of electricity come from and how does it enter the valley?

- The electricity delivered to the Treasure Valley arrives via eight 230,000 (230 kV) transmission lines
- Five originate at the Hells Canyon hydro complex and three originate at the Midpoint Substation near Shoshone
- Most of the power comes into the southeast area of the valley. One line comes in near Ontario, Oregon, and then through Caldwell.

Where will future (2030) electricity enter the valley and from where does Idaho Power plan to have it come?

- More power will have to enter the west and northwest area of the valley, so that power flows properly
- The location of new generation will determine where the power comes from

Are transmission lines safe for people to live near?

- Yes, but there are some safety concerns to be aware of:
 - Line breaking This can happen at any voltage level but is very infrequent and
 is generally the result of a vehicle colliding with a power pole. If protective
 devices (circuit breakers) fail to open the circuit, a line lying in the road can be
 live and pose a serious risk of injury or death if someone comes in contact with
 it.
 - o Fires caused by malfunctions or animal contact with power lines Infrequently, a connection device will fail on a power pole and cause it to burn, resulting in a brush fire. More frequently, a small animal or bird will contact live distribution or transmission lines causing a brush or forest fire.

Idaho Power, TVEP Community Advisory Committee

Electromagnetic Fields (EMF) – EMFs are invisible forces created by any electric charge. The word "electromagnetic" is a combination of two words; electro (electric) and magnetic. Electric fields are the result of the strength (voltage) of the electric charge. Magnetic fields are the result of the motion (current) of the charge. Wherever electricity is used, EMFs are present. Since the early 1970s, extensive research has been performed to determine if EMFs pose health risks. Idaho Power agrees with the overwhelming body of research that shows that EMF is not detrimental to human or animal health.

What are the advantages and disadvantages of transmission lines?

Advantages:

- Allows generation to be built remotely from the Treasure Valley and outside of the valley's air shed. This would be important if the valley is ever in a non-attainment (air quality) situation.
- o Provides access to generation that can only be located remotely from the Treasure Valley, such as hydro, wind, geothermal and coal
- Allows interconnection with other utilities for buying and selling power, and also increases the reliability of Idaho Power's system

Disadvantages:

- o Many people don't like the way transmission lines look
- o On a long distance, high-voltage transmission line, between 2 and 3 percent of the generated power is lost before it gets to the substation, due to the inefficiencies of the wire
- A high voltage transmission line requires considerable right-of-way that could be used for other purposes

How does Idaho Power determine where to place transmission lines?

- The optimal location of a transmission line is the shortest distance between the two substations to which you are connecting
- Locating a transmission line along a public transportation right-of-way is an ideal location. Idaho Power prefers to obtain private easements next to the public ROW for transmission lines.
- Idaho Power condemns only as a last resort

Idaho Power, TVEP Community Advisory Committee

What is the cost of replacing or upgrading and how often is it necessary?

- The cost of replacing is essentially the same as a new transmission line, except the right-of-way might be reused
- Upgrade costs depend on what type of upgrade that is occurring
- Frequency of replacement or upgrade depends on load growth, damage to the line or technology change

How do you determine whether transmission lines will be above ground or below ground? What is the cost and maintenance difference? Why is underground transmission so expensive?

- Idaho Power does not install transmission lines underground due to the cost. It is significantly more expensive to install 138 kV (and above) transmission underground than it is to construct it overhead.
 - An underground 138 kV line is about 10 times more expensive than an overhead line. For 230 kV and above, this cost difference can be much higher.
- Maintenance can be lower for an underground line, though some repairs can be much more expensive because of the difficulty of finding the fault and then digging to get to it. The actual time to repair an underground line is much greater than for an overhead line.
- An overhead line is not insulated. It is bare wire with no outer covering. If the line is placed underground, a non-conducting insulation must encase the wire. The material for this insulation is quite expensive.

What is the capacity of transmission lines?

- There are many factors that go into determining how much power a given transmission line can carry
- For general purposes, we can say:
 - A 500 kV transmission line can carry between 1,000 and 1,500 megawatts (MW)
 - 345 kV transmission line can carry between 700 and 1,000 MW
 - o 230 kV transmission line can carry between 300 and 500 MW
 - o All of these lines will normally be operated in parallel (<u>electrically</u> alongside) with another line of equal size or a set of lower voltage lines. If the line with the highest capacity goes out, the remaining lines must still be capable of carrying their loads plus the load that was on the line that went out.

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Idaho Power, TVEP Community Advisory Committee

What conditions and other infrastructure are necessary to support transmission lines? What are the restrictions on where they can be located?

- 500 kV, 345 kV and 230 kV lines must obtain a variance from some cities because they are taller than allowed by city ordinance
- If located in areas with trees, the trees must be cleared in the right-of-way so the wires will not contact them

How much right-of-way is necessary for each size of transmission line?

- The amount of right-of-way necessary depends on many factors. As a rule of thumb:
 - A single 500 kV transmission line needs 150 feet of right-of-way. This is equivalent right-of-way width of Eagle Road. (Right-of-way includes traffic lanes as well a roadway shoulders.) If two 500 kV transmission lines are put in the same right-of-way but on separate towers, the width would increase to 300 feet. If placed along road right-of-way, a single 500 kV transmission line will need at least 70 feet outside of the road ROW.
 - A 345 kV transmission line needs 130 feet of right-of-way. If two 345 kV transmission lines are put in the same right-of-way but on separate towers, the width would increase to 300 feet. If placed along road right-of-way, a single 345 kV transmission line will need at least 60 feet outside of the road ROW.
 - A double circuit 230 kV transmission line strung on the same towers needs about 80 feet of right-of-way. If placed along road right-of-way, a double circuit 230 kV transmission line will need at least 40 feet outside of the road ROW. Note: in urban areas, a 230 kV structure will almost always be designed to carry two circuits.

Note: For comparison purposes a typical traffic lane is 12 feet.

Can you place more than one size of transmission line in a corridor?

 Yes. Sometimes a wider corridor is used and multiple transmission lines are placed alongside each other. Additionally, a lower voltage line is often placed below (closer to the ground) a higher voltage line on the same tower. Idaho Power, TVEP Community Advisory Committee

How can building transmission lines in the Treasure Valley be avoided?

- To avoid building a major transmission line (500 or 345 kV), you can:
 - o Reduce load through energy efficiency or demand reduction technologies
 - o Install local generation within the Treasure Valley large enough to displace the need for a line
 - o Limit growth
- Future 230 kV transmission lines will generally be used for transmitting energy between hub substations. To avoid a 230 kV line, the need for electricity must be reduced.

Can we build more of the smaller transmission lines and fewer large lines?

- Yes
 - o Advantages: Less right-of-way would be needed
 - Disadvantages: Lower voltage lines incur higher losses than higher voltage lines; more transmission corridors would be required

Can we build more large lines and fewer smaller lines?

- Yes
 - o Advantages: More efficient transmission; fewer corridors needed
 - Disadvantages: Very expensive, especially if you were replacing existing lower voltage lines with higher voltage lines; requires wider right-of-way
- In practice, Idaho Power will upgrade a lower voltage transmission line to a higher voltage when the capacity requirements increase to a point that it makes it cost efficient.

Can we build fewer of the hub substations if we use more small lines?

No. The hub substations will still be needed to distribute energy throughout the valley.

Can we build fewer substations if we use more large transmission lines?

No. These lines will still need substations to distribute the electricity they carry.

What is reliability as it pertains to a transmission system?

• Idaho Power must be able to reliably serve its customers under all normal operating conditions and under expected abnormal operating conditions (events that are statistically likely to occur fairly often)

Idaho Power, TVEP Community Advisory Committee

Does Idaho Power have to answer to some authority for reliability?

- Yes, Idaho Power voluntarily complies with reliability standards put forth by the Western Electricity Coordinating Council (WECC) and, by signatory agreement, concedes to the WECC the ability to impose financial penalties for reliability violations.
 - o The federal Energy Policy Act of 2005 legislates that a reliability organization be formed that has statutory ability to impose penalties.
 - The specific organization that will be formed to do this has not yet been identified.
- Idaho Power must periodically submit reports on varying reliability topics to both the WECC and the North American Electric Reliability Council (NERC). WECC and NERC will also periodically verify that Idaho Power is operating by the in-place reliability standards.
 - o If Idaho Power is found to be out of compliance with reliability standards, WECC can impose monetary penalties.
- Additionally, the Idaho Public Utilities Commission has some oversight authority and can force Idaho Power to improve its system if reliability degrades enough

Describe reliability as it pertains to extra-high voltage transmission.

- Idaho Power's transmission system must be able to survive the single worst contingency (abnormal condition) on the system
 - No one event on a major transmission line can disrupt the system, making it unable to supply all the end users
 - To accomplish this, certain transmission lines are not loaded to their full capability – they hold some of their capacity in reserve
 - Additional capacity is held in reserve so that energy can be imported from surrounding utilities should Idaho Power lose generation
- Idaho Power must also adhere to what's known as an "n-1" criterion
 - For multiple major transmission lines delivering power to the same point, if one
 of the lines goes out of service, the remaining lines must be able to carry both
 the load they were carrying before the event, plus the load carried by the line
 that is out of service.
 - This is true even if the line with the highest capacity is the one that goes out of service
 - o Note: this requirement only holds true for major transmission lines

Attachment 2, Page 8 of 8

Idaho Power, TVEP Community Advisory Committee

Does every transmission line have a backup transmission line?

 No. Many times, a lower voltage transmission line will be the only transmission serving a sparsely populated area. If the line goes out of service, the customers being served by that line lose power. In urban settings, lower voltage transmission lines do have backup.

How does Idaho Power measure reliability at the customer level?

- Idaho Power looks at two primary measures of reliability. One measures the number
 of times (frequency) the power goes out over a given time period and the other
 measures how long (duration) each of the outages lasts during the same time period.
 - Generally, these two measures are evaluated at the low voltage (12.47/34.5 kV) feeder level
 - Idaho Power evaluates these measures on an ongoing basis and uses the results to indicate which feeders are in need of upgrade
 - These can also be indicators of problems at the major transmission line level

Does everyone on the Idaho Power system see the same level of reliability?

- No, it would be prohibitively expensive to ensure all customers had the same reliability
 - Customers who are located in urban areas generally have the ability to receive power from more than one feeder, thus limiting their exposure to power outages
 - More remote customers have only one feeder serving their area, so if that feeder is out of service they lose power
 - o In mountainous areas, snow and wind will cause more outages

Attachment U-3:

Record of Correspondence with Heppner Volunteer Fire Department





VOLUNTEER FIRE DEPARTMENT

197 WEST WILLOW STREET P.O. BOX 743 HEPPNER, OREGON 97836 (541) 676-9618



Rusty Estes, chief

June 23, 2013

Robert Friedel Tetra Tech Inc. 1750 SW Harbor Way Suite 400 Portland, OR 97201

City of Heppner Volunteer Fire is the responding Department for a portion of this project, we do not have the ability to do confined space rescue or high angle rescue. Beyond those two rescues, it has been determined that the Wheatridge Wind Energy Project will not have a significant impact on the operations of Heppner Fire Department.

Sincerely,

Rusty Estes Fire Chief

Attachment U-4:

Record of Correspondence with Ione Rural Fire Protection District

I.R.F.P.D.

Ione Rural Fire Protection District PO Box 6 — 160 West Main Street Ione, Oregon 97843 541-422-7303



May 14, 2014

Robert Triedel

Tetra Tech, Inc. 1750 S.W. Harbor Way Suite 400 Portland, OR. 97201

The Ione Rural Fire Protection District is one of five departments that will provide protection to the area where Wheatridge Wind Energy Facility will be located.

Tone RFPD does not provide high angle or confined space rescue.

We find that this wind facility will not have a significant impact on our ability to fight wildfires.

Sincerely

Virgil L. Morgan

Dingit Morgo Ione RFPD Fire Chief

541-422-7504 home 541-256-0256 cell

Attachment U-5:

Record of Correspondence with Echo Rural Fire Protection District

Attachment 3, Page 10 of 15

Robert Friedel Tetra Tech. Inc 1750 SW Harbor Way, Suite 400 Portland, Or. 97201

Robert,

Echo Rural Fire District does not do high altitude rescues but would be able to handle any wild land fires. We would respond to any wild land fires and do not have any reservations regarding the Wind Project.

Sincerely,

Merle Gehrke

Fire Chief- Echo RFD

June 30, 2014

Attachment U-6:

Record of Correspondence with Boardman Rural Fire Protection District

Attachment 3, Page 15 of 15

Boardman Rural Fire Protection

(541) 481-FIRE (3473)

Fax (541) 481-0909

e-mail: mrogelstad@boardmanfd.com

Marc Rogelstad, Fire Chief Suzanne Matthews, Volunteer Coordinator 300 Wilson Lane, Boardman, Oregon 97818

Bill Ellis, Assistant Chief Marty Broadbent, Fire Marshal

March 10, 2015

Mr. Robert Fridel

In Regards to the Wheatridge Wind Energy Facility located in Morrow County OR. This project is not within the Boundaries of the Boardman Rural Fire Protection District. As such it has no significant impacts on us. Any response would be via mutual aid to the responsible Fire District and our response would be only to aid those departments in their operations.

Marc Rogelstad, Chief Boardman Rural Fire Protection District

Umatilla	County	Planning	Commission
Wheatridge			
	Augus	st 27, 201	.5



Question for PC Consideration

Does Application contain enough evidence to show it meets county "applicable substantive criteria"?



County "Applicable Substantive Criteria"

- Substantive criteria are those that have a meaningful impact on a decision to approve or deny the proposal
- Three county criteria primarily at issue:
 - *152 616(HHH)(5)(b) requiring a map showing location of components of wind facility
 - 152.616(HHH)(5)(c))(3) identification of the route and plan for transmission facilities connecting the project to the grid.

 152.616(5)(d)(1) demonstration of compliance with UCDO 152.061
 - - "(A) Will not force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; and
 - "(B) Will not significantly increase the cost of accepted farm or forest practices on lands devoted to farm or forest use." $\frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \int_{-\infty}^{\infty}$



UDC 152.061

- This is a direct as well as cumulative impacts standard
 - Interprets identically worded state law standard which court of appeals has interpreted to include direct and cumulative impacts
- Thus testimony about direct adverse impacts of the facility and cumulative adverse impacts are relevant to the PC's consideration
 - Turbines
 - Substations including as attractant for additional facilities to tie into
 - Intraconnection
 - Interconnection Gen Tie lines



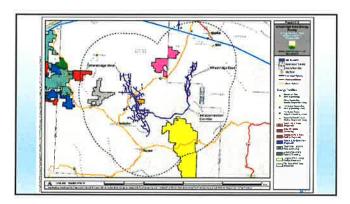
Cumulative Impacts

Application includes map of wind farm locations (existing and proposed) but not transmission

If all projects and required transmission are developed what is the impact on high value agricultural operations:

- · Accepted farming practices &
- · Costs of accepted farming practices?

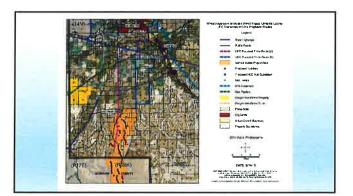




PC Options

- Include mitigating clear and objective standards
 - Such as requiring upgrade and colocation of transmission on Buttercreek Hwy





Facility to be Evaluated

- County code requires evaluation of entire facility turbines & transmission & substations
- Application makes clear transmission is required no project until interconnection in place:

"The timeline and control of the interconnection options are largely established by BPA and other transmission customers in the area, which means the Project's construction timeline requires flexibility to be able to start construction when the interconnection facilities are ready." (APP Exh B p 3)



Facility to be evaluated - continued

Converse: if transmission never ready, per the express terms of the Application, the project would never be constructed

Therefore, it appears that approval of the Application necessarily means all required transmission and other components



Application Premise: Entitled to Avoid Evaluation of Transmission

- Application premise: the Applicant does not propose transmission, so transmission need not be evaluated under state law.
 - Likely incorrect under state law because while words avoid proposing specific transmission, application makes clear transmission is required thus necessarily proposed.
 - Akin to 'we don't propose parking for a shopping center, therefore we need not evaluate trip generation'
- Regardless, question is whether the application complies with county code.



County Code

- Requires application to show the route for transmission and related components
- Requires transmission and all components be evaluated against county standards including cumulative and direct impacts n farm practices and costs
- Can't condition Application to comply with mandatory standards. If standard is mandatory, compliance must at a minimum be determined to be feasible.



Only Issue is whether Application Complies with County Standards

- . This is the question ODOE asked the county
- · This is the question the county must and will answer
- County standards are acknowledged as complying with state law, so are lawful



EFSC Required to Apply County Land Use Standards

- Balancing does not apply to compliance with land use standard
- To approve Application, EFSC would be required to take an "exception"
- Whether such an "exception" could be granted beyond scope of needed PC evaluation
- · But PC welcome to supply input on this If It desires

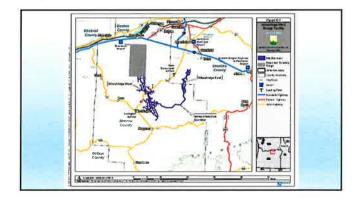


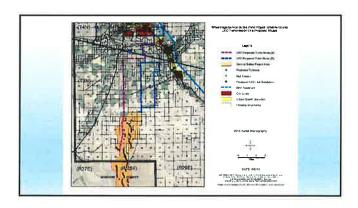
WHEATRIDGE OVERVIEW

- 200-292 turbines
- Spread between two areas Wheatridge West and Wheatridge East
- Wheatridge West in Morrow County, transmission runs to proposed "Strawberry" substation to proposed "Longhorn" substation
- Wheatridge East in Umatilla County, transmission runs to proposed "Stanfield" substation









Application Analysis Area

- ½ mile around turbines and intraconnection Option 1
- Does not identify transmission line locations and so no analysis of transmission corridors and substations
- Interconnection "conceptual"







4 Intraconnection Drives Location of Gen Tie Lines

- Intraconnection 4 "options"
 - Options 3 and 4 in Umatilla County Options 1 and 2 in Morrow County

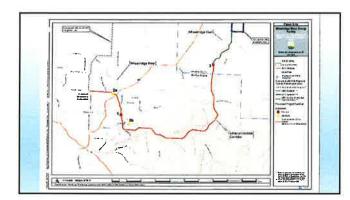
 - All have two overhead lines



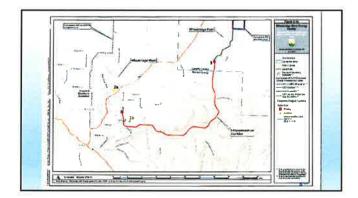
Intraconnection Options Exhibit B p 8-9

- "Option 1: Two Project Substations to Longhorn"
- "Option 2: Three Project Substations to Longhorn"
- "Option 3: Two Project Substations to Stanfield"
- "Option 4: Three Project Substations to Stanfield"











Appears Application Appears to Assume Intraconnection Option 1

"Wheatridge West is located entirely within Morrow County, approximately 5 miles northeast of Lexington, and approximately 7 miles northwest of Heppner. Wheatridge West is bisected by Oregon Highway 207 (OR-207). Wheatridge East is located approximately 16 miles northeast of Heppner and encompasses land in both Morrow and Umatilla Counties. The Intraconnection Corridor is located primarily within Morrow County and adjoins to the southeastern portion of Wheatridge West and the southern portion of Wheatridge East." Application Exhibit K, "Land Use", p 1.



Impacts of Concern Raised to Date

- Application fails to comply with county requirements because it fails to propose for evaluation specific transmission (both intra and interconnection facilities) for evaluation.
- A 500 MW wind farm in this area has unacceptable direct and cumulative impacts including attracting more transmission and substations which will in turn attract more of the same destroying or severely compromising high value agricultural operations
- Application fails to show transmission through co-location where that is feasible along Buttercreek Hwy.
- Various significant direct and cumulative impacts on farm practices and costs from wind turbine locations and required transmission that is shown



RECEIVED

Mautz & O'Hanlon LLP

AUG 2 6 2015

ATTORNEYS AT LAW
ROBERT T. MAUTZ
TIMOTHY J. O'HANLON*
PLANNING DEPARTMENT M. WALLACE, of counses
*Also a member of the
Washington State Bar

August 26, 2015

Sent via email to: tamra.mabbott@umatillacounty.net And hand delivery

UMATILLA COUNTY PLANNING DEPT 216 4TH ST PENDLETON OR 97801

Sent via email to: george.murdock@umatillacounty.net

And hand delivery

UMATILLA COUNTY COMMISSIONERS 216 4TH ST PENDLETON OR 97801

RE: EAGLE RANCH/ WHEATRIDGE WIND ENERGY FACILITY, LLC

APPLICATION FOR SITE CERTIFICATE

OUR FILE NO. 6004-002

To Whom it May Concern:

I represent Eagle Ranch.

Pursuant to a Notice of Public Hearing dated August 7, 2015, I understand that the Umatilla County Planning Commission, at its Thursday, August 27, 2015 meeting in Pendleton, will review the Wheatridge Wind Energy, LLC ("Wheatridge") Application for Site Certificate (ASC) submitted to the Oregon Department of Energy, Energy Facility Siting Council (EFSC). On behalf of my client, Eagle Ranch, I would raise the following concerns:

- 1. It is our understanding that Wheatridge's Application for Site Certificate, in order to connect to the power grid, proposes running a large power line over and through farmland owned by Eagle Ranch. This power line, if approved and constructed, would be very disruptive to Eagle Ranch's current farming operations, and would likely result in very productive, high-value farmland being taken out of production. While we are not opposed to the concept of wind energy in general, we strongly oppose this proposed power line running through Eagle Ranch property, and feel that other routes, less disruptive to ongoing farming operations, should first be considered.
- 2. In addition to the disruption to Eagle Ranch's ongoing farming operation, if the use of eminent domain authority is contemplated in order to obtain the necessary power line easement, it is our position that the taking out of

Mautz & O'Hanlon LLP

Mr. Art Prior

Re: Eagle Ranch/Wheatridge Wind Energy Facility, LLC

Application for Site Certificate

Our File: 6004-002 August 26, 2015

Page 2

production of this particular high value farmland would not be an acceptable public benefit, and would not be "the highest and best use" of this farmland. Other routes, over less productive and valuable farmland, would be of greater benefit to the public, and should be considered first.

3. We appreciate that Umatilla County is providing an opportunity for a public hearing on this matter. We agree with Umatilla County that the State should not allow an energy project without a transmission line and further, that we support Umatilla County's Land Use Code and Comprehensive Plain, which requires that an energy generation facility be permitted coterminous with a transmission line.

Sincerely,

MAUTZ & O'HANLON LLP

Jeffrey M. Wallace

JMW/11

cc: Art Prior (by email)

Umatilla County Electric Commission

August 27, 2015

OPTIONS FOR PLANNING COMMISSION

- 1. Support legal analysis shared by Wendie Kellington. Conclusion is that UCDO 152.616(HHH) requires a transmission line to be permitted as part of a wind energy facility project.
- 2. Recommend EFSC not approve the ASC application until transmission is either part of the application or transmission is permitted prior to application of energy project.
- 3. Recommend developer meet with landowners and transmission line developers to identify a suitable path for a transmission line.

August 27, 2015

To: Umatilla County Planning Commission, Department of Land Use Planning

From: Michael and Toni Lampkin - Echo, Oregon Regarding: Wheatridge Wind Energy Facility

We are raising the following concerns regarding the above project, and request that they be entered as comments in order to file a possible appeal to the Land Use Board of Appeals.

The proposed overhead transmission lines have a possible impact on our land in the following areas, and as such require extensive and specific study:

- * aesthetics and property values
- * livestock impacts as a result of stray voltage
- * health impacts and property values
- * endangered species-plant and animal

Thank you.

Michael and Toni Lampkin 76520 Echo Meadows Road

Echo, Oregon

Umatilla County Commissioners Umatilla County Planning Commission 216 SE 4th Street Pendleton, Or 97801

August 27, 2015

Economic development in Western Umatilla County has historically relied on affordable and reliable power. The BPA hydro system provided that consistent reliable source at competitive prices for that development. As new regulations require the development of alternative sources of power access to the grid has become more complicated where access crosses through rural residential and high-value irrigated land. We support a thoughtful and well-planned development of alternative energy production and infrastructure.

However, the lack of adequate policy discussions, policy implementation and long-range planning has resulted in a broken system. That broken system threatens irrigated agriculture and value added processing that this area has become famous for. Along with threats to our economic base the current polices threaten the cultural and aesthetic values of our region. The implementation of a policy that will appropriately balance energy development and other values is needed. These two interests can and should coincide harmoniously.

Since 2010, we have collectively been dealing with an onslaught of projects that do not meet local needs. Cascade Crossing, Boardman to Hemingway, eight different wind energy projects (including Wheatridge) identified by BPA and the Perennial Wind project would all take high value irrigated cropland out of production if the transmission lines were built as originally planned.

The System is Broken

The numerous projects cause local residents to expend funds and time in unproductive activities.

- Spend money on experts to protect their businesses economic base.
- Cause emotional stress from dealing with and unresponsive state agency (EFSC) to our local concerns.
- Cause local business lost opportunity from spending excessive time at meetings on this issue that seldom result in a positive change.
- Local farmers have strategically invested in the acquisition and development of circle irrigated farm properties in the most desirable and productive locations in northern Umatilla and Morrow Counties.

The Notices sent by the Oregon Department of energy can be misleading to unsuspecting residents.

- The mailing by the Oregon Department of Energy dated July 20, 2015 titled "Public Notice, Wheatridge Wind Energy Facility" (Attachment A) does not depict a transmission route from the project to the grid.
 - O However, in the papers filed in February 2013 to the EFSC department (Attachment B) transmission corridor doors have been included even though the scale is impossible to determine impact from. This insufficient notice can be misleading.

The Applications fail to evaluate ALTERNATIVES that have fewer impacts to the area.

- The Applications presume with little to no analysis that any route selected has no significant adverse impact on irrigated agriculture.
 - They have failed to provide detail to determine impact nor are they required to provide an alternative analysis acceptable to the residents affected.
 - The map shows three alternative routes,
 - Appendix 2 photo 1, shows a picture of one of the proposed routes through circle irrigated land along a road where every circle in its path would be affected along many with future farming activities. In addition, the aesthetics of open space and unobstructed views would be affected.
 - Appendix 2 photo 2 shows a typical problem with the other two
 considered alternatives. A large power line will need to be run
 deeper into the irrigated land behind the house or into the fields on
 the left of the exiting line.
 - O High value farmland is scarce and decreasing. Water availability and other resource issues limit, if not prohibit, development of new circle irrigated farmland. Losses of circle-irrigated farmland in the area are irreplaceable. Transmission facilities must be sited to minimize these irreplaceable losses.
 - One of the proposed lines has five residences along the route in a 1.5 mile segment.
 - Appendix 2 photo 3 shows a typical high-voltage transmission line used to transmit power to and from the grid. These lines are not used to supply local farms or residence with power.
 - While it is indisputable that transmission tower locations pose significant potential problems to farmers, none of the Projects' applications identify transmission tower locations.

Applications ignore any discussion of the differences between the routes (such as a comparison of routes over (1) high value farmland (irrigated) versus low value (non-irrigated) farmland and (2) existing transmission corridors versus new transmission corridors).

- The map accompanying the Umatilla County mailing (Attachment C) shows three alternative routes but does not include two other routes that should be considered.
 - Appendix 2 photo 4 is a picture looking north on butter creek highway that has two power lines one on each side.
 - A rebuild of either line or increasing the capacity was not mentioned as an alternative.
 - To existing lines are but a half-mile West of one of the proposed new routes where there is not an existing line.

Without proper planning and analysis of the **cumulative impacts** of additional projects trying to reach the grid will continue to cause damage to the area that cannot be mitigated.

 BPA has a list of wind projects that have plans to reach the grid. Without proper analysis and planning at this stage all of those projects will cause increasing problems for our area.

Coordinated Planning Must be Required

- In addition to the impacts on agriculture, the scope and significance of the Projects demand coordinated long-term planning. The local area appears to be an evolving and expanding hub of energy generation and transmission. Despite numerous proposed energy projects in the area, none of them appear to coordinate planning or development. Whether the result of expedience, competition, or otherwise, regulators should prevent the risks and potential harm from uncoordinated development and cumulative adverse effects. The significance of the area's generation facilities requires vigilant planning and oversight to avoid the wasteful and unnecessary repetition of efforts to evaluate and develop new energy facilities. Coordinated planning also promises to minimize conflicts and adverse effects, improve aesthetics, and promote reasoned siting decisions now and in the future.
- Oregon land use and energy facility siting law obligates the Applicants to bear the time, cost, and burden to assess their projects' impacts on area landowners and land uses. Instead, the current Applicants completely ignore farming this region's economic engine and impermissibly shift their legal burden to landowners. Applicants must be required to satisfy their legal obligations for siting and must obtain sufficient background information to avoid harmful, arbitrary and superficial siting decisions. The siting decision must result in the least impact on agriculture. ORS 197.732(2)(c)(A)-(D); see also ORS 469.504(2).

Also attached is a petition signed by concerned landowners (Attachment D) in the area of the proposed transmissions lines that ask for strong intervention by the Umatilla Board of commissioners.



PUBLIC NOTICE

Wheatridge Wind Energy Facility

Information Meeting on the Complete Application for Site Certificate

Introduction

The Oregon Department of Energy (department), staff to the Energy Facility Siting Council (EFSC or Council), received an application for site certificate (ASC) from Wheatridge Wind Energy, LLC (applicant), for the construction and operation of the Wheatridge Wind Energy Facility (proposed facility), a wind generation facility with a nominal generating capacity of 500 megawatts. Under Oregon law, the applicant must obtain a site certificate from EFSC before constructing and operating the proposed facility. The department determined the ASC complete on July 1, 2015 and the applicant submitted and filed a final ASC on July 13, 2015.

Public Information Meeting

The department will hold a public information meeting on August 11, 2015 at 6:30 p.m. at Boardman City Hall to present information about the proposed facility. Department staff and the applicant will be available to answer questions related to the EFSC review process and the proposed facility, respectively.

Date:

August 11, 2015

Time:

6:30 p.m.

Location:

Boardman City Hall Council Chambers

200 City Center Circle Boardman, OR 97818

The information meeting is not a public hearing and will not include public testimony. Opportunity for written or oral testimony will be provided during the draft proposed order public comment period and public hearing, following issuance of the draft proposed order, as further described below.

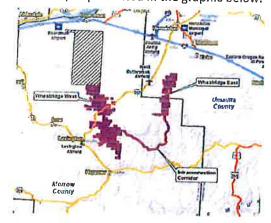
Description of the Proposed Facility

The proposed facility would consist of up to 292 turbines divided into two groups: Wheatridge West and Wheatridge East; and an interconnection corridor containing up to two parallel overhead 230-kilovolt (kV) transmission lines connecting Wheatridge West and Wheatridge East. In addition, the proposed facility includes the following related and supporting facilities:

- 34.5-kV collector lines and substations
- Meteorological tower
- Communication and SCADA System
- Operations and maintenance buildings
- Access roads
- Temporary construction areas
- Temporary concrete batch plants

Location of Proposed Facility

The Wheatridge Wind Energy Facility is proposed to be located on approximately 13,097 acres of privately owned land within Morrow and Umatilla counties, as presented in the graphic below.



For detailed maps, please see the department website at the link below or Exhibit B of the Application for Site Certificate.

EFSC Review Process

The site certificate review and approval process is a consolidated, comprehensive siting process. The applicant must demonstrate that the proposed facility meets EFSC standards established under Oregon Revised Statute (ORS) 469.501 and set forth in Oregon Administrative Rule (OAR) Chapter 345, divisions 22 and 24, as well as all other applicable Oregon statutes, rules and standards. The department conducts the ASC review process.

Upcoming Review Phases

The department determined the ASC complete on July 1, 2015 and is currently preparing the draft proposed order (DPO) which will include staff's analysis of the ASC, based on the department's review of the ASC as well as comments received from state agencies, tribes, local governments and others identified as "reviewing agencies" under EFSC rules and statutes. Based on staff's analysis of the ASC, the DPO will include a recommendation of approval or denial of the site certificate to EFSC. If staff recommends approval, the DPO will include recommended condition language.

Following issuance of the DPO, the department will open a public comment period, which will include a public hearing. You must provide written comment during the public comment period, or oral or written testimony on the record of the public hearing, to preserve your right to participate in the contested case proceeding and subsequent appeals of EFSC's decision. The department anticipates issuing the DPO during the 1st quarter of 2016. The department will issue notice of the public hearing and comment period when it issues the DPO.

More Information

For more information about the proposed facility, please contact Sarah Esterson, the siting analyst for the proposed facility, at:

Sarah Esterson
Energy Facility Siting Analyst
625 Marion Street NE
Salem, OR 97301
503-373-7945
WRW.comments@state.or.us

More information about the proposed facility and the EFSC review process is available through the department's webpage at: http://www.oregon.gov/energy/Siting/Pages/W RW.aspx

Updates by email:

Subscribe to email updates on the Wheatridge Wind Energy Facility or other energy facilities under EFSC jurisdiction through GovDelivery. For more information, please visit: http://tinyurl.com/EFSC-email.

In hardcopy:

Copies of the ASC are available for public review at:

Oregon Trail Library District

Heppner Branch 444 North Main Street Heppner, OR 97836

Oregon Department of Energy 625 Marion Street NE Salem, OR 97301

Accessibility Information

The department is committed to accommodating people with disabilities. If you require any special accommodations, or need information in an alternate format, please contact Matt Lawyer at 503-378-3895, toll-free in Oregon at 800-221-8035, or via email at matthew.lawyer@state.or.us. TTY users should call the Oregon Relay Service at 711.

Attachment B: Figures Referenced in Exhibit B

Prepared for

Wheatridge Wind Energy, LLC



February 2013

Prepared by



Tetra Tech, Inc.

Umatilla County

Department of Land Use Planning



DIRECTOR TAMRA MABBOTT

LAND USE PLANNING, ZONING AND PERMITTING

CODE ENFORCEMENT

SOLID WASTE COMMITTEE

SMOKE MANAGEMENT

GIS AND MAPPING

RURAL ADDRESSING

LIAISON, NATURAL RESOURCES & ENVIRONMENT

NOTICE OF PUBLIC HEARING UMATILLA COUNTY PLANNING COMMISSION

YOU ARE HEREBY NOTIFIED as the applicant, adjacent property owner or affected governmental agency of a Public Hearing to be held before the Umatilla County Planning Commission on Thursday, August 27, 2015 at 6:30 p.m. in Justice Center Media Room, 4700 NW Pioneer Place, Pendleton, OR.

REQUEST FOR A PUBLIC HEARING FOR LAND USE DECISION REQUEST #LUD-185-15, BLUE MOUNTAIN CHRISTIAN FELLOWSHIP, applicant/property owners. During the public comment period, a "Request for a Public Hearing" was submitted on July 27, 2015. The request is to develop an 80 foot by 80 foot cemetery on church-owned property. The area of the Blue Mountain Christian Fellowship property proposed for the cemetery is located on the south side of Sunquist Road (County Road No. 512) at the northeast corner of Tax Lot #1100, in Township 6N, Range 35E, Section 21A. The situs address for this property is 52322 Sunquist Road, Milton Freewater, OR 97802. Criteria of approval are found in Umatilla County Development Code 152.059 (B), 152.617 (II).

For further information concerning the above proposal, please contact Bob Waldher, Seniōr Planner, at the Umatilla County Planning Department, 216 SE 4th Street, Courthouse, Pendleton, Oregon 97801; telephone (541)278-6251; email <u>robert.waldher@umatillacounty.net</u>.

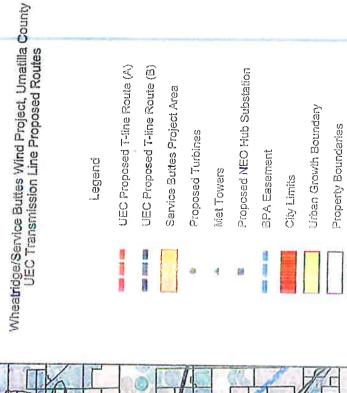
WHEATRIDGE WIND ENERGY FACILITY: Planning Commission will review the Wheatridge Wind Energy, LLC Application for Site Certificate (ASC) submitted to the Oregon Department of Energy, Energy Facility Siting Council (EFSC). Planning Commission will focus their attention on Exhibit K of the ASC but may consider all relevant issues. Planning Commission role is to make a recommendation to the Board of Commissioners who will submit comments to EFSC.

For further information concerning the above request, please contact Tamra Mabbott, Planning Director, at the Umatilla County Planning Department, 216 SE 4th Street, Courthouse, Pendleton, Oregon 97801; telephone (541)278-6246; email tamra.mabbott@umatillacounty.net.

Opportunity to voice support or opposition to the above proposals, or to ask questions, will be provided. Failure to raise an issue in a hearing, either in person or by letter, or failure to provide statements or evidence sufficient to afford the decision maker an opportunity to respond to that issue, precludes appeal to the Land Use Board of Appeals based on that issue. Copies of applications, documents and evidence pertaining to the hearings listed above, and all relevant criteria are available for inspection at no cost and will be duplicated at printing cost. A copy of the staff report will be available for inspection or duplicated at least seven days before the hearing. Hearings shall be governed by Section 152.772 of the Umatilla County Land Development Code.

DATED THIS 7th day of August, 2015 UMATILLA COUNTY DEPARTMENT OF LAND USE PLANNING

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WHITEHOUSE RO

2014 Aerial Photography



DATE: 8/4/15

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MAP DISCLAMMER: No warranty is made by Umatila County as to the accuracy, releasily or completeness of this date. Parcel date should be used for following no purposes only. Not intended for legal use. Created by J. Alford, Umatila County Planning Department 2/4/15 workspaceuplassingforojects/UEC_WhoobidgoSoviceButtos_Tings6_16.gws To: Umatilla Board of County Commissioners

Re: Wheatridge Wind Energy Facility

From: The below-signed Umatilla County Residents

The below-signed residents of Umatilla County hereby request that the Umatilla County Board of County Commissioners, in its evaluation of this energy project under state law and the applicable local approval criteria, evaluate and consider the impacts of the wind turbines and the transmission line – all of which collectively constitute the energy facility. The ODOE Notice for this project specifically states that it includes two parallel overhead 230 kV power transmission lines connecting Wheatridge East and West, and presumably it also includes at lease one additional power transmission line connecting this facility to the power grid. The project proposal, however, fails to provide any information about the transmission facility component or alternative alignments or substation locations that would satisfy the stated project purpose and need. Nor is there any explanation of impacts of the transmission facility. In fact, the transmission facility component constitutes a necessary related and supporting facility to the wind generators that cannot be segmented out of this energy project proposal.

The impacts of this energy facility cannot be understood or analyzed without knowing the proposed transmission routes(s) that will support the wind generators. The specific alignment of powerlines, including substation and support tower locations, should be a necessary component of the County's evaluation of this project proposal and the energy facility's impact on agriculture, especially center-pivot and similar irrigated agriculture. An understanding of the specific alignment of powerline alternatives is a necessary prerequisite to understanding how and to what degree this energy facility will impact accepted farming practices and how it will affect the cost of accepted farming practices. The artificial segmentation of this project into separate generation and transmission components defeats meaningful and informed public comment and county review of the project's impacts on accepted farm practices, including cumulative impacts of the entire project. These impacts are significant for farmers and ranchers in Umatilla County because of the accepted farming practices of center-pivot related irrigation and underground water piping and pump stations. The County should not allow such an artificial segmentation as a means to elude a comprehensive review and consideration of the energy facility project's cumulative impacts.

The Umatilla Board of County Commissioners has the authority and obligation to require a comprehensive evaluation of this energy facility proposal, including transmission alternatives as a necessary related and supporting facility with a significant impact on agriculture in Umatilla County under UCO 152.616 (HHH) (5)(b) and (6)(a). We urge you to do so

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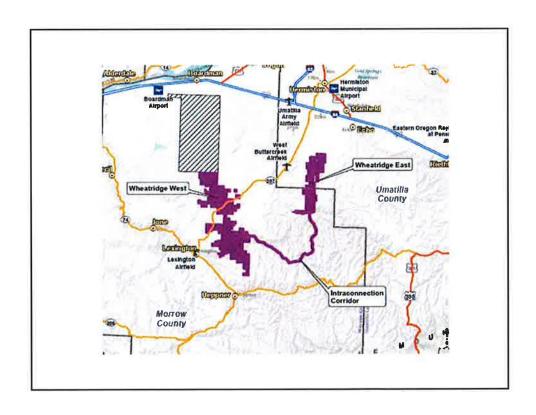
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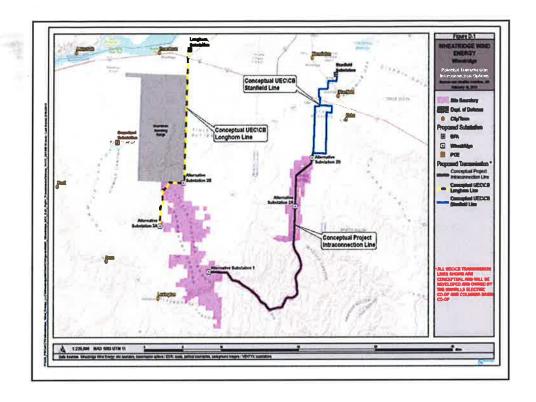
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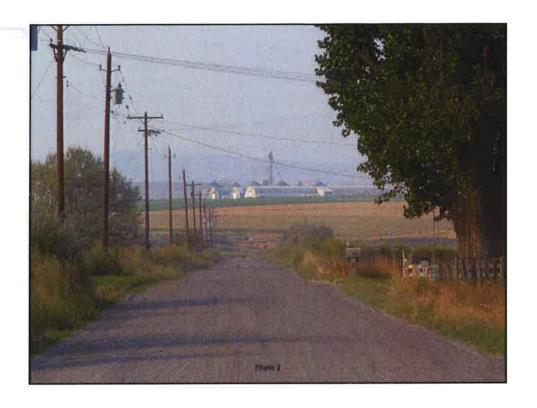
Umatilla County Planning Commission Energy Facility Sitings

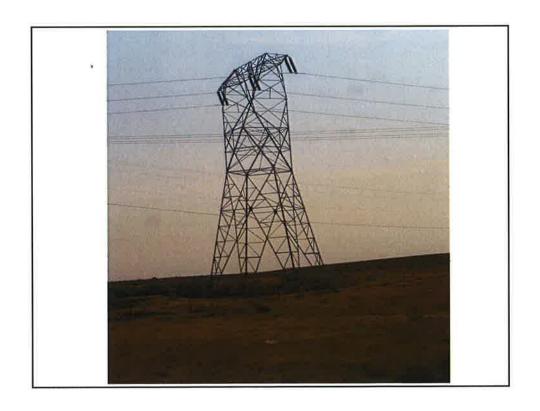
Wheatridge Project
Appendix 2
8.27.15



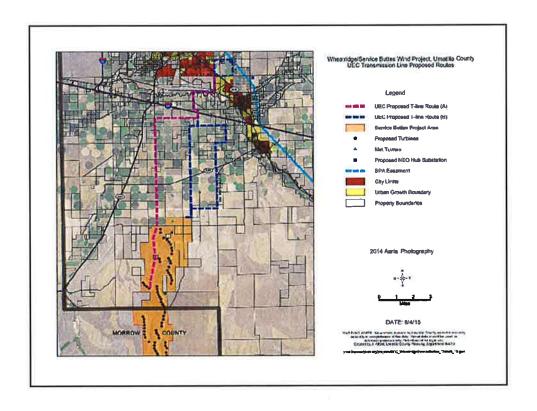












Clinton B. Reeder, PhD

Economics, Business, Public Policy 47647 Reeder Road Pendleton, OR 97801 DRAFT – SUBJECT TO REVISIONS
AND CORRECTIONS

Mobile 541-969-6410

Home/Shop 541-276-9278 clintonreeder@westforkco.com

COMMENTS CONCERNING UMATILLA COUNTY WIND ENERGY ORDINANCE AND POLICY POSITION RELATIVE TO THE WHEAT RIDGE DEVELOPMENT PROPOSAL

Before the Umatilla County Planning Commission August 27, 2015

BASED ON EXTENSIVE RESEARCH AND LITERATURE REVIEW.

The Umatilla County wind energy ordinance and policy was established based on a very careful, lengthy literature review and considerable research, including an intensive Internet search concerning the wind energy development activity internationally. The author has numerous notebooks full of downloaded material and an extensive library of wind energy references... including tonight some pertinent references concerning the health affects of sleep in general, and wind turbine noise and other factors that at times pose adverse health consequences.

In general, the author suggests that the Umatilla County wind energy development ordinance fundamentally embodies one particular core objective: to assure for all parties to a wind energy development project sufficient negotiating leverage to effectively protect and advance their own best interest, including the best interests of their families.

RECOMMUNITY MUST BE A PRIMARY PRIORITY. The author's research over the past several years related to projects of the Umatilla County Planning Commission, makes it very clear that we all, as individuals and collectively, must never lose sight of the harsh reality that the Character of Our Community can and will never be greater than expected and demanded by those of us who participate as voters, and committee members charged with protecting and enhancing the best interest of the community, while minimizing adverse impacts thereof on individuals, families and businesses who live, work and serve our communities.

We must never let ourselves simply have a "so what" reaction to the Collateral Damage of economic development consequences!

Furthermore, we must never assume that "reasonable mitigation for the community" as a whole (new streets, a new school, etc.) is in any way reasonable mitigation for the close neighbors to the wind energy projects who experience most directly the adverse outcomes of such projects!

The author was absolutely appalled when a local farmer who signed a site lease agreement stated to him during a public hearing that it mattered not at all if some benefitted from such projects, while others did not – That's the American Competitive Way", he was told.

The author says BALDERDASH and BALONEY: Competition is fine – the author is not opposed to it. On the other hand, if you pile your hay in front of your neighbor's house without talking to them first, you had better not expect them to be "neighborly" thereafter! If you want to live in and benefit from a productive, reasonably cooperative community, you had best invest in actions that sustain and enhance that Community Character!

STATE VS. LOCAL CRITERIA AND STANDARDS.

As far as the author is concerned, no person should serve on the Energy Facility Siting Council unless they are well versed in the issues and concerns, and preferably have served in a similar capacity in at least one local community. Recognizing that this standard will not always be possible to satisfy...

RECOMMENDATION 3 — RE EFSC MEMBERS. The author STRONGLY RECOMMENDS no one be named to serve on this body unless (a) they are well known for sincerely listening to local citizens in any public hearings; (b) taking local suggestions and public policy seriously; and (c) acknowledging that the Character of the State Community will never be any better than the nature and effectiveness of the working relationship between the State entities and the local jurisdictions.

The author acknowledges that not all concerns of State interest can be resolved in every local jurisdiction. On the other hand, the author's lifetime experience in such matters, suggests that seldom is there any meaningful justification to ignore local policy preferences and ordinances.

In other words, if EFSC attempts to simply ignore or side-step without significant local input any local policy preferences and ordinances, they do so at great longer term risk – for ultimately, the State cannot sustain such conduct

without increasing local backlash, which may benefit no one... and only serve to unnecessarily delay essential projects.

So, again, the author strongly suggests that the Character of the State Community absolutely depends upon the nature and effectiveness of the ongoing working relationship between the State entities and the local jurisdictions. It is the author's opinion that this is especially important today, as one considers the prevailing attitudes and risks among global communities, as well as some of the more lawless relationship dynamics between the federal government and states; including the mounting probability for increasing disagreement between State and local jurisdictions concerning certain matters, such as drug legalization and related policy concerns – which may at the drop of a hat in early 2017, no longer be effective.

THE WIND ENERGY DEVELOPMENT PROCESS. The wind energy development process follows a very similar process everywhere around the globe. The process includes considerable effort to assure confidentiality of any and all information, good or not so good, especially by those who sign development contracts with the wind energy developers.

While there are good reasons for the industry to protect their companies by assuring contract details and operating procedures are maintained as confidential, the result of the manner they demand confidentiality prevents those with development contracts from speaking to anyone about the facts of their personal health and family circumstances brought about by their living in close proximity to the wind turbines and other facilities. As a result, good data is severely lacking concerning the first-hand reporting by "victims" of the development outcomes upon themselves and their families.

The international review identifies wind energy developments in multiple countries where those persons adversely impacted by intolerable health effects are numerous, resulting in families literally abandoning their homes. Usually, these sites are where the wind turbines are built far too close to the neighboring homes, sometimes less than 1,000 feet.

NO ESCAPE. As near as I can determine, the contracts generally provide no escape clause which might be exercised by those who learn after they sign the site lease contracts that they, or someone in their family simply cannot tolerate the low frequency sound generated by the wind turbines, and/or vibrations in their homes caused by that low frequency noise... or wind turbine shadows frequently blinking through the house.

RECOMMENDATION 4 – PROVIDE THAT EVERY WIND TURBINE SITE LEASE CONTRACT INCLUDE AN ESCAPE CLAUSE. Require that every site lease contract include a provision which allows an alternative way to deal with potential adverse health and financial effects that do not become obvious until after the turbines are built and in operation.

For example, a wind developer might agree that if the property owner discovers living near the wind turbines is intolerable, the developer will buy the home site from the owner, at a pre-determined value, thus providing funds for the property owner to relocate his family... if the property owner requests this alternative be implemented within a reasonable period of time after the wind turbines are activated.

This is already happening in many wind development projects: one or more property owners simply refuse to sign a lease agreement until and unless the developer buys their home site, so the property owner can relocate.

RECOMMENDATION 5 – ORGANIZE FOR JOINT ACTION AND INFORMATION SHARING.

The usual process discourages joint action and/or sharing of information by property owners, as far as site lease terms are concerned. The confidentiality provisions of the contracts severely restrict the sharing of information among property owners.

Property owners might, and in the opinion of the author should at least seriously consider agreeing to organize and act cooperatively as soon as a new project is proposed: (a) select a competent, knowledgeable attorney and Certified Public Accountant to represent them; and (b) appoint a committee of property owners to work with the Attorney and Accountant, to develop contract terms acceptable to the property owners as a group... at least develop a model contract, which individuals might elect to complete in confidence with the developer, after extensive early shared consideration of the facts and pertinent legal and accounting information is accomplished.

RECOMMENTATION 6 – REQUIRE THAT NEARBY NEIGHBORS BE THE FIRST AND BEST COMPENSATED FOR ADVERSE CONSEQUENCES OF SUCH DEVELOPMENT. The impact of site lease outcomes upon neighbors near to the wind energy projects are effectively ignored by the development process, at least in many

respects. This is a colossal mistake, for public officials to allow this adverse social impact to occur in our local communities. It is unacceptable that one of the primary adverse impacts of wind energy development is that neighbor who have been good friends for multiple generations in many instances end up increasingly not speaking to each other as the projects development process proceeds.

These close neighbors are typically the first major victims of the developments — and is generally detrimental to the community! These non-farm industrial developments in Exclusive Farm and Forest zones are contrary to Oregon's land use planning program intent. They are not necessarily compatible with the general intent of the zoning laws, to protect the character and economic status of the zoned area.

For one thing, the economic consequences alter the competitiveness of local property owners relative to ownership of both farm land and farm machinery. The non-farm income associated with, but limited primarily (if not exclusively) to the site lease owners, provides them a non-farm income source that is way out of proportion to the normal income flow from farm land. Thus, those who sign site lease agreements with the developers, gain a significant longer term economic advantage over their non-participating neighbors!

The general case at the present is for the nearby neighbor to simply be considered "Collateral Damage"... unfortunately, an uncompensated major victim of the development --- all too often looked down upon simply because they attempt to protect their own interests in the development process. They may lose their outside view; their open-space rural setting without nearby industrial development; have wind turbine blade shadows blinking inside their home; have maybe one of more rooms where they do not feel well due to the vibration caused by the low frequency noise from the wind turbines; and in canyon areas, forced to suffer the additional agony of the exacerbation of noise by the noise mixing and intensification referred to by some as "the canyon effect".

LOST PROPERTY VALUES – MITIGATING THE COSTS. The wind developers often claim there is no adverse land value caused by wind energy development. As a professional economist, I tell you that is close to a fraudulent statement. Any good real estate appraisal will consider the aesthetics of the site as well as its practical elements. In fact, property taxes are paid on such views, to the extent that view impacts the property value.

The statement is sometimes justified by a major study several years ago commissioned by the wind energy developers. To illustrate: assume a ten mile diameter circle around a wind energy site... with maybe a 1,000 acre wind turbine

site in the center. If you assume a reasonable normal increase in land values for the land outside the 1,000 acres, it is easy to demonstrate that the increase in the overall land area in the 10 mile circle has been greater than any loss to those inside the wind turbine site of 1,000 acres, even if the loss is 100 percent of the value.

The ten mile circle includes over 50,266 acres. The 1,000 acre wind turbine site is only 2 percent of the circle (1,000 / 50,266). If the average land value per acre inside the ten mile circle is \$1,250 per acre, the total land value of the circle is about \$62,832,500. If we assume the loss in land value is 100 percent in the 1,000 acre wind turbine site, the loss would be about \$1,250,000. In other words, the developer is claiming that the one year increase in land value of the entire circle is greater than the total loss of value of the wind turbine site. Hence, they conclude: "Therefore", wind turbine sites cause no net loss in property values!

What is the logical conclusion for the area? Everyone gains except for the neighbors to the wind turbines, who may lose their entire home asset value (in this illustration). Property owners inside the circle if they contributed just 2 percent of their average annual gain in property value for one year could mitigate the 100 percent loss by those inside the 1,000 acre turbine site.

Since the loss would not likely be 100 percent, except maybe for a limited number of such sites, the mitigation requirement would likely be far less than illustrated. And it would be a one-time cost, while the wind turbines would continue for years generating significant income, which averaged over a period of years, makes the potential mitigation cost to the neighbors essentially a minimal consideration.

The real question to ask, however, has nothing to do with "no net loss" to the community. The pertinent question is: Are there winners and losers? Of course: (a) the neighbors to the wind turbines lost 100 percent of the value of their home and home sites (in this illustration); (b) those persons participating in the project, likely earned the 2 percent increase in their land; (c) plus the lease holders stand to continue receiving the annual land value increase, plus whatever the annual payment is for each of the wind turbines on their property.

The Community problem is that those who gain give little or no consideration to what the losers lost as a result of the development. And that lack of concern will plague the community for multiple generations! And all for the wrong reasons! An appropriate and meaningful mitigation arrangement could have preserved the Character of the Community at relatively little cost.

I my several years working with wind energy projects, I have never once heard the neighbors signing site leases offer to pay such a mitigation fee to their

neighbors. I have, on the other hand, heard them argue no such payment is justified... "Some gain, some lose – too bad". No wonder relationships in some (many?) wind energy developments deteriorate.

The harsh reality is this: Neighbors and developers must act neighborly, in tangible ways, in order to sustain the Character of the Community! Harsh feelings can erode community cohesiveness not only today, and tomorrow – but sometimes for generations.

MITIGATION PAYMENTS TO A PUBLIC ENTITY SELDOM FAIRLY MITIGATE FOR THE NEIGHBORS NEAR THE TURBINES. Some mitigation schemes for wind energy projects have more recently provided a relatively large sum of money to the county in which the project is located, sometimes essentially granted to the County Officials to disburse as they see fit – or maybe, call for a community involvement process of some kind to assure a rational sharing of the mitigation money.

As far as the author is concerned, any mitigation scheme that does not make the neighbors close to the development site the first mitigation priority, backed by some kind of a reasonable process to make any mitigation payments fit the loss experienced, is a corruption of the development process and the process of local government.

The author has been a party to some discussions where it is very obvious such schemes cost far more in lost public support for county officials than is gained in money not appropriately shared with those who are the primary "Collateral Damage" of the development. Such political-economic schemes do not fairly and equitably sustain and enhance the Character of the Community!

WHY DOES UMATILLA COUNTY HAVE A TWO-MILE SETBACK FROM RURAL HOMES TO THE NEAREST WIND TURBINE?

After conducting the international survey of wind energy development outcomes, and locating in the process a set of recommendations concerning minimum protective setback distances... followed by considerable discussion in this county, including public hearings... it was concluded that any setback closer than 2 miles would not, and could not provide the property owner two things: (a) a sense of security relative to the encroachment of wind turbines on their properties and the values protected by the Exclusive Farm (and Forest) Use zones; and (2) sufficient leverage to assure a fair and reasonable ability to engage in a meaningful negotiation for site lease payments with the wind developers.

In other words, if the property owner simply said NO to any site lease on their property, the 2-mile setback left them comfortably protected. If they were willing to have wind turbines back of the barn, but not in front of their house, the 2-mile setback provided adequate leverage to successfully negotiate the kind of terms they were willing to live with. Otherwise, if enough property owners simply said, NO, then the community would be protected from the unwanted development.

With the 2-mile setback, all parties to the proposed development are assured fair and reasonable treatment; a fair and reasonable opportunity to participate in the development process, including using their personal leverage as a trade-off not only with the wind developer but also with others in the community who were unwilling to share reasonably in the economic benefits and costs associated with the development.

Essentially, rather than just being treated like so much "community trash", the "Collateral Damage" citizens now could have a meaningful voice in the outcome of the development, including money in their own bank account to reasonably compensate for any loss they might suffer by being supportive of the development.

No more would they have to suffer the indignity of being treated as 2nd class citizens in their own community... thus, the 2-mile setback effectively serves as a device to better assure the Character of the Community will not be sustained and enhance at the expense of those forced to live near the wind development sites without reasonable compensation (mitigation).

Finally, many people have claimed the 2-mile setback essentially ends wind energy development in Umatilla County. This conclusion is absolutely false!

On the other hand, the 2-mile setback certainly makes sure there will be no further wind energy projects in Umatilla County, unless all parties have a seat at the negotiating table; and none will be coerced or intimidated into saying YES, for the wrong reasons.

Any property owner can in the course of their negotiations alter the nature of how the setback provision might function in their own case. Wind turbines can still be built, maybe even as many as if this setback did not exist. However, there will be no property owners forced to have wind turbine closer than 2-miles without their personal consent.

Neighbors either cooperate, or the project risks go way up – an incentive to consider a new development strategy, one that treats all local citizens fairly, equitably, and with minimum adverse impact on the longer term Character of the Community.

In a sequence of four, three hour discussion sessions, led by a reasonably creative moderator, I am willing to bet a committee could come up with a list of at least five feasible ways to make the 2-mile setback work effectively in any Oregon county, or most any county anywhere in the world.

It may not work everywhere, because some areas simply will not tolerate turbines being built too close, due to (a) potential adverse health effects; (b) unacceptable loss of home value; (c) unacceptable environmental risks, such as untenable fire prevention and control measures associated with the development plans; (d) detrimental effects on other non-compatible businesses concerns; and/or (e) other currently unforeseen objections not subject to acceptable mitigation.

RECOMMENDATION 7 — ESTABLISH SETBACKS BETWEEN WIND TURBINES AND HOMES OF NOT LESS THAN 2 MILES... Especially if you care about the Character of your Community!

Umatilla County looked closely at setbacks between 1-2 miles. In discussing the distance with a number of persons in nearby rural areas, plus the literature, we could not justify much less than the 2 miles. Some people might feel more secure at 1 mile than at half a mile, but given the opportunity to have a 2-mile setback, most preferred the greater distance.

The international literature was supportive of the 2-mile setback, which it appears is seen very much as a risk management standard relative to wind energy development. The personal risk of loss tends to increase as the setback distance shrinks, with less than 1 mile feeling increasingly threatening. The author does not recall anyone in any literature considering a setback distance less than 1/4th mile being reasonable... even though in some locations, setback distances were even less than 1,000 feet.

It is very important to consider the size of the newer wind turbines, which stand about 500 feet tall, to the upper blade tip. This means that any disintegration of a run-away turbine spin would only have to throw wreckage 500 feet more than the height of the tower to hit a nearby residence. Ice throw from a spinning turbine could expose neighbors to a similar risk if too close to homes.

An interesting part of this research process, included a hasty process by a relatively small group persons to collect petition signatures in support of a more distant setback. In a very short time period, those working with the project managed to collect about 3,500 signatures — which surprised many in the community. The petitions were to a certain extent the straw that broke the

camel's back – it was rather obvious that many more signatures could likely be collected if more time were allocated to the project.

The harsh reality is that the neighbors to the projects were being treated like 2nd class citizens, and very much resented the way they were being treated — as if the impact of the projects on them was of little consequence, and not worthy of fair and reasonable consideration. Many other people not directly involved in any project were also supportive of the setback proposal.

The really significant economic and legal reality is that at 2-miles persons facing such risks and imposed burden, including potential financial loss, feel reasonably safe at the 2-mile setback distance. The author strongly feels, personally and professionally, that the 2-mile setback, provides individual property owners sufficient security that they can engage in meaningful negotiations full knowing that all they have to do, ultimately, is say NO to any site contract, and be protected. That makes for a much more mutually advantageous contract negotiation, and much improved fairness and equity relative to the wind development projects.

ADVERSE HEALTH EFFECTS OF WIND ENERGY DEVELOPMENT.

In the opinion of this author, there are two major adverse health concerns: (1) the adverse effects of personal general health associated with the low frequency noise from the wind turbines; and (2) the adverse health effects, very well documented and increasingly so, associated with not well understood simple sleep interruptions and disturbances.

Good sleep is essential to good health! This is well documented! What many people do not realize, is that sleep can be interrupted in ways that leave a person with no memory of any such loss. In other words, a person can be only slightly aroused, but not come fully awake. If REM sleep is interrupted, the memory process may not proceed normally, but the person remains out-of-alertness to the extent they have no memory in the morning of their sleep pattern being disrupted at all. If this repeats with much frequency, there are serious general adverse health effects.

I know this from personal experience. Several years ago, my sleep was interrupted in this manner by a disorder called Sleep Apnea. With this disorder, the throat relaxes while asleep, causing stoppage of the throat, preventing breathing. For me, this became so severe that when I finally had formal sleep tests, I was not breathing 40 times per hour, for as long as 15-20 seconds. 40 times an hour times 15 seconds is 600 seconds, or 10 minutes. In other words, I was not breathing 16.6 percent of the time. My blood oxygen level was dropping

down into the mid-80% level, when it should remain at 95% or better. I was literally sleeping oxygen deprived, for much of every night!

The primary effects were (a) severe end of day fatigue; (b) steadily worsening short term memory loss (deep sleep is required for short term memory to convert to long term memory); and (c) diminishing personal productivity in my work and public service activities. One evening I drove to a meeting in town; could not remember where to go; could not remember who I might call; and soon realized I'd best just go home. I was humiliated; embarrassed; confused; and scared about what this downturn might mean.

I went to a neurologist to find out if I might be developing early onset Alzheimer's disorder. After an hour or so of testing and discussion, he told me to go across the street and have an overnight sleep test done... which I did. And it was a miraculous experience. Within about 2 weeks on a C-PAP breathing machine, which pressurizes the throat and prevents the Sleep Apnea from happening, I felt entirely different, full of energy again and able to function more productively than for the past 2-3 years.

The truth is, any sleep loss poses similar adverse health effects... including a list of additional longer term outcomes, such as diminished ability to concentrate, to learn and improve job skills — all quite contrary to the best interest of families and school children. Entire families can become irritable, less patient, increasingly short-tempered, and develop other mental-cognitive deficiencies. And some even develop what might seem much like sea-sickness, or air-sickness... referred to in a book title "Wind Turbine Syndrome".

This Wind Turbine Syndrome disorder is usually caused by the vibratory effect of low frequency noise on certain parts of the ear and body balance mechanisms, causing the brain to conclude the body is out of equilibrium even though it actually might not be. It is simply a neurological response to the vibratory effect of the low frequency noise generated by wind turbines.

It appears from the international survey of literature that something like 8-15 percent of the general population might be susceptible to this Wind Turbine Syndrome. That may not seem like much to be concerned about, but wait a bit — that is about the same as many other measures of various susceptibilities. In other word, if 12% of the general population is potentially susceptible, and there are 30 homes inside or nearby a wind energy development, each housing 4 persons, this means that maybe 14 persons are likely to be victims of this problem. Is that small number of concern? Should it be?

If there are that many in each county, then the numbers certainly add up. If there are that many in the general population, and the wind energy project numbers continue to increase, subsidized by public funds, it is not unreasonable to suggest that ultimately we may be talking about a very significant number of persons experiencing adverse health effects from this "clean and safe energy source".

It is unreasonable for any Caring Community to think they can just ignore identifiable adverse health effects, without appropriate mitigation being provided, including escape clauses in wind development contracts.

The Character of the Community (and the wind energy developer) will be telegraphed far and wide by the nature of the community (and developer's) response to such adverse outcomes – especially where it is so reasonable to provide appropriate mitigation for such outcomes.

RECOMMENDATION 8 – DO NOT SIGN ANY WIND ENERGY SITE LEASES WHICH INCLUDE A CONFIDENTIALITY PROVISION CONCERNING YOUR TALKING TO RESEARCHERS, NEIGHBORS AND PUBLIC OFFICIALS ABOUT ADVERSE HEALTH EFFECTS.

Participants in such community projects should not fear talking to their neighbors, and sharing health-related information. Signing contracts which include such confidentiality provisions only guarantee that a property owner cannot protect their own health interests relative to potential adverse outcomes associated with wind energy development... and the greater community cannot generate such data, which is essential to have if we are to develop larger wind energy projects in the longer term to improve electric energy availability.

The wind energy industry has often argued that such adverse health effects are "all in your head"; that is, just a figment of your imagination. The international literature includes such reports from multiple countries. A major public survey report generated a few years ago in Australia appears to have (maybe) included information from many persons who had signed confidentiality agreements. The Data submitted was often submitted anonymously, suggesting the respondent may have feared adverse site contract outcomes if their identity were made public.

RECOMMENDATION 9A – WIND ENERGY DEVELOPMENT NEIGHBORHOODS. SHOULD GENERATE THEIR OWN DATA.

The local property owners signing site lease contracts, as well s their non-contracted neighbors should cooperate in collecting credible data concerning especially the "quality" (frequency/intensity/decibel level and variability of noise to which they are exposed. This could be done by a collective effort to purchase

monitoring equipment and maybe even contracting to have a professional noise survey team do the actual analytic work, to assure credibility. This is especially important to do in the early stages of the project coming on-line... and then continued for at least 5-8 years to assure the project does not exceed the promised noise standards made public during the early development phase.

Accountability is crucial to the longer term investment in wind energy projects. No state should subsidize any projects that do not provide at least part of the funding for monitoring programs which release to the public certain information about compliance outcomes.

RECOMMENDATION 9B. One alternative is to add to the site lease contracts, is a clear and unambiguous escape clause if the noise level exceeds the level predicted for the project!

FIRE PROTECTION AND CONTROL CONSIDERATIONS.

Most neighbors to wind energy projects are concerned about potential fire damage associated with wind energy developments. It takes little time to locate illustrations of failing wind turbines on the Internet. The 2-mile setback provides time to respond to a fire, much more so than a closer turbine. In addition, 2-miles in most farm country will provide some fallow fields which serve as fire protection, at least some risk mitigation potential.

Wind driven fire in rural areas is a serious concern, especially in hilly landscapes where wind turbines tend to be concentrated. Regardless of the equipment available, gravity coupled with terrain features determine where firefighting equipment can travel. Where the terrain is soft, rocky and/or steep, most fire-fighting effort will be by individuals with shovels and other tools... with maybe some back-pack water sprayers. Well established pre-fire season non-combustible barrier areas are essential for protection of terrain that is difficult to put heavy machinery and equipment onto.

Wind driven fire is very, very dangerous and can totally consume a home and out-buildings in less than one hour. Escape routes can be cut-off very quickly, which is a major reason many areas are simply evacuated prior to a fire getting too close. My experience strongly suggests that ignoring the fire concerns of a neighbor close to a wind turbine site is not a smart idea!

RECOMMENATION 10 – A FORMAL FIRE PREVENTION AND CONTROL PROGRAM MUST BE A PART OF ANY WIND ENERGY DEVELOPMENT PROJECT.

Any wind related fire prevention and control program should not simply depend on local rural fire districts. The wind energy developer must commit additional funding to the district to pay for associated fire training and equipment necessary to prevent and control fire on wind energy sites.

In addition, the agreement should require that the developer be accountable for any and all high altitude rescue costs and operations – not the local fire district.

Furthermore, the local ordinance and agreements should provide written statement/s concerning the ongoing personnel training, in-field equipment carried by each employee, everywhere they go on the development site, as part of the fire prevention and early control response efforts of the developer.

IN CONCLUSION: It would be insulting to local jurisdictions for EFSC to attempt to by-pass local ordinances and preferred public policy concerning wind energy development projects. Local citizens can best protect their interests, and can do so most productively if engaged in meaningful working relationships with State entities, which are sincerely interested in and reasonably responsive to local interests and concerns.

Failure to acknowledge this reality can and will lead to a diminishing effectiveness in that working relationship, to the longer term disadvantage of both the State and local jurisdictions.

It is crucially important that the State and local jurisdictions continue to sincerely work together for the benefit and general welfare of citizens across the state. Whenever the State thinks they know best, the outcomes are not as beneficial as they might have been. The same can be said for circumstances, of general citizen interest across the State, when local jurisdictions fail to sincerely consider the concerns of the state-wide citizenry.

Finally, the drug issues and concerns (part personal, part social, part economic, part public health, part public planning) now challenging Oregon and other states make very clear that where there are significant cultural differences among parts of the State. Great caution must be exercised if Oregon is to avoid being literally torn apart, because they fail in such instances to not only consider but respond with great care to the harsh reality that one solution cannot and will not often work well for all areas of the State.

Therefore, it is very necessary that all longer term wind energy development planning take account of, acknowledge and respond appropriately

and supportively when especially divisive differences exist between the State and local jurisdictions. Deciding the issues on the basis of local preference is likely to be more productive in the longer term, with few exceptions.

Differences matter. So, too, do common interests. Whenever reasonably feasible, the Character of the Community, State and local both, are more likely to benefit when freedom to take action is founded on State policy which provides local options more fitting to particular local jurisdictions, without imposing an unreasonable burden on the State. Such a closely coordinated public policy administrative strategy is much more likely to be in the longer term interest of every citizen.

SUSTAINING AND ENHANCING THE CHARACTER OF THE COMMUNITY MUST BE THE PRIMARY GOAL OF EACH AND EVERY COMMUNITY, AT EVERY LEVEL OF SOCIETY, FOR THAT DETERMINES THE CHARACTER OF THE FUTURE FOR SOCIETY ITSELF.

Sincerely,

Clinton Reeder

The author previously served 31 years as a member of the Umatilla County Planning Commission... and was intimately involved in the development of the county wind energy development ordinance since the first project was proposed. He owns and operates a Century Farm, homesteaded in 1877 and under continuous ownership and operating control of one or more family members since that date. He has served 13 years as a University faculty member, researcher and Extension Education Specialist. He now continues to operate his farm, and do some consulting work, largely research.

The author would appreciate any errors or deficiencies in this statement being brought to his attention, for correction and/or appropriate re-statement.

UMATILLA COUNTY PLANNING COMMISSION - AUGUST 27, 2015

Subject: Wheat Ridge Energy Facility Review of Project Application

Purpose: To Host a Public Hearing for Public Comment

The process for this proposal started in early 2013. The application was submitted on December 19, 2014. The completed application was received on July 1, 20-15.

Despite the lengthy history of this project, there is little specific information on which to base a legitimate review and evaluation. While a maximum size of the project is identified, 500 MW, 292 turbines, there is no specific information as to what the actual project will be; maximum size, minimum size, all details remain unknown and therefore, project evaluation is not possible.

The transmission infra structure required for such a project is unknown. Basically, the question of what it is and it's location, is not known. It appears that the intra and inter connection facilities required for this project would be a significant undertaking. Yet there is inadequate information given in the application. It is uncertain as to how the transmission facilities fit into the application. In one area of the application the inter transmission is treated as a part of the application. Yet, later on it is treated as a separate process, a separate application.

The Inter connect Transmission part of the project most likely will be processed as a separate application but, at this point this is unknown. However, whichever process is used for the inter connection part, it must still comply with UCDC 152.616 HHH (5) (4) (b) (c) (3). That is "a map showing the location of components" and "route and plan for transmission facilities for connecting the project to the grid. The application fails in all aspects of meeting the UCDC 152.616 HHH "Application Requirements".

This leads us to the subject of "feasibility" and "Viability" requirements. This Project fails to demonstrate any compliance with either "feasibility or viability" requirements. The project size, component location, and infra structure details are purely speculative and conceptual. To demonstrate case in point, simply read section B, Page 19 in the packet and the discussion for requesting 6 years for start construction date. The process required for siting projects such as this, are setup to minimize what we see here – a speculative and conceptual proposal. That is the reason for "Viability and Feasibility" standards, in order to avoid a situation like we see here. This application process is premature and not timely.

In summary:

- The application does not have adequate nor specific information on which to evaluate project components and resource impacts nor compliance with applicable laws, regulations and local ordinances.
- 2. The project does not comply with nor meet requirements of UCDC 152.616 HHH (5) "Application requirements".
- 3. The project fails to meet the "feasibility or viability" requirements. The project is speculative and conceptual. The request for a 6 years to start construction should be denied.

Respectfully submitted,

Dave Price 80488 Zerba Road Athena, OR 97813 dprice@wtechlink.us Wheatridge Wind Project Comments to the Umatilla County Planning Commission Aug. 27,2015

1. OAR 345-024-0015

Cumulative Effects Standard for Wind Energy Facilities

The applicant is required to abide by these standards before a site certificate can be issued by EFSC. Transmission lines and substations are considered components of a wind facility. Without them there would be no project. The Special Advisory Group (SAG) is unable to evaluate the project for compliance with "applicable substantive criteria" if the applicant has not produced the transmission routes, substations, and maps of this project in entirety. EFSC must consider the SAG recommendations and the "applicable substantive criteria". Cumulative effects cannot be considered if the project is missing key elements of information. The applicant has failed to meet the Cumulative Effects standard.

The Cumulative Effect standard, section (6), which states: "Using the minimum lighting necessary for safety and security purposes and using techniques to prevent casting glare from the site, except as otherwise required by the Federal Aviation Administration or the Oregon Dept. of Aviation."

The NTSB has issued safety recommendations to the American Wind Energy Assoc. on May 15,2013 in regards to Met Tower and airplane collisions. In addition, NTSB sent a letter to the FAA to amend Part 77 to require marking and registration of all METs and create a nationwide registry.

Our SAG must demand compliance with section (6). The wind industry has been on notice for over 2 years in this matter of aviation safety. Compliance with the already existing Met towers and future possible 12 permanent Met towers is a matter of great concern for pilot safety. The applicant states the possible 12 permanent Met Towers proposed for Wheatridge "may" have lighting installed on an unknown number of them. Before EFSC can grant a site certificate to Wheatridge, the already existing met towers and future ones installed should be required to have FAA approved lighting and be registered nationally.

2. OAR 345-024-0010

Public Health and Safety Standards for Wind Energy Facilities

To issue a site certificate for a proposed wind energy facility, the Council *must* find that the applicant:

(1) Can design, construct and operate the facility to exclude members of the public from close proximity to the turbine blades and electrical equipment.

Planning Commissioners, this includes private citizens who fly, commercial flights, and our Dept of Defense personnel. Radar disruption caused by wind turbines has been well documented by the DOD. The NTSB has investigated fatal collisions between planes, wind turbines and Met towers. Safety of the public should come first-the applicant must take all necessary steps to ensure public safety.

The applicant must demonstrate how it will comply with Public Health and Safety before EFSC can legally grant a site certificate.

Scio-economic Effects

Planning Commissioners, the wind industry as well as land owners who lease their land to the wind companies, report positive impacts that a wind development has on a community. Some of this is true. The wind industry has long asserted that the only leverage that they have is monetary. While a small percentage of the community will gain compensation from a wind project, such as people who lease their land or residents who elect to sign noise easements, the majority of the community do not benefit. Quite the opposite. Neighboring residents bear the burden of an unwelcome wind project. Expressing opposition to a wind project, they are deemed envious of the ability of the land owner who can lease property to the wind industry. The phrase I have heard is: The Haves and The Have Nots. This is a dismissal of legitimate concerns and shows a real ignorance of the facts.

A very good example of this is Shepherds Flat wind project. There were several neighboring land owners that opposed it. They were called

nutcases and were harassed by the participating land owners. The facts that should have been made public was that Shepherds Flat was only 11% investor funded and the remainder was paid for by the American tax payer, which was over \$1 Billion in subsidies. The residents opposing Shepherds Flat were demonized by the wind industry and the participating land owners. However, it was their tax dollars that were paying for the very unwelcome wind project and lining the pockets of the participating land owners. Hardly seems fair.

Any assumption that all neighboring land owners and residents will be in favor of this project and it will benefit them is a dishonest industry ploy.

Property values decrease in the 2 mile footprint of a wind project. Several residents of an unwelcome wind project in their communities have banded together and sued the wind developer for acoustic trespass and diminished quality of life. And this was done on their own dime. The wind developer makes many promises but fails to keep them once non- disclosure agreements have been signed. The last recourse for these folks is the court system. Many have prevailed but are prevented from speaking of it by gag clauses that the wind industry instigates. This shields the industry and deprives the public from learning the facts.

As our current president is putting in place new EPA regulations for reducing our carbon footprint, the wind industry made claim that wind energy reduces carbon emissions. The industry touts wind energy as green and clean.

Fact: wind turbines are made of and manufactured by carbon based energy and materials. Rare earth minerals are mined and shipped from China via carbon based energy sources. The blades are coated with fiberglass and manufactured with carbon based energy sources. Both are highly toxic to the environment.

Fact: turbine parts are transported via ship, railway and truck- all carbon based energy.

Fact: to construct these wind projects, again it uses carbon based energy- cranes, bulldozers, welders, trucks, not to mention all the migrant workers who drive daily to and from the work site.

Fact: wind turbines must rely on an alternate back up power source.

Many use natural gas, again a carbon based energy. Wind is intermittent and will never be a viable stand alone power source. When

the industry claims are examined more closely, they are anything but green and clean.

Show us the independent, scientific data that wind energy reduces our carbon footprint.

The wind industry asserts that we need more wind projects to meet the Renewable Portfolio Standard in the coming future. With Shepherds Flat, the power that is generated there is contracted by Con-Ed for 20 years and is sent to Southern California. How does this benefit Oregonians? Or our RPS requirements? Not at all. The legislature put a stop to exporting renewable energy and RECs after this fiasco. Oregonians paid \$30 Million thanks to the corruption in the Oregon Dept of Energy for Shepherds Flat.

Breaking projects up in separate lots does entitle them to another \$10Million of our dollars. Wheatride east and Wheatridge west is nothing more than one project and is only entitled to \$10 Million in state subsidies. But greed is a great motivator and another \$10 Million of state tax payer dollars is too tempting. The legislature should wise up and close this loophole.

With American tax payers left holding the bag for over \$1Billion in subsidies on Shepherds Flat, how can it possibly generate enough power to pay for itself? The fact is that it cannot. Wind projects are simply an avenue to tax payers \$\$\$\$\$. The name plate capacity stated is not necessarily the amount of power generated. It has been reported some are operating at less than 24% capacity. Private industry and individuals report this. The wind industry does not disclose the actual generation capacity. Nationally wind struggles to supply 2-3% of our power. For what it costs the tax payers it is economically unfeasible. A ponzie scheme that is paid by the tax payer.

A life span of 50 years on the Wheatridge project is unrealistic. The Vansycle Ridge wind project had turbines shake apart in the first year in operation. There were also 2 turbines fires on that 38 turbine project. I would say that that is a very high percentage of fires and mishaps in comparison to the small number of turbines. Many, many more incidents of turbines catching fire, blades flying off, turbines shaking apart, towers falling over have been regularly reported on a nationwide basis.

Planning Commissioners thank you for your diligence and putting the interests of our county and residents to the fore front. Thank you for time.

Cindy Severe 82422 Vansycle Rd Helix, OR 97835



National Transportation Safety Board

Washington, DC 20594

Safety Recommendation

Date: May 15, 2013

In reply refer to: A-13-18 and -19

Mr. Rob Gramlich Interim Chief Executive Officer American Wind Energy Association 1501 M Street, NW Suite 1000 Washington, DC 20005

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant accidents in other modes of transportation—railroad, highway, marine, and pipeline. The NTSB determines the probable cause of the accidents and issues safety recommendations aimed at preventing future accidents. In addition, the NTSB carries out special studies concerning transportation safety and coordinates the resources of the federal government and other organizations to provide assistance to victims and their family members affected by major transportation disasters. We are providing the following information to urge the American Wind Energy Association (AWEA) to take action on the safety recommendations issued in this letter.

This recommendation addresses hazards that meteorological evaluation towers (MET) pose to low-altitude aviation operations. It is derived from the NTSB's investigations of three accidents in which airplanes inadvertently collided with METs, fatally injuring four people. As a result of these investigations, the NTSB has issued six safety recommendations, two of which are addressed to AWEA. Information supporting these recommendations is discussed below.

Accidents

On January 10, 2011, about 1057 Pacific standard time, the left wing of a Rockwell International S-2R, N4977X, impacted an unmarked and unlighted MET during an aerial seed application flight on Webb Tract Island, Oakley, California. Witnesses reported that they did not see the airplane perform any evasive maneuvers before the impact, indicating that the pilot did not see the obstruction. The pilot was fatally injured, and the airplane sustained substantial damage. Visual meteorological conditions prevailed and no flight plan was filed for the 14 *Code of Federal Regulations* (CFR) Part 137 flight. The NTSB's investigation found that the county

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¹ More information about this accident. NTSB case number WPR11LA094, is available at http://www.ntsb.gov/aviationquery/index.aspx.

permit² for the MET had expired more than a year before the accident, but the MET had not been removed as stipulated by the permit's conditions of approval.

On May 19, 2005, about 0944 central daylight time, a turbine-powered Air Tractor AT-602 agricultural airplane, N9017Z, registered to and operated by McAdoo Flying Service. Inc., of Crosbyton, Texas, impacted terrain following an in-flight collision with an unmarked and unlighted MET³ while maneuvering near Ralls, Texas. The commercial pilot, the sole occupant of the airplane, was fatally injured, and the airplane was destroyed. Visual meteorological conditions prevailed throughout the area and a flight plan was not filed for the 14 CFR Part 137 aerial application flight. The local flight originated from Crosbyton Airport, near Crosbyton, Texas. matella Co.

On December 15, 2003, about 1416 Pacific standard time, an Erickson SHA Glasair TD homebuilt aircraft, N434SW, collided with an unmarked and unlighted MET and its wires during an unknown phase of operation about 1 nautical mile north of Vansycle, Oregon. The pilot and passenger sustained fatal injuries, and the airplane was destroyed. Visual meteorological conditions prevailed and a flight plan was not filed. The personal flight originated from Yakima, Washington, about 1345, and its destination was reported to be Walla Walla, Washington.

Discussion

METs can be erected quickly and, depending on their location, without notice to the local aviation community. In March 2011, the NTSB issued a safety alert about METs, noting that the speed with which they can be erected is an important aspect of this safety issue—in just a matter of hours, the navigable airspace for low-flying operations can change without notice. Because their height is typically just under the 200-feet-above-ground-level (AGL) threshold that requires Federal Aviation Administration (FAA) notification, including a marking and lighting plan, METs are often erected without markings or lighting. Because of these factors, pilots have reported difficulty seeing METs from the air (the following figure shows an example MET), which has led to accidents.

² The permit for the MET was issued by Contra Costa County, which specified that the paint colors for the MET blend in with the surroundings and "have a reflectivity less than 55%."

The original accident report referred to the MET as an antenna tower.

⁴ More information about this accident. NTSB case number DFW05LA126. is available at http://www.ntsb.gov/aviationquery/index.aspx.

More information about this accident, NTSB case

number SEA04LA027. is available at

http://www.ntsb.gov/aviationquery/index.aspx.

6 NTSB Safety Alert SA-016 highlights the dangers of METs and provides links to resources where pilots can find additional information: it is available at http://www.ntsb.gov/doclib/safetyalerts/SA 016.pdf.

Title 14 CFR 77.9. "Construction or alteration requiring notice" states, in part, that "If requested by the FAA. or if you propose any of the following types of construction or alteration, you must file notice with the FAA of: (a) Any construction or alteration that is more than 200 ft. AGL at its site,"



Figure. A photograph showing a MET (indicated by the black arrow), as seen from an accident site (NTSB case number WPR11LA094).

Currently, it is unknown how many METs are erected in the United States. Unless notice is required by other provisions in 14 CFR Part 77,8 the FAA does not conduct an aeronautical study of any structure less than 200 feet AGL at its site. On January 5, 2011, acknowledging that METs often fall outside of FAA regulations governing tall structures and their impact on navigable airspace, the FAA published a notice seeking comments on a proposed revision to Advisory Circular (AC) 70/7460-1, "Obstruction Marking and Lighting," that is intended to establish "a uniform and consistent scheme for voluntarily marking" METs less than 200 feet AGL (76 Federal Register 490). In June 2011, the FAA published a policy statement announcing its approval of the recommended guidance (76 Federal Register 36983). According to the FAA, no further action on MET requirements is presently being considered. The NTSB is recommending in a separate letter that the FAA amend Part 77 to require marking and registration of all METs and create a nationwide registry.

⁸ In addition to height considerations, section 77.9 requires that notice for proposed structures be filed with the FAA based on proximity to an airport, location, and frequencies emitted from the structure.

Recognizing that revising regulations can be a protracted undertaking, the NTSB is interested in actions other stakeholders, such as AWEA, can take to address this safety issue. AWEA's *Wind Energy Siting Handbook* contains a section in chapter 4 that briefly outlines aviation considerations involved with a wind energy development project, including required FAA notifications. It also references AC 70/7460-1. However, wind turbines are the handbook's focus and METs are not discussed much beyond their role in a project. The NTSB believes that AWEA can help increase awareness among its membership about the potential aviation hazards of METs by revising the handbook to mention their lack of visibility for low-altitude operations and encourage voluntary marking using AC 70/7460-1 as guidance. The NTSB also believes that AWEA should inform all members about this safety issue.

Therefore, the National Transportation Safety Board makes the following recommendations to the American Wind Energy Association:

Revise the *Wind Energy Siting Handbook* to clearly indicate the hazards that meteorological evaluation towers (MET) pose to low-altitude aviation operations and encourage voluntarily marking them to increase their visibility by reference to Advisory Circular 70/7460-1, "Obstruction Marking and Lighting." (A-13-18)

Inform your members about the circumstances of the airplane accidents that have occurred in connection with the presence of meteorological evaluation towers (MET) and emphasize the importance of understanding the aviation safety hazards associated with METs when erecting them. (A-13-19)

The NTSB also issued two safety recommendations to the FAA: one recommendation to the Department of the Interior, the Department of Agriculture, and the Department of Defense; and one recommendation to the governors of 50 US states and territories and the District of Columbia. In response to the recommendations in this letter, please refer to Safety Recommendations A-13-18 and -19. We encourage you to submit updates electronically at the following e-mail address: correspondence@ntsb.gov. If your response includes attachments that exceed 10 megabytes, please e-mail us at the same address for instructions. To avoid confusion, please do not submit both an electronic copy and a hard copy of the same response.

Chairman HERSMAN, Vice Chairman HART, and Members SUMWALT, ROSEKIND, and WEENER concurred in these recommendations.

By: Deborah A.P. Hersman, Chairman



Wind Farms Disrupting Radar, Scientists Say

Published Nevember 05, 2011 : FoxNews.com

This one's really off the radar.

Wind farms, along with solar power and other alternative energy sources, are supposed to produce the energy of tomorrow. Evidence indicates that their countiess whirring fan blades produce something else: "blank spots" that distort radar readings.

Now government agencies that depend on redar -- such as the Department of Defense and the National Weather Service -- are spending millions in a scramble to preserve their detection capabilities. A four-star Air Force general recently spelled out the problem to Dave Belote, the director of the Department of Defense's Energy Siting Clearinghouse.

"Look there's a rader here -- one of our network of Homeland surveillance radars -- and [if you build this wind farm] you essentially are going to put my eyes out in the Northwestern comer of the United States," Beloite related during a web conference in April.

Spinning wind turbines make it hard to detect incoming planes. To avoid that problem, military officials have blocked wind farm construction near their radars - and in some cases later allowed them after politicians protested.

Shepherd's Flat, a wind farm under construction in Oregon, was initially held up by a government notice that the farm would "seriously impair the ability of the (DoD) to detect, monitor and safely conduct air operations."

Then Oregon's senators got involved.

"The Department of Defense's earlier decision threatened to drop a bomb on job creation in Central Oregon," democratic Senator Ron Wyden noted in a press release.

Beloite told FoxNews.com that the project was given the green light by the military only after scientists at MiT's Lincoln Laboratory assured the Department of Defense "that there were algorithms and processors they could design for not too much money that would mitigate the problem."

Beloite said that the MIT technology has proven successful in the last few months.

"[The problem] has been addressed. And I have a letter from the deputy director of operations from U.S. NORAD that says 'step one of the two-step fix worked so well that we recommend we don't spend any more money on step two."

The fix the MIT scientists came up with tells the radar not to pay attention to signals in a very small area.

'You just tell the radar processor, 'you're going to have clutter here. Don't display it.' You create a liny blank spot [in the redar map] directly above the turbine," Beloite told FoxNews.com.

n addition to the cost of the radar development, taxpayers are on the hook for more than \$1 billion in subsidies for the construction of the Shepherd's Flat wind farm, according to a 2010 memo from Larry Summers and two other White House economic advisors.

The fix for military radar doesn't work so well for weather forecasters, however.

It's a lot easier to filter out interference for aviation," Ed Clardi, a meteorologist at the National Weather Service Radar Operations Jenter in Norman, Okla., told FoxNews.com. "The real problem is when rain and the wind turbines are mixed together (on the radar nap.] And it's all confusing... sometimes [forecasters] throw up their hands and say, 'who knows?"

When the situation is unclear, Clardi said, "they'll play it safe and maybe extend a warning."

liardi said there have been occasional false alarms due to wind farm interference, but the Weather Service hasn't failed to issue ny storm wamings yet.

We're more worried about the future ... we've seen quite a few proposals for wind farms around our radars. And we have been ... ying to convince them to stay a good distance away," he said.

ne strategy is to ask wind farm owners to turn off the propellers during storms. Another is to convince them to install devices that seasure wind speeds and rainfall, so that there would no longer be much need for radar there.

I all comes down to money and who's going to pay for it," he noted.

eanwhile, top radar scientists are working on developing a fix that works for weather radar.

s slow progress, and they say it's extremely difficult - that they need more money and more time. The solution, I would say, is obably five years down the road," Clardi said.

Re: COMMENTS REGARDING WHEATRIDGE APPLICATION

Currently identified issues of concern:

1. The applicant understates the impacts of the development by excluding significant parts of the development from the application.

The application has stated that since the utility will be developing the transmission line, it is not included in the application.

According to the definition of an energy development contained in the statutes, the grid Interconnection must be included as part of project. The statutes define "related or supporting facilities" as those proposed by applicant to be constructed or substantially modified in connection with construction of an energy facility. During the public information meeting held on August 11, 2014, representatives from the developer stated that they have been involved in ongoing discussions with the utilities regarding the lines to connect to the grid. They also stated that they have been negotiating with the landowners who would be impacted by one of the two potential interconnection routes. To remove the transmission lines connecting to the grid from the cite certificate process, the developer must document that they have not been involved in proposing either the development or substantial modifications to the lines to accommodate the wind development.

The burden of proof falls on the developer to document compliance with these site certificate rules. In order to accept the application as it has been submitted, the developer must provide documentation from the utilities that the line will go in regardless of whether or not the proposed wind farm is built, and that the developer has not been involved with or provided recommendations regarding the route the line will take, the configuration or voltage the line will carry or other details. It is clear that the conditions cannot be met which would allow the developer to separate the development of the transmission line(s) from the rest of the wind development.

A second example of the understating of impacts is the fact that the applicant defines the site boundary as only including the siting corridors. Other applications show the site boundary as including the entire area

within which the siting corridors are located. Using only the siting corridors ignores the indirect impacts of the development as a whole on the habitat and environment. Absent a change in the statute, the definition of the site boundary needs to be consistent with that which has been used for multiple other developments for many years. By ignoring the current interpretation of what constitutes the site boundary, the applicant is understating the acres of land impacted, reducing the analysis area resulting in understating the impacts, making it impossible to accurately assess cumulative impacts, misleading the public regarding the area of land impacted, and failing to identify critical habitat such as wetlands that may be damaged by indirect impacts such as sediment deposits carried from the area of the development. In addition, no reasonable person would be willing to guarantee that all traffic from the development will remain within the siting corridors which would require back-tracking multiple times and that no traffic from the development will cut across the area between turbine strings. Much of this area has not been surveyed due to a failure on the part of the developer to include the area between turbine strings in the site boundary. This will result in putting at risk an unknown quantity of resources that may be impacted by any activity occurring outside the siting corridors which in some instances are as narrow as 200 feet.

2. The developer is attempting to site two developments which are clearly separate from one another under one site certificate. This applicant is claiming that a development which requires a 30 mile transmission line to connect two distinctly different areas and for which the period for the start and completion timeframes requested are 3 years longer than any previously sited wind development can be one development sited under one site certificate. This development must be submitted under at least two different cite certificates, if not more. A review of the reasons the Department of Energy and the Energy Facility Siting Counsel determined that three site certificates were required for Shepherd Flat provides documentation regarding the interpretations being applied to the decisions regarding whether or not a wind development should be sited under one or more than one site certificates. Contrary to the statements of the developer, there appears to be no other development in Oregon which has been sited under one site certificate under the conditions the developer describes.

- 3. A third issue is the failure of the applicant to do any wildlife monitoring of the wetlands or riparian areas surrounding the wetlands. These areas are critical to multiple species of wildlife and become even more important when located in arid areas such as the one being proposed by this developer.
- 4. There is a lack of information indicating that the developer has completed an assessment of the cumulative impacts of this development in combination with the existing wind developments on wildlife and resources of the state. Given the multiple developments which have been approved, and the reduced numbers of golden eagles, Washington Gound Squirrels, bats and other species being impacted by the addition of wind developments to the already existing population impacts, this is a critical issue to be considered as part of the citing process and is a requirement of the statutes.

You are encouraged to recommend against approval of the site certificate for Wheatridge Wind Development under the current application and absent addressing the above issues and updating the application(s) to reflect those changes prior to considering issuing cite certificate(s).

Sincerely,

Irene Gilbert, Legal Research Analyst Friends of the Grande Ronde Valley 2310 Adams Ave.

La Grande, Oregon 97850

e-mail: ott.irene@frontier.com

Phone:541-963-8160You

WildBlue Webmail

severe@wildblue.net

2letters for UCPC 8-27-15 meeting

From: Judy Price <beborn2x@wtechlink.us> Thu, Aug 27, 2015 12:28 AM

Subject: 2letters for UCPC 8-27-15 meeting

To: tamra mabbot

<tamra.mabbot@umatillacounty.net>

Please enter Tom Price's concerns in the record for the UCPC Meeting on August 27, 2015

OAR 345-024-0015

Cumulative Effects Standard for Wind Energy Facilities

The applicant is required to abide by these standards before a site certificate can be issued by EFSC. Transmission lines and substations are considered components of a wind facility. The definition of a "Project" as defined in ORS 469.300 (14) and (24) includes transmission and substations as a part of the project. The Special Advisory Group (SAG) cannot evaluate the project without the project presented in it's entirety. Cumulative effects, also, cannot be assessed without full disclosure of transmission routes, substations, and maps of all impacted areas. None of which have been provided to the SAG for inspection. The SAG cannot evaluate the current project in regards to "applicable substantive criteria".

Tom D. Price Price Cattle Co

Please enter Judy Price's concerns in the record for the UCPC Meeting on August 27, 2015.

OAR 345-024-0015

Cumulative Effects Standard for Wind Energy Facilities

It is not possible for the Special Advisory Group (SAG) to thoroughly evaluate a project without all of the components identified. Area maps impacted by the project, substations, transmission lines, etc., are components of the whole and necessary to evaluate the current project without negligence or omissions on the part of SAG.

Judy E Price Price Cattle Co.

Sent from my iPhone

Wheatridge Application for Site Certificate Selected Statutes and Administrative Rules

ORS 469.300

- (11)(a) "Energy facility" means any of the following:
- (A) An electric power generating plant with a nominal electric generating capacity of 25 megawatts or more, including but not limited to:
 - (i) Thermal power;
 - (ii) Combustion turbine power plant; or
 - (iii) Solar thermal power plant.
 - (B) A nuclear installation as defined in this section.
- (C) A high voltage transmission line of more than 10 miles in length with a capacity of 230,000 volts or more to be constructed in more than one city or county in this state, but excluding:
- (i) Lines proposed for construction entirely within 500 feet of an existing corridor occupied by high voltage transmission lines with a capacity of 230,000 volts or more; and
- (ii) Lines of 57,000 volts or more that are rebuilt and upgraded to 230,000 volts along the same right of way.
- (24) "Related or supporting facilities" means any structure, proposed by the applicant, to be constructed or substantially modified in connection with the construction of an energy facility, including associated transmission lines, reservoirs, storage facilities, intake structures, road and rail access, pipelines, barge basins, office or public buildings, and commercial and industrial structures. "Related or supporting facilities" does not include geothermal or underground gas storage reservoirs, production, injection or monitoring wells or wellhead equipment or pumps.

OAR 345-001-0010

(51) "Related or supporting facilities" as defined in ORS 469.300. The Council interprets the terms "proposed to be built in connection with" as meaning that a structure is a related or supporting facility if it would not be built but for construction or operation of the energy facility. "Related or supporting facilities" does not include any structure existing prior to construction of the energy facility, unless such structure must be significantly modified solely to serve the energy facility.

OAR 345-021-0010

[An application for a site certificate shall contain:]

- (b) Exhibit B. Information about the proposed facility, construction schedule and temporary disturbances of the site, including: \hat{y}_{i_0}
 - (B) A description of major components, structures and systems of each related or supporting facility.
 - (C) The approximate dimensions of major facility structures and visible features.

(D) If the proposed energy facility is a pipeline or a transmission line or has, as a related or supporting facility, a transmission line or pipeline that, by itself, is an energy facility under the definition in ORS 469.300, a corridor selection assessment explaining how the applicant selected the corridor(s) for analysis in the application. In the assessment, the applicant shall evaluate the corridor adjustments the Department has described in the project order, if any. The applicant may select any corridor for analysis in the application and may select more than one corridor. However, if the applicant selects a new corridor, then the applicant must explain why the applicant did not present the new corridor for comment at an informational meeting under OAR 345-015-0130. In the assessment, the applicant shall discuss the reasons for selecting the corridor(s), based upon evaluation of the following factors:

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(iv) Least percentage of the total length of the pipeline or transmission line that would be located within lands that require zone changes, variances or exceptions.

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(vii) Greatest percentage of the total length of the pipeline or transmission line that would be located to avoid seismic, geological and soils hazards.

(viii) Least percentage of the total length of the pipeline or transmission line that would be located within lands zoned for exclusive farm use.



March 28, 2011

Mr. Thomas Stoops Energy Facility Siting Manager Oregon Department of Energy 625 Marion Street NE Salem, OR 97301-3737

Re: Confirmation on Morrow County Jurisdiction for 2 Morrow Energy Project

Dear Mr. Stoops

2 Morrow Energy is in the process of planning a 1012 MW wind farm in Morrow County. As part of the project, Umatilla Electric Cooperative (UEC) is planning a 230 KV transmission line to connect the project's collector substation to a new BPA 500KV/230KV substation at the Port of Morrow.

The potential routes of this line are wholly within a single jurisdiction, Morrow County. The length of the line is approximately 26 miles. The route follows an existing 69 KV BPA line for the majority, but not all, of the route.

UEC is requesting confirmation that that Morrow County has jurisdiction for the permitting process.

Thank you for your help on this project. If you need any other information, please call me at (541) 564-4348.

Sincerely;

David Gottula, P.E.

c.c. Ms. Carla McLane, Morrow County

Phone: (541) 567-6414

Fax: (541) 567-8142

Toll Free: 800-452-2273





625 Marion St. NE Salem, OR 97301-3737 Phone: (503) 378-4040 Toll Free: 1-800-221-8035 FAX: (503) 373-7806

www.Oregon.gov/ENERGY

March 30, 2011

David Gottula, P.E. Umatilla Electric Cooperative 750 Elm Street PO Box 1148 Hermiston, OR 97838

Re: Request to Define Jurisdiction on a Transmission Line

Dear Mr. Gottula,

We have reviewed your letter of March 3, 2011 regarding the construction of a transmission line approximately 26 miles in length, in Morrow County, following an existing BPA 69kV transmission route. We offer the following analysis of the information presented.

To assist the analysis, we offer the following information;

ORS 469.300(11)(a)"Energy facility" means any of the following:

(C) A high voltage transmission line of more than 10 miles in length with a capacity of 230,000 volts or more to be constructed in more than one city or county in this state, but excluding:

- (i) Lines proposed for construction entirely within 500 feet of an existing corridor occupied by high voltage transmission lines with a capacity of 230,000 volts or more; and
- (ii) Lines of 57,000 volts or more that are rebuilt and upgraded to 230,000 volts along the same right of way.

Based on this definition, the electrical transmission line that you propose is not an Energy Facility Siting Council jurisdictional due to it being located solely within Morrow County. We understand that this facility will be built to integrate wind facilities planned for Morrow County. Thus, we have also reviewed the definition of "Related and supporting facilities," ORS 469.300(24). A related and supporting facility is "any structure, proposed by the applicant, to be constructed or substantially modified in connection with the construction of an energy facility, including associated transmission lines, reservoirs, storage facilities, intake structures, road and rail access, pipelines, barge basins, office or public buildings, and commercial and industrial structures." However, because Umatilla Electric is not proposing to construct a generating facility in conjunction with this line, the proposed project is not a related and supporting facility. As such, we concur with your conclusion that the project proposed by Umatilla Electric would be appropriately sited under the Morrow County Comprehensive Land Use Plan.

Thank you for the question, and let me know if you have additional concerns.

Thomas M. Stoops

Respectfully

Energy Facility Siting Division Administrator



August 24, 2015

Umatilla County Board of Commissioners 216 SE 4th St. Room #121 Pendleton, OR 97801

Dear Commissioners Murdock, Givens and Elfering,

Please find attached, a letter we sent to our UEC Members in the Echo area concerning the Wheatridge Wind Project. The letter is in response to UEC Member concerns about transmission lines which, according to a Umatilla County mailing, asserted that UEC was proposing in their area. Since UEC is not proposing any transmission line in the area, we believed that the matter needed clarification. Late on Thursday, August 20, we spoke with Vice-Chair Larry Givens. Vice-Chair Givens asked UEC to correspond with the County Commissioners reiterating its position.

UEC is dedicated to the growth and development of Umatilla and Morrow Counties. With regard to electric generation development and associated transmission lines, UEC believes that the following principles should help form the policy of counties and the State of Oregon:

- 1) Transmission lines should be owned, operated and maintained by electric utilities. From a public safety and reliability standpoint, utilities are required to construct and operate power lines within national, state and local standards; utilities are required to have qualified personnel to work on and around power lines; utilities are required to provide service 24 hours a day, 365 days a year. Non-Utility transmission owners are not likely to meet these same requirements.
- 2) Counties, at their option, should designate transmission corridors through their county, with the collaboration of neighboring counties.
- 3) New transmission lines should use existing transmission rights of way or expand existing transmission rights of way to meet additional needs. Following this principle lessens the accumulative effects of new transmission lines and is far more likely to be done when these transmission lines are owned and operated by utilities.
- 4) Transmission line routes should, to the extent possible, be based on consensus with affected landowners, developers, utilities and counties (local jurisdictions).

750 W. Elm Avenue • PO Box 1148 • Hermiston OR 97838



The western terminal end of the Boardman to Hemingway (B2H) Transmission Line, is an example which meets these principles. All transmission lines along the Bombing Range Road to the BPA Longhorn Substation, east of the Port of Morrow, will be utility owned, operated and maintained; and existing transmission rights of way are utilized. This collaborative compromise allows the addition of B2H and potential wind development transmission lines to two existing transmission lines owned by UEC and BPA respectively. This transmission corridor is now supported by the Landowners, Morrow County, serving utilities and developers. It is our hope that Umatilla County will endorse and support the B2H compromise and will continue to look for similar opportunities within Umatilla County.

Sincerely,

M. Steven Eldrige

General Manager & CEO

M. Stewer Eldrige

MSE/kw

Enclosures

750 W. Elm Avenue • PO Box 1148 • Hermiston OR 97838



August 20, 2015

Member Name Member Address City, State Zip

Dear << Member>>,

You may have received the enclosed mailings from Umatilla County, convening a meeting August 27, 2015, 6:30 p.m. in Pendleton. One of the agenda items is titled, "Wheatridge Wind Energy Facility". A map was included titled, "Wheatridge/Service Buttes Wind Project, Umatilla County; UEC Transmission Lines Proposed Routes" and in the legend of this map are proposed transmission lines identified as "UEC Proposed T-Line Route (A) & (B).

As Members of UEC, please be assured that Umatilla Electric Cooperative will not impinge on your property without discussions with you first.

As to the notice you received, several clarifications are in order.

- 1. Over a year ago, a consultant was hired to conceptualize paths from south Umatilla County to north of Stanfield. The consultants work did not result in any proposed line routes.
- 2. UEC's consultant purchased county files and information as part of their work and shared broad conceptualized paths with the county to aide in their information response, but otherwise did not provide map information to the County.
- 3. Umatilla Electric has not requested a conditional use permit from Umatilla County for the lines shown on the enclosed map or for any routes whatsoever in the area.
- 4. In UEC's opinion, it is highly unlikely that a Wheatridge Wind Project will traverse Umatilla County south to north. In fact, unless the BPA Longhorn Substation just east of Boardman is not built, the transmission line from Wheatridge Wind will go to the Longhorn Substation, near Boardman.

750 W. Elm Avenue PO Box 1148 Hermiston OR 97838



We want to re-emphasize that Umatilla Electric Cooperative will not affect your property without speaking with you first. Umatilla Electric has not proposed any transmission lines in the area or as depicted on the map.

Sincerely,

M. Steve Eldrige

General Manager & CEO

M. Steven Eldrige

MSE/kw

Enclosures

750 W. Elm Avenue PO Box 1148 • Hermiston OR 97838

Umatilla County

Department of Land Use Planning



AGENDA

Umatilla County Planning Commission Public Hearing Thursday, August 27, 2015, 6:30 p.m. Justice Center Media Room Pendleton, OR

Members of Planning Commission Randy Randall, Chair Gary Rhinhart, Vice-Chair Tammie Williams Don Wysocki David Lee Don Marlatt Suni Danforth Cecil Thorne

Members of Planning Staff Tamra Mabbott, Planning Director Carol Johnson, Senior Planner Bob Waldher, Senior Planner Brandon Seitz, Assistant Planner Julie Alford, GIS Gina Miller, Code Enforcement

- 1. Call to order
- 2. Adopt minutes (April, June and July 2015)
- 3. New Hearing:

REQUEST FOR A PUBLIC HEARING FOR LAND USE DECISION #LUD-185-15, BLUE MOUNTAIN CHRISTIAN FELLOWSHIP, applicant/property owners. During the public comment period, a "Request for a Public Hearing" was submitted on July 27, 2015. The request is to develop an 80 foot by 80 foot cemetery on church-owned property. The area of the Blue Mountain Christian Fellowship property proposed for the cemetery is located on the south side of Sunguist Road (County Road No. 512) at the northeast corner of Tax Lot #1100, in Township 6N, Range 35E, Section 21A. The situs address for this property is 52322 Sunguist Road, Milton Freewater, OR 97802, Criteria of approval are found in Umatilla County Development Code 152.059 (B), 152.617 (II).

4. New Hearing:

WHEATRIDGE WIND ENERGY FACILITY: Planning Commission will review the Wheatridge Wind Energy, LLC Application for Site Certificate (ASC) submitted to the Oregon Department of Energy, Energy Facility Siting Council (EFSC). Planning Commission will focus their attention on Exhibit K of the ASC but may consider all relevant issues. Planning Commission role is to make a recommendation to the Board of Commissioners who will submit comments to EFSC.

- 5. New Business: Land Use legislation update by Tamra Mabbott and Carol Johnson.
- 6. Adjournment

Next Scheduled Meeting:

Thursday, September 24, 2015, 6:30 p.m., Justice Center Media Room, Pendleton, OR.

Umatilla County

Department of Land Use Planning



DIRECTOR TAMRA MABBOTT

MEMO

August 18, 2015

LAND USE PLANNING, ZONING AND PERMITTING

CODE

TO:

Planning Commission

FROM:

Tamra J. Mabbott, Planning Director

CC:

Doug Olsen, County Counsel

Interested Parties

SUBJECT:

Public Comments for Wheatridge Wind Energy, LLC

August 27, 2015 meeting

SMOKE MANAGEMENT

ENFORCEMENT

SOLID WASTE

COMMITTEE

GIS AND MAPPING

RURAL ADDRESSING

LIAISON, NATURAL RESOURCES & ENVIRONMENT The Wheatridge Wind Energy Project is under permitting jurisdiction of the Oregon Energy Facility Siting Council (EFSC). As part of that process, the County Board of Commissioner's is appointed as Special Advisory Group (SAG) to EFSC. In that capacity, the Board has requested the Planning Commission review the project application and, host a public hearing forum for public comment.

That public hearing is scheduled during your meeting on August 27, 2015. This will be the second hearing on the agenda that evening. To begin, staff will present an overview of the land use issues, along with attorney Wendie Kellington, whom the county has retained to assist with the land use legal analysis. Staff and Ms. Kellington will then answer questions of the commission. Next the Commission Chair will open the meeting to hear comments and testimony from the public. Planning Commission can then advise staff on how to proceed with comments for the Board of Commissioners consideration.

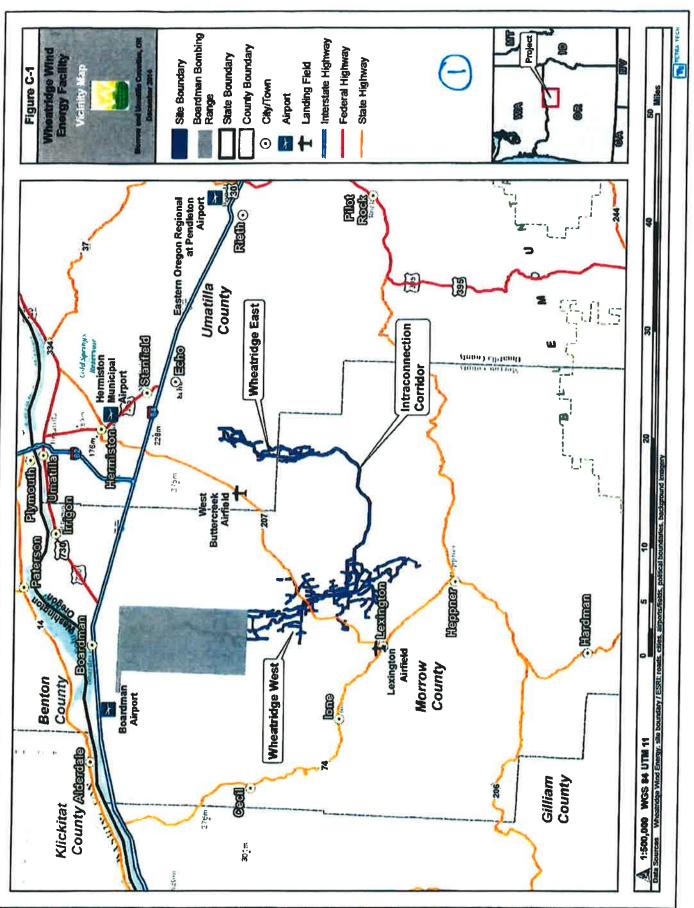
To assist in your review, portions of the Wheatridge application is attached. See portions of Exhibit B Project Description and Exhibit K Land Use. The entire application can be viewed on the Oregon Department of Energy Website, as follows: http://www.oregon.gov/energy/Siting/Pages/Facilities.aspx

On Page 1 of Exhibit K, the applicant writes "the project complies with the majority of the applicable local substantive criteria from the comprehensive plans and zoning codes" for the jurisdictions in which the Project is located." Staff and counsel presentation will focus on the portions of the application that do not appear to comply with the local applicable land use criteria.

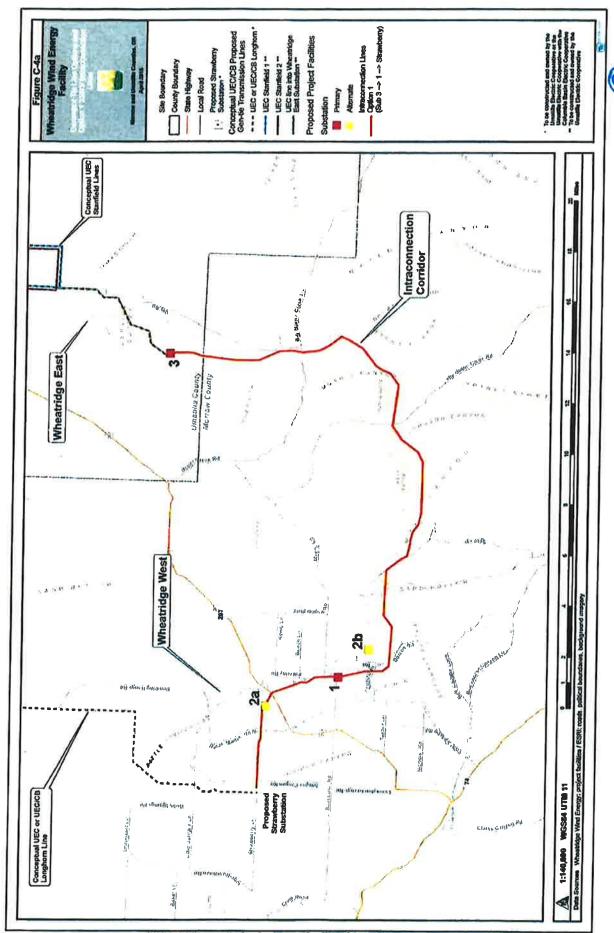
Consistent with our standard procedure, this Planning Commission packet will be posted to the county website by close of business 7 days prior to the public hearing, or August 20, 2015.

Table of Contents - Review of Wheatridge Wind Energy, LLC

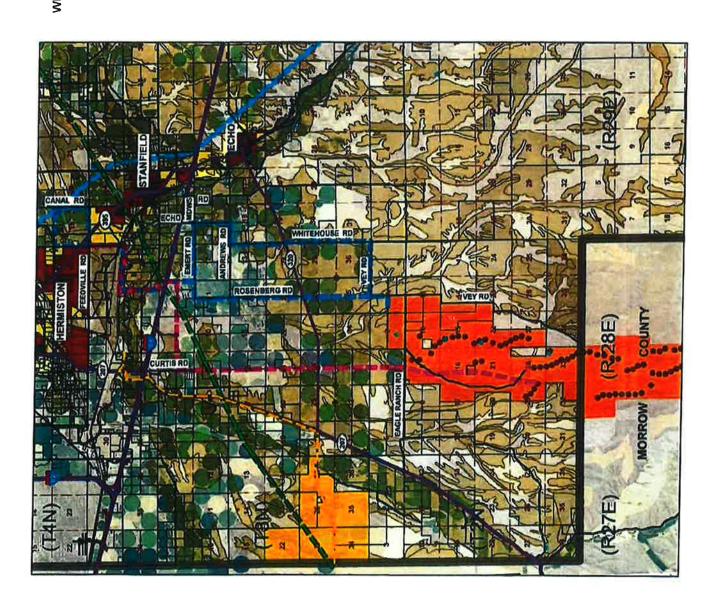
- 1. Map Figure C-1 Vicinity Map
- 2. Map Figure C-4a Generator Tie Line Options and Option 1 Intraconnection Lines
- 3. Map August 14, 2015 county map of proposed transmission line routes in Umatilla County
- 4. July 28, 2015 county memo with landowner verification
- 5. Memo and exhibits from Attorney Wendie Kellington
- 6. ASC Exhibit B, Project Description (excluding maps)
- 7. ASC Exhibit K, Land Use (excluding maps)
- 8. ODOE Facility Siting Process stages



PICIS_PROJECTS/Whealidgo_Wind_Energy_LLC/WhealidgoWXUs/PASCiaxCi/WWF_Whealidgo_PASC_Fig_C01_Noring/Map_85i11_20141110 mxd - Last Saved 11/10/2014







Wheatridge/Service Buttes Wind Project, Umatilla County UEC Transmission Line Proposed Routes

Legend

State Highways
Public Roads

■ UEC Proposed T-line Route (A)

UEC Proposed T-line Route (B)

Service Buttes Project Area

Proposed Turbines

Proposed NEO Hub Substation

Met Towers

BPA Easement

Gas Pipeline

Oregon Windfarms Property

Oregon Windfarms T-line

City Limits

Urban Growth Boundary

Property Boundaries

2014 Aerial Photography



DATE: 8/14/15

MAP DISCLAMER. No warranty at made by Umailia County as to the accuracy relability or completeness of this data. Parcels data shoulde used for betterforce purposes only volunteded for legal use. Created by J. Altord, Umailia County Pranning Department 8/6/15

e/planning/projects/UEC_WheatridgeServiceButtes_Times_sections gms

David Petrsn, Attriney, Tonkin, Torp

Wheatridge Application for Site Certificate Selected Statutes and Administrative Rules

ORS 469.300

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OAR 345-001-0010

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OAR 345-021-0010

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March 28, 2011

Mr. Thomas Stoops Energy Facility Siting Manager Oregon Department of Energy 625 Marion Street NE Salem, OR 97301-3737

Re: Confirmation on Morrow County Jurisdiction for 2 Morrow Energy Project

Dear Mr. Stoops

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Sincerely;

David Gottula, P.E.

c.c. Ms. Carla McLane, Morrow County

750 W Elm Street • PO Box 1148 • Hermiston OR 97838





625 Marion St. NE Salem, OR 97301-3737 Phone: (503) 378-4040 Toll Free: 1-800-221-8035 FAX: (503) 373-7806 www.Oregon.gov/ENERGY

March 30, 2011

David Gottula, P.E. Umatilla Electric Cooperative 750 Elm Street PO Box 1148 Hermiston, OR 97838

Re: Request to Define Jurisdiction on a Transmission Line

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Thank you for the question, and let me know if you have additional concerns.

Thomas M. Stoops

Energy Facility Siting Division Administrator

Umatilla County

Pepartment of Land Use Planning



Umatilla County Planning Commission Public Hearing Thursday, August 27, 2015, 6:30 p.m. Justice Center Media Room Pendleton, OR

Members of Planning Commission

Randy Randall, Chair
Gary Rhinhart, Vice-Chair
Tammie Williams
Don Wysocki
David Lee
Don Marlatt
Suni Danforth
Cecil Thorne

Members of Planning Staff
Tamra Mabbott, Planning Director
Carol Johnson, Senior Planner
Bob Waldher, Senior Planner
Brandon Seitz, Assistant Planner
Julie Alford, GIS
Gina Miller, Code Enforcement

- 1. Call to order
- **2.** Adopt minutes (April, June and July 2015)
- 3. New Hearing:

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216 S.E. 4th Street • Pendleton, OR 97801 • Ph: 541-278-6252 • Fax: 541-278-5480

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- 6. Adjournment

Next Scheduled Meeting:

Thursday, September 24, 2015, 6:30 p.m., Justice Center Media Room, Pendleton, OR.

Umatilla County

Department of Land Use Planning



DIRECTOR **TAMRA** MABBOTT

MEMO

August 18, 2015

LAND USE PLANNING. **ZONING AND PERMITTING**

CODE

TO:

Planning Commission

FROM:

Tamra J. Mabbott, Planning Director

CC:

Doug Olsen, County Counsel

Interested Parties

SUBJECT:

Public Comments for Wheatridge Wind Energy, LLC

August 27, 2015 meeting

SOLID WASTE COMMITTEE

ENFORCEMENT

SMOKE MANAGEMENT

GIS AND MAPPING

RURAL. ADDRESSING

LIAISON, NATURAL RESOURCES & **ENVIRONMENT**

The Wheatridge Wind Energy Project is under permitting jurisdiction of the Oregon Energy Facility Siting Council (EFSC). As part of that process, the County Board of Commissioner's is appointed as Special Advisory Group (SAG) to EFSC. In that capacity, the Board has requested the Planning Commission review the project application and, host a public hearing forum for public comment.

That public hearing is scheduled during your meeting on August 27, 2015. This will be the second hearing on the agenda that evening. To begin, staff will present an overview of the land use issues, along with attorney Wendie Kellington, whom the county has retained to assist with the land use legal analysis. Staff and Ms. Kellington will then answer questions of the commission. Next the Commission Chair will open the meeting to hear comments and testimony from the public. Planning Commission can then advise staff on how to proceed with comments for the Board of Commissioners consideration.

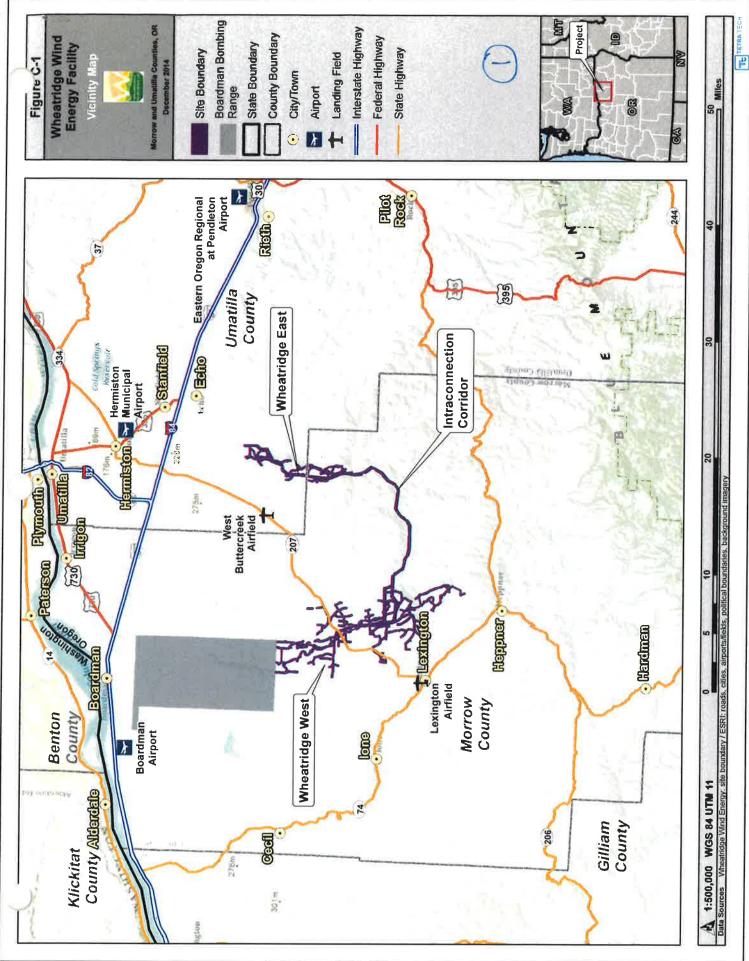
To assist in your review, portions of the Wheatridge application is attached. See portions of Exhibit B Project Description and Exhibit K Land Use. The entire application can be viewed on the Oregon Department of Energy Website, as follows: http://www.oregon.gov/energy/Siting/Pages/Facilities.aspx

On Page 1 of Exhibit K, the applicant writes "the project complies with the majority of the applicable local substantive criteria from the comprehensive plans and zoning codes" for the jurisdictions in which the Project is located." Staff and counsel presentation will focus on the portions of the application that do not appear to comply with the local applicable land use criteria.

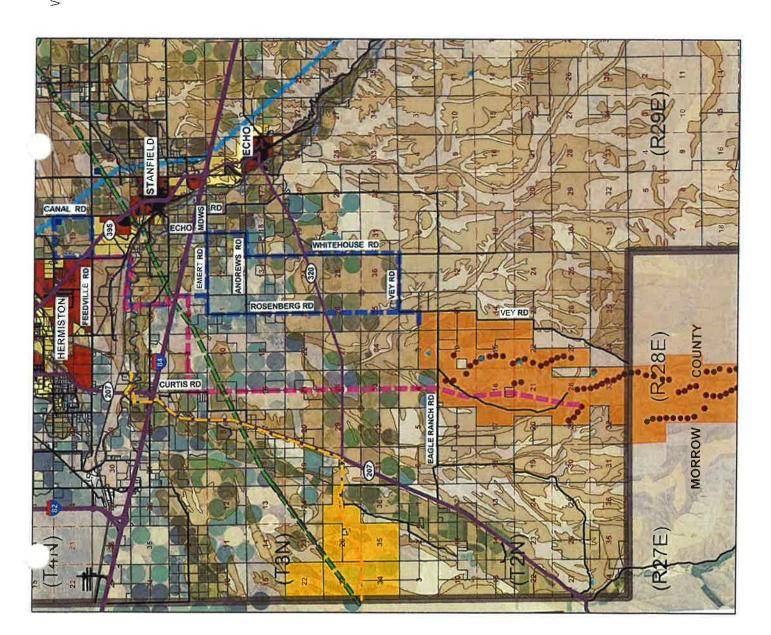
Consistent with our standard procedure, this Planning Commission packet will be posted to the county website by close of business 7 days prior to the public hearing, or August 20, 2015.

Table of Contents - Review of Wheatridge Wind Energy, LLC

- 1. Map Figure C-1 Vicinity Map
- 2. Map Figure C-4a Generator Tie Line Options and Option 1 Intraconnection Lines
- 3. Map August 14, 2015 county map of proposed transmission line routes in Umatilla County
- 4. July 28, 2015 county memo with landowner verification
- 5. Memo and exhibits from Attorney Wendie Kellington
- 6. ASC Exhibit B, Project Description (excluding maps)
- 7. ASC Exhibit K, Land Use (excluding maps)
- 8. ODOE Facility Siting Process stages

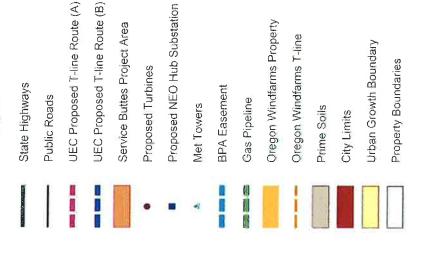






Wheatridge/Service Buttes Wind Project, Umatilla County, **UEC Transmission Line Proposed Routes**

Legend



2014 Aerial Photography



DATE: 8/14/15

yworkspace/plannog/projects/UEC_WhaaindgaSorvicaButtes_Tines_sections.gw MAP DISCLAIMER: No warranty is made by Umatilia County as to the uccuracy testability or completionness of this Catal. Parted talts should be used for reference purposes only. Not intended for legal use. Created by J. Afford, Umatilia County Planning Department 8/8/15

Umatilla County

artment of Land Use Planning



DIRECTOR TAMRA MARBOTT

LAND USE PLANNING, ZONING AND PERMITTING

CODE ENFORCEMENT

SOLID WASTE COMMITTEE

SMOKE MANAGEMENT

GIS AND MAPPING

RURAL ADDRESSING

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MEMO

DATE:

July 28, 2015

TO:

Tamra Mabbott, Planning Director

FROM:

Brandon Seitz, Assistant Planner 35

SUBJECT:

Wheatridge Wind Exhibit F – Landowner Verification

I conducted the following review to verify landowners listed in exhibit F, adjacent property owners name and addresses:

- 1. Created a 500 foot buffer around the project area in ARC using the most recent Umatilla County tax lot maps to create a current list of landowners using Umatilla County data.
- 2. Compared the list of tax lots to the list found on the ODOE website for landowners within 500 feet. Found both list matched.
- 3. Reviewed landowner names and addresses in the county system to Wheatridge's listing. I found one discrepancy Map 2N20 #2500 has been sold. The current owner is shown on the attached list and is also shown on the list as an owner of another property.
- 4. Reviewed the landowner names and addresses for a list created by Julie Alford, planning cartography, for property owners within 100 feet the proposed Umatilla Electric Cooperative transmission line. Reviewed and corrected all landowner names and mailing addresses to match our current information.

Attached: Wheatridge Landowners;

Properties Within 100' of Wheatridge/Service Buttes Final T-line Proposal

ZIP 97826 97826 97826 97826 97826 97826 97826 97826 97826-9019 97826-9019 97826-9014 97826-9044 97826-9044	97826-9044 97826-9001 97826-9044 97826-9044 97801 97801 97826 97208 97826 97826 97826
STATE STATE STATE OR OR OR OR OR OR OR OR OR O	8
M_CITY ECHO ECHO ECHO ECHO ECHO ECHO ECHO ECHO	ECHO ECHO ECHO ECHO ECHO PENDLETON PENDLETON ECHO PORTLAND ECHO ECHO
M_ADDRESS 33263 OREGON TRAIL RD 32327 OREGON TRAIL RD 59285 SCHILLER DR 32327 OREGON TRAIL RD 522 S HIGHWAY 207 73120 HIGHWAY 207 73120 HIGHWAY 207 73120 HIGHWAY 207 73120 HIGHWAY 207 69958 SCHILLER DR	69958 SCHILLER DR 32327 OREGON TRAIL RD 69958 SCHILLER DR 69958 SCHILLER DR 69958 SCHILLER DR 7877 EGGERS RD PO BOX 310 PO BOX 2965 76763 BUTTER CREEK RD PO BOX 4965 69958 SCHILLER DR 69958 SCHILLER DR
IN_CARE_OF BUREAU OF LAND MGT	C/O SEEGER BARBARA BUREAU OF LAND MGT DONALD O CAVALLETTO
OWNER SNOW H RICHARD 1/2 & (TRS) 1/2 EAGLE RANCH SCHILLER MARILYN EAGLE RANCH EAGLE RANCH EAGLE RANCH EAGLE RANCH EAGLE RANCH HALE FARNS LLC HALE FARMS LLC HALE FARMS LLC HALE FARMS LLC SCHILLER MARILYN	EGGLE RANCH SCHILLER MARILYN SCHILLER MARILYN SCHILLER MARILYN SCHILLER MARILYN HAWKINS CO INC HAWKINS CO INC SEEGER CASEY A & CODY ROBERT USA LUCIANI GEORGE J & BEATRICE PINE CANYON RANCH GP SCHILLER MARILYN SCHILLER MARILYN
TLID 2N28000000100 2N28000000300 2N28000000300 2N28000000400 2N28000000400 2N28000000600 2N28000000700 2N28000001700 2N28000001900 2N28000001901 2N28000001901 2N28000001901 2N28000001901 2N28000002100 2N28000002300	2NZ8000002400 2NZ8000002500 2NZ8000002800 2NZ8000002900 2NZ8000003100 2NZ8000003300 2NZ8000003300 2NZ8000003300 2NZ8000003300 2NZ8000003500 2NZ8000003500 2NZ8000003500 2NZ8000003500

Wheatridge_Landowners, 8/18/2015, Page 1

PROPERTIES WITHIN 100' OF WHEATRIDGE/SERVICE BUTTES FINAL T-LINE PROPOSAL

)))	
TLID	ACCT_ID	ACCT_ID_OWNER	IN_CARE_OF AGENT	M_ADDRESS	M_CITY	M_ST	ZIP
2N28000000800	107114	WESTLAND ENTERPRISES LLC		822 S HIGHWAY 395 #PMB 423	HERMISTON	OR	97838-2621
2N28000001900	106887	SCHILLER MARILYN		69958 SCHILLER DR	ЕСНО	OR	97826-9044
2N28000002900	135464	SCHILLER MARILYN		69958 SCHILLER DR	ЕСНО	OR	97826-9044
3N28000000400	106826	MANN IRVIN L 3RD ETAL	C/O HOPPER PAT M	31466 ANDREWS RD	ЕСНО	OR	97826-9056
3N28000000401	133372	HOPPER PAT(LE)ETAL 50%ETAL50%	C/O HOPPER PAT M	31466 ANDREWS RD	ЕСНО	OR	97826
3N280000000500	133373	MCBEE JOHN M & MCBEE DEBBIE A		1062 SKYLINE DR	PENDLETON	OR	97801-1269
3N28000000600	133374	MCBEE JOHN M & MCBEE DEBBIE A		1062 SKYLINE DR	PENDLETON	OR	97801-1269
3N28000000700	133376	MCBEE JOHN M & MCBEE DEBBIE A		1062 SKYLINE DR	PENDLETON	OR	97801-1269
3N28000000702	106828	TAYLOR MICHAEL L & PATRICIA S (TRS)		31466 ANDREWS RD	ЕСНО	OR	97826-9056
3N28000000800	116678	HOPPER PAT (LE)ETAL 50%ETAL50%		31466 ANDREWS RD	ЕСНО	OR	97826
3N28000000900	116679	TAYLOR MICHAEL L & PATRICIA S (TRS)		31466 ANDREWS RD	ЕСНО	OR	97826-9056
3N28000001100	116681	PRIOR ROSALIE		32327 OREGON TRAIL RD	ЕСНО	OR	97826
3N28000001200	116682	PRIOR ROSALIE		32327 OREGON TRAIL RD	ЕСНО	OR	97826
3N28000001300	116688	PRIOR ROSALIE		32327 OREGON TRAIL RD	ЕСНО	OR	97826
3N28000001400	116691	PRIOR ROSALIE		32327 OREGON TRAIL RD	ЕСНО	OR	97826
3N28000001600	116696	BAR-U-INC		PO BOX 27	BOISE	₽	83707
3N28000001700U1 116697	116697	EUBANKS JULIE F ETAL 73.306%ETAL 26.694%	C/O MANN LINC	11905 SW LANEWOOD ST	PORTLAND	OR	97225
3N28000001700U2 157270	2 157270	BUHLER DEBORAH J (TRS)26.694% ETAL 73.306%		7860 S TRENTON ST	ENGLEWOOD	8	80112-3319
3N28000001702	140244	BAR-U-INC		PO BOX 27	BOISE	₽	83707
3N28000001702A1 143603	143603	BEEF CITY INC	C/O MANN LINC	11905 SW LANEWOOD ST	PORTLAND	OR	97225
3N28000002900	116759	PRIOR ARTHUR R (1/2) & PRIOR C (TRS)		32327 OREGON TRAIL RD	ЕСНО	OR	97826-9001
3N28000002902	145512	TAYLOR MICHAEL L & PATRICIA S (TRS)		31466 ANDREWS RD	ЕСНО	OR	97826-9056
3N28000002903	107198	PRIOR CHESTER J		32327 OREGON TRAIL RD	ЕСНО	OR	97826
3N28000003000	116762	PRIOR ARTHUR R (1/2) & PRIOR C (TRS)		32327 OREGON TRAIL RD	ЕСНО	OR	97826-9001
3N28000003100	116764	PRIOR ARTHUR R (1/2) & PRIOR C (TRS)		32327 OREGON TRAIL RD	ЕСНО	OR	97826-9001
3N28000003101	107201	PRIOR ROSALIE		32327 OREGON TRAIL RD	ЕСНО	OR	97826
3N28000004700	107255	PRIOR ROSALIE		32327 OREGON TRAIL RD	ЕСНО	OR	97826
3N28000006800	107318	PRIOR DAVID CHESTER		32327 OREGON TRAIL RD	ЕСНО	OR	97826-9001
3N28000006900	107338	PRIOR DAVID CHESTER		32327 OREGON TRAIL RD	ЕСНО	OR	97826-9001
3N28000007500	107346	WESTLAND ENTERPRISES LLC		822 S HIGHWAY 395 #PMB 423	HERMISTON	OR	97838-2621
3N28000008103	107390	WESTLAND ENTERPRISES LLC		822 S HIGHWAY 395 #PMB 423	HERMISTON	OR	97838-2621
3N28000008105	147888	WESTLAND ENTERPRISES LLC	C/O LEVY ROBERT L	822 S HIGHWAY 395 #PMB 423	HERMISTON	OR	97838-2621
4N28D00000107	152988	VERDON LLC		34801 OLD HIGHWAY 320	ЕСНО	OR	97826-9653



PROPERTIES WITHIN 100' OF WHEATRIDGE/SERVICE BUTTES FINAL T-LINE PROPOSAL

	68179-1690	68179-1690	68179-1690	68179-1001	97826	97826	97826-9056	97826	97826-9056	97826-9056	97838-0881	97875-5030	68179-1690	68179-1690	68179-1690
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	1400 DOUGLAS ST #STOP 1690 OMAHA	1400 DOUGLAS ST #STOP 1690 OMAHA	1400 DOUGLAS ST #STOP 1690 OMAHA	1400 DOUGLAS ST #STOP 1640 OMAHA	31466 ANDREWS RD	31466 ANDREWS RD	31466 ANDREWS RD	31466 ANDREWS RD	31466 ANDREWS RD	31466 ANDREWS RD	PO BOX 881	77513 HOOSIER RD	1400 DOUGLAS ST #STOP 1690 OMAHA	1400 DOUGLAS ST #STOP 1690 OMAHA	1400 DOUGLAS ST #STOP 1690 OMAHA
)	ATTN: CORP TAX	ATTN: CORP TAX	ATTN: CORP TAX	C/O PROPERTY TAX	С/О НОРРЕК Р			С/О НОРРЕЯ Р					ATTN: CORP TAX	ATTN: CORP TAX	ATTN: CORP TAX
	4N28D00002100 139519 UNION PACIFIC RR CO	UNION PACIFIC RR CO	139519 UNION PACIFIC RR CO	139518 UNION PACIFIC RAILROAD CO	DOUBLE M RANCH INC	128247 HOPPER P(LE)ETAL 50% MANN I L III ETAL50	MANN IRVIN L 3RD&EUBANKS JULIE	MANN IRVIN L 3RD&EUBANKS JBUHLER D(TRS)	TAYLOR MICHAEL L & PATRICIA S (TRS)	TAYLOR MICHAEL L & PATRICIA S (TRS)	133541 GUTIERREZ RAUL ARIEL	GOODRICH BRADLEY D & JODI A	UNION PACIFIC RR CO	139513 UNION PACIFIC RR CO	UNION PACIFIC RR CO
,	139519	139519	139519	139518	106972	128247	128248	106981	158958	106986	133541	106696	139513	139513	139526
)	4N28D00002100	4N28D00002100	4N28D00002100	4N28D00002180	4N28D00002902	4N28D00003402	4N28D00003403	4N28D00003406	4N28D00003407	4N28D00003490	4N29190000700	4N29310000600	4N29C00001100	4N29C00001100	4N29C00001103







To:

Tamra Mabbott

From: Date:

Wendie Kellington August 17, 2015

Re:

Wheatridge Energy Facility

Status and Process

On March 18, 2013, the Oregon Department of Energy (ODOE) appointed the Umatilla County Board of Commissioners as a "Special Advisory Group" (SAG) to provide specific input regarding the proposed Wheatridge Wind Energy Facility (Wheatridge). The SAG input requested by ODOE was to identify the applicable substantive criteria that apply to the Wheatridge wind energy proposal and to determine whether the Wheatridge Applicant (Applicant) supplied adequate evidence in the Application, to demonstrate the proposal complies with the County identified applicable substantive criteria. Under ORS 469.504(1)(b)(A) and (5), the "applicable substantive criteria" at issue are defined as:

"The * * * applicable substantive criteria from the affected local government's acknowledged comprehensive plan and land use regulations that are required by the statewide planning goals and in effect on the date the application is submitted, and with any Land Conservation and Development Commission administrative rules and goals and any land use statutes that apply directly to the facility under ORS 197.646."

On April 12, 2013, the Umatilla County Board of Commissioners identified the state and local applicable substantive criteria that applied to the proposed Wheatridge facility.

On August 27, 2015, the Umatilla County Planning Commission will consider public testimony regarding whether the Wheatridge Application (Application) supplied enough evidence to demonstrate compliance with the applicable substantive criteria that the County SAG identified. After the public hearing, the planning commission will make a recommendation to the Umatilla County Board of Commissioners' concerning the Application's compliance. Thereafter, the Board of Commissioners will consider the planning commission's recommendation and adopt a formal Resolution to forward to ODOE (EFSC) regarding whether the County determines the Wheatridge application contains sufficient evidence to demonstrate compliance with applicable substantive criteria.

Understanding the Application

Exactly what the Application proposes is seemingly inconsistent at times and unclear. Whether the proposal is adequately articulated and explained to enable an evaluation of its compliance with SAG identified criteria, is a question to be considered by the Planning Commission. As noted below, the most serious impediment to analyzing the Application's compliance with County SAG identified standards, is it failure to identify transmission routes. Reduced to its essentials the Application proposes:

- **(1)** Wind Turbines, roads other infrastructure. Either 292 wind turbines or 200 wind turbines, spread between two Wheatridge Project areas – Wheatridge West and Wheatridge East – are proposed to be placed on EFU zoned land in Umatilla and Morrow counties. Application Exhibit B "Project Description", p 4 Table B-1. However, the notification portion of the Application, treats the project as a 292 turbine project. See Application Exhibit F, p 1. Similarly, the land use segment of the Application treats the project as a 292 project. See Application Exhibit K, p 1. The number of turbines that will be included in the project will depend on the type of turbine the Applicant decides to purchase. Regardless of the number of turbines deployed, the project will be a 500 MW project. Id. Roads and other infrastructure will be established to support the wind turbines. Because the land use segment of the Application evaluates the impacts of 292 turbines, the variability in the number of turbines that are contemplated for the project alone, is not itself likely a significant land use issue. However, whether the Application provides adequate evidence to establish the Application meets all County SAG identified standards, including the direct and cumulative impacts of 292 turbines on accepted farming practices and the costs of accepted farming practices among other things, are land use issues that the planning commission should consider.
- (2) "Intraconnection Line(s)". Intraconnection²" is the connection between the proposed windfarm and the grid. Intraconnection for the proposed project is noncommittal, instead four (4) intraconnection "options" are listed. See Application Exhibit B "Project Description", p 8-9. The circumstances for choosing one of the 4 "options" is similarly noncommittal. According to the Application, the intraconnection route selected "will depend on the point of interconnection to the BPA grid, likely either the planned Longhorn or Stanfield substation and on the number of Project Substations." This interconnection point, is in turn, speculative. The Application's lack of specificity about intraconnection is tied to the Application's twin failure to provide specificity regarding interconnection. Not knowing where any of the project's transmission will be located, significantly impairs the County's ability to evaluate the Application. However, while lack of specificity about intraconnection is important, the lack of specificity regarding interconnection is probably the more serious land use issue. How intraconnection is addressed in the Application is briefly described in this Paragraph No. 2. How the Application deals with interconnection is briefly addressed in the following Paragraph No. 3.

With either 30 or 35 of these wind turbines in Umatilla County and the balance in Morrow County.

² Intraconnection lines are built by the wind developer and are distinguished from "Interconnection". Interconnection are the Gen-Tie lines that the Application states will someday be Umatilla Electric Coop (UEC) or UEC/Columbia Basin Electric Cooperative (CB) built connections to the BPA system.

The Application only evaluates *one* of the four intraconnection options for compliance with the state's "corridor assessment" criteria. Application Exhibit B "Project Description", p 9-13. That single option that was evaluated against the "corridor assessment criteria", is intraconnection "Option 1." The Application states Option 1 for intraconnection (and no other) was evaluated because it is the "longest route." This option, however, is apparently almost entirely located in Morrow County, and leads to the potential Strawberry substation which in turn leads to interconnection that terminates at the potential Longhorn substation. It does not appear that the Application provided any required state administrative rule required "corridor assessment" for any other intraconnection option than this mostly Morrow County option. This means there is apparently no "corridor assessment" of the type that is required by state law for any "Intraconnection" option that would be located principally in Umatilla County.

Moreover, it is not clear whether or the extent to which intraconnection options located primarily in Umatilla County (Options 3 or 4 explained at Application Exhibit B, "Project Description", p 9), were evaluated in the Land Use segment of the Application (Exhibit K) against the County SAG identified criteria. On this, the Application states:

"Wheatridge West is located entirely within Morrow County, approximately 5 miles northeast of Lexington, and approximately 7 miles northwest of Heppner. Wheatridge West is bisected by Oregon Highway 207 (OR-207). Wheatridge East is located approximately 16 miles northeast of Heppner and encompasses land in both Morrow and Umatilla Counties. The Intraconnection Corridor is located primarily within Morrow County and adjoins to the southeastern portion of Wheatridge West and the southern portion of Wheatridge East." Application Exhibit K, "Land Use", p 1. (Emphasis supplied.)

This seems to suggest that the *only* intraconnection evaluated against the County SAG identified land use standards in Application Exhibit K, is Option 1. Recall, Option 1 heads west to the potential Strawberry substation then hooks into the *inter* connection route that then heads north to the potential Longhorn substation, all of which almost entirely in Morrow, not Umatilla County. If Option 1 intraconnection was the intraconnection option evaluated for land use compliance, then that would in turn suggest very little or no consideration was given to SAG identified criteria for project intraconnection in Umatilla County (Options 3 and 4).

On the other hand, a chart and some of the map exhibits to the Application's Exhibit K, suggest Intraconnection Option 3 (mostly located in Umatilla County) was considered, although these chart/maps are difficult to harmonize with the above quoted statement which ostensibly frames

³ Application Exhibit K "Land Use," p 19, suggests that 0.04 acres of Option 1 (0.02 in high value farmland and 0.02 not in high value farmland) is in Umatilla County. However, it appears that this may be wrong because under any Option, more than 0.04 acres would appear to underlie Intraconnection in Umatilla County in order to connect Wheatridge West and East; although the least amount of Intraconnection in Umatilla County, occurs under intraconnection Option 1. Necessarily, it seems, that the amount of land taken for these the two options shown on the Exhibit K chart in Umatilla County should be different. Further, the same values on the same chart are attributed to "Option 3" as "Option 1" and it seems obvious that there would be much more than 0.04 acres of land taken for intraconnection in Umatilla County for Option 3. While not strictly a land use issue, this tends to reinforce that transmission — whether intra or interconnection — is at best unclear or confusing, complicating the County's ability to evaluate the Application.



the scope of the land use analysis in the Application. *Compare* Application Exhibit B "Project Description" p 9, with Application Exhibit K, "Land Use" p 1, and 19 *and also* Figure K-6 and K-6.1- to 18 through K-8. "Option 3" (mostly in Umatilla County) is the *shortest* route overall.

The chart at Application Exhibit K "Land Use", p 19, appears to incorrectly identify the amount of land underlying Intraconnection facilities in Umatilla County under Option 1 or 3 as being limited to 0.04 acres. *See* Footnote 3 to this Memorandum.

"Option 4" appears not to have been evaluated at all against County SAG identified criteria in the Application, regardless of whether the narrative which purports to frame the analysis or the chart/maps, are utilized.

As noted in the beginning paragraph of this paragraph, intraconnection is probably not as serious a potential problem as interconnection, but it is important for the planning commission to understand how the Application deals with both.

3. Grid Connection or Interconnection. Interconnection appears to be the land use issue of the greatest concern to area constituents. Interconnection to the grid, according to the Application is entirely "conceptual". See Application Exhibit B "Project Description", p 3. In this regard, the Application states: "The specific location of the future Gen-tie Line(s) is not yet known; however, several potential routes have been identified and are shown as conceptual alignments in the [Application] (see Figures C-4a/b/c/d)." (Emphasis supplied.) Application Exhibit B "Project Description" p 3. The Application states that the Gen-Tie lines will be 230 kv transmission lines "to be owned by Umatilla Electric Cooperative (UEC) or UEC in partnership with the Columbia Basin Electric Cooperative (CB), but operated by BPA. The Gen-tie Line(s) will be permitted by UEC and/or CB separately from the Wheatridge Project; therefore, this application does not address impacts associated with the Gen-tie Line(s) and their associated substation(s)." (Emphasis supplied.) Id.

The County/SAG Identified Applicable Substantive Criteria and the Applicant's Response

A copy of the County letter to ODOE identifying the applicable substantive criteria is included in the Planning Commission's packet. Particular County SAG identified applicable substantive criteria with which the Application appears to be deficient are identified in this Memorandum.

• UCDO 152.616(HHH)

The Wheatridge Applicant's response to the applicable substantive law that the County SAG identified, is Application Exhibit K. In sum, the Applicant either did not address the applicable substantive law that the County SAG identified or argued it met a "majority" of those standards. Application Exhibit K, p 1. The Applicant's responses are summarized below, with our comment:



"152.616(HHH) Application Requirements

"Response: UDCO 152.616(HHH)(5) lists information that would be required as part of an application for a County Conditional Use Permit. The information submitted as a part of this application and information that will be provided as a condition of approval attached to the Site Certificate satisfy all of the information requirements identified by Umatilla County." Application Exhibit K, p 21.

The Applicant's statement above does not establish that the Application has supplied adequate evidence to demonstrate compliance with the County SAG identified applicable substantive law. Specifically, the Application fails to comply with UDCO 152.616(HHH)(5)(b) and (5)(c)(3), among other criteria, as discussed later in this memorandum. These failures in turn mean the Application appears to fail to provide adequate evidence to demonstrate compliance with UCDO 152.616(5)(d)(1).

To explain, UCDC 152.616(HHH)(5)(b) requires a map showing the location of components of the proposed wind power generation facility. The County has interpreted this provision to require a map showing the location of all of the components related to the facility, which includes the routes and location of transmission facilities to connect the project to the grid, as well as substations to serve the proposal. The requirement to provide this map is an applicable substantive criteria because it will have a meaningful impact on a decision to approve or deny the proposal.

Similarly, UCDC 152.616(HHH)(5)(c)(3) requires identification of the route and plan for transmission facilities connecting the project to the grid. This similarly is an applicable substantive criteria because it will have a meaningful impact on the decision to approve or deny the proposal. Identifying the route for transmission and the plan for transmission facilities, enables a meaningful evaluation of impacts and helps to identify other applicable substantive criteria included within the development code or county plan. As noted above, this information must also be depicted on the map required by UCDC 152.616(HHH)(5)(b).

The SAG identified criteria require that transmission and substation locations be disclosed. If those key components are "conceptual" and speculative as the Application states, then the County's typical response to such a land use application defect would be that the project is simply premature or deficient and cannot be approved.

According to the Application, transmission and substations could be located anywhere:

"The specific location of the future Gen-tie Line(s) is not yet known; however, several potential routes have been identified and are shown as conceptual alignments on figures in the ASC (see Figures C-4a/b/c/d). With the proposed Intraconnection Line(s) and multiple Substations, the Project is designed to accommodate a variety of Gen-tie Line route options. Several likely points of interconnection to the BPA transmission system exist, including the planned



Stanfield substation near Stanfield, Oregon (Umatilla County) and the planned Longhorn substation at the Port of Morrow, Oregon (Morrow County). These two points of interconnection are the most likely and are shown throughout this ASC as illustrative of the Project's grid interconnection options, but other options may exist. The timeline and control of the interconnection options are largely established by BPA and other transmission customers in the area, which means the Project's construction timeline requires flexibility to be able to start construction when the interconnection facilities are ready."

UCDC 152.616(HHH)(5)(d)(1) requires a demonstration of compliance with UCDO 152.061. This is an applicable substantive criteria as well. The deficits above, mean the Application's compliance with this standard is relatedly, deficient. If the location of the energy facility in its entirety is not identified, then it is impossible to evaluate the facility's compliance with UCDO 152.061. In this regard, UCDO 152.061 requires that all conditional uses in an EFU zone demonstrate compliance with the following two approval standards:

- "(A) Will not force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; and
- "(B) Will not significantly increase the cost of accepted farm or forest practices on lands devoted to farm or forest use."

Evaluating Impacts - UCDO 152.061 (Individual and Cumulative Effects) and State Cumulative Effect Standards

As explained above, UCDO 152.061 requires analysis of the significant impacts from the facility on accepted farming practices and on the costs of farming. This same standard as it appears in ORS 215.296(1), has been interpreted by the Oregon Court of Appeals to require not only an evaluation of individual impacts from a proposed development, but also the "cumulative effects" of that facility on farming operations and farming costs. *Von Lubken v. Hood River County*, 118 Or App 246, 251 (1993).

This SAG identified standard intersects with ODOE's wind "cumulative effect" standard established in OAR 345-024-0015. This standard recognizes that potential adverse effects attend the selection of transmission routes and substation locations; carrying the potential for adverse cumulative impacts. A copy of that state "Cumulative Effect" standard is Attachment 1 to this memorandum.

OAR 345-024-0015 does not allow EFSC to ignore impacts from related or supporting facilities of a wind energy project. Rather, OAR 345-024-0015 imposes on EFSC an independent, mandatory obligation on EFSC's authority, that to issue a Site Certificate, EFSC "must find that the applicant can design and construct the *facility* to reduce cumulative adverse environmental effects in the vicinity by practicable measures, including but not limited to the following. * * *" ORS 469.300(14) defines "facility" to include the "energy facility together with any related or supporting facilities." ORS 469.300(24) defines "related or supporting facility" to include transmission facilities.



The Applicant's failure to address SAG identified requirements not only appears to deprive EFSC of authority to approve the application based failure to meet SAG identified standards, but also failure to satisfy the state law "Cumulative Effects" standard.

Planning Commission's Evaluation

The Planning Commission is asked to take public testimony and make a recommendation to the Board of Commissioners on the following two issues:

- 1. Whether the Wheatridge Application as proposed including turbines, roads and related infrastructure, both with and without consideration of the two Umatilla County (although speculative), potential intraconnection and interconnection transmission lines and routes and substation(s), complies with Umatilla County SAG identified standards;
- 2. Whether the Application as proposed including turbines, roads and related infrastructure, both with and without consideration of the two Umatilla County (although speculative), potential intraconnection and interconnection transmission lines and routes and substation(s), meets UCDO 152.061 which requires that the energy facility:
 - "(A) Will not force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; and
 - "(B) Will not significantly increase the cost of accepted farm or forest practices on lands devoted to farm or forest use."

This will require the Planning Commission to consider four key issues associated with the proposed facility:

- 1. Compliance and effects of proposed turbines (presume 292 turbines), roads and related infrastructure;
- 2. Compliance and effect of proposed Option 3 and Option 4 "intraconnection" lines to connect "West Wheatridge" and East Wheatridge" to the point of "interconnection";
- 3. Compliance and effects of the conceptual transmission interconnection lines leading to the potential Stanfield substation that is shown as a possibility on the Application;
- 4. Compliance and effects of potential transmission (both interconnection and intraconnection) and substations being "conceptual" only, rather than a concrete energy facility proposal.



EFSC Options if Application Does not Provide Sufficient Evidence to Establish Compliance with SAG Identified Criteria

Where an Application fails to provide adequate evidence to establish compliance with SAG identified approval criteria, EFSC lacks authority to approve the facility, except in the specific limited circumstances described below. This particular situation is unusual because the Applicant has failed to respond at all to two SAG identified standards and that failure significantly influences its ability to comply with other SAG identified standards. In other words, the Applicant's failure to identify the location and route for transmission and substation location(s) likely means the Applicant has not addressed two SAG identified criteria and has failed to perform the direct and cumulative impacts analysis required by UCDO 152.061 for the facility.

The consequences of these apparent failures appear to mean that EFSC has only limited options to approve the proposal. EFSC may not interpret SAG identified criteria. EFSC may not approve a proposal that does not meet SAG criteria, except under limited circumstances discussed in this section. More detail on how this works, follows.

ORS 469.504(5) states EFSC "shall apply the criteria identified by the SAG." Accordingly, EFSC is required to apply SAG identified criteria, regardless of whether the Applicant has done so. Compliance with applicable SAG standards may not be deferred or otherwise conditioned to occur at some later point, in a process that would not apply the SAG criteria in equivalent processes. See Willamette Oaks, LLC v. City of Eugene, 232 Or App 29 (2009) (TPR is written to require resolution of whether uses significantly affect a transportation facility be decided prior to approving a zone change and cannot be deferred to a subsequent permit approval); see also Columbia Riverkeeper v. Columbia County, __ Or LUBA __ (LUBA No. 2014-017/018) (goal exception standards are not permitted to be deferred to a permit proceeding).

Further, OAR 345-022-0000(3)(b)⁴ prohibits EFSC from using its public interest "balancing" authority to excuse noncompliance with SAG identified criteria.

Accordingly, an Applicant's failure to establish compliance with SAG identified standards means EFSC has two options: EFSC may attempt to independently determine the proposal complies with applicable Statewide Planning Goals or to take an exception to "one or more" Statewide Planning Goals.

EFSC Option 1 – Finding Goal Compliance

EFSC can approve a project that does not comply with the applicable substantive law identified by the SAG, by establishing that the proposed facility complies with the "Statewide Planning Goals." EFSC rarely if at all attempts to establish Goal compliance

⁴ "(3) Notwithstanding section (2) of this rule, the Council shall not apply the balancing determination to the following standards: * * * (b) The land use standard described in OAR 345-022-0030 * * *."



independent of SAG identified criteria and, instead, traditionally relies on the SAG identified standards. However, if EFSC were here to decide to avoid County standards and decide Goal compliance on its own, it is the Applicant's burden to establish entitlement to a finding of Goal compliance. This is evident from OAR 345-021-0010(1)(k)(iv).

However, even if the Applicant were to ask, and EFSC were to agree to invoke, this extraordinary authority to avoid County SAG identified requirements and apply the Goals directly, it appears that determining the project complies with applicable Statewide Planning Goals would be very difficult in this case. This is because UCDO 152.616(HHH)(5) has been acknowledged to be in compliance with all Statewide Planning Goals. UCDO 152.616(HHH) implements Goals 1 (Citizen Involvement), Goal 2 (Land Use Planning) and Goal 3 (Agricultural Lands), among other Goals. Accordingly, the proposal's failure to comply with the acknowledged County SAG identified standards, would appear to mean that the proposal fails to comply with the Statewide Planning Goals. Moreover, Goal 2 requires all land use decisions have an "adequate factual base". Where the core problem is that an Applicant has failed to provide *any* factual base for compliance with SAG identified standards (UCDO 152.616(HHH) (5)(b), (5)(c)(3) and UDCO 152.061), it seems impossible for EFSC to establish Goal 2 compliance.

If EFSC is unable to determine Goal compliance based on the Application as submitted, then EFSC may consider approval of a facility that fails to comply with SAG identified standards, by taking a Goal exception of the types described in OAR 340-022-0030(4).

EFSC Option 2 - Exceptions

It is important to note at the outset, that it is the Applicant's burden to establish entitlement to any exception. This is evident from the requirement in OAR 345-021-0010(k)(v) that obliges the Applicant to justify any needed exception.

It seems there would be little doubt that EFSC would not be in a position to take a "developed" or "irrevocably committed" exception to Goal 3 per OAR 340-022-0030(4)(a) or (b), for any of the area around the Wheatridge wind farm to authorize transmission or substations, because the entire area is currently successfully utilized for agriculture. Further, a developed and committed exception to Goals 1 or 2 seems inappropriate, for obvious reasons.

A "reasons" exception under OAR 345-022-0030(4)(c), may be similarly unlikely. The key failures of compliance with SAG criteria, as noted above include the Applicant's failure to identify the routes and location of transmission facilities and substations. Importantly, the Applicant makes no claim of adequate "reasons" to support the failure to provide information about the project to enable the evaluation of the facility as the Applicant envisions it. The Application contains no evidence to justify a reasons exception to the opportunity for meaningful citizen input that Goal 1 requires, to evaluate the wind energy facility's compliance with the SAG identified criteria.



Approving an exception means that the public will never have a meaningful opportunity to evaluate the "facility." No exception has ever been granted for this in the past and its hard to imagine adequate reasons can be stated to justify bypassing Goal 1.

Further, there is no evidence in the Application to support that there are "reasons" to justify refusal to identify both intra and interconnection transmission routes to enable a meaningful evaluation of the discrete and cumulative adverse impacts from the facility on high value agricultural operations, as would be required by Goal 3. Simply stating that the Gen-tie route and thus intraconnection routes and substations are unknown does not supply a reason why they are unknown or what stands in the way of them being known or even whether any of the "conceptual routes" or "options" are feasible.

Moreover, the Application does not support that transmission routes and substation locations are unknown to the Applicant, in fact. In this regard, the Application supplies enough information to conclude that transmission facility locations, route and substations are not unknown. Specifically, the proposal is a multimillion dollar 500 MW wind farm, one of the largest in Oregon. It is being developed in "partnership" with "Map Royalty, Inc." which offers investors an investment in Wheatridge. Application Exhibit A, p 2. The Applicant exists to "secure the real estate rights, permits and interconnection rights necessary to construct and operate a wind energy facility within the project footprint." Application Exhibit D, p 2. Obviously, interconnection to the grid is a part of the contemplated project. The Bank of Eastern Oregon has indicated its willingness to provide a \$17,500,000 letter of credit for the construction of the proposed wind power facility, subject to approval of an application for the same. Application Exhibit M, Attachment M-2. There is nothing to suggest that a small regional bank would contemplate making that investment without assurance of project financial feasibility which includes a reasonably certain transmission route and substation(s) to serve the facility to connect it to the grid to make the facility feasible.

If intraconnection and interconnection transmission facility locations, route and substations were disclosed, then not only would the project be capable of being meaningfully evaluated against the SAG identified criteria, but also ODOE's "corridor selection assessment" requirements in OAR 345-021-0010(1)(b) would be properly applied and addressed. On the latter, recall, the Application only appears to apply the state OAR 345-021-0010(1)(b) "corridor assessment" to intraconnection "Option 1," which is predominately in, and runs the entirety of required *inter*connection through, Morrow County. The corridor selected and studied for intraconnection predetermines the corridor for interconnection. It appears only studying Option 1 intraconnection fails to comply with OAR 345-021-0010(1)(b). While compliance with OAR 345-021-0010(1)(b) is not a SAG criteria concern, the apparent failure to comply with OAR 345-021-0010(1)(b) underscores the interrelated problems posed by the Application's ambiguities and omissions on compliance with key SAG identified criteria.



The Application's Evaluation of Impacts

Limited Area for Evaluation

The Applicant evaluated impacts only from development of the wind farm, its "Intraconnection Lines⁵" and an area ½ mile around the boundary of these. This is the "Project Site" evaluated in the Application. From this limited "Project Site", the Applicant concluded that the Wheatridge proposal will not force a significant change in accepted farm practices or significantly increase the cost of farm practices. It did not address cumulative adverse impacts from the project including new transmission or substations to connect the project to the grid. This limited "Project Site" area that the Applicant evaluates is shown on Application Exhibit K-5, which is Attachment 2 to this Memorandum.⁶ Importantly, as noted variously in this Memorandum, the Applicant provides no analysis of impacts on farming practices or costs from interconnection transmission facilities, route or substations, even the ones identified in the Application are speculative. The Application does not evaluate the impact of the eventual selection of particular intraconnection options either on the necessary interconnection selection that is associated with each such intraconnection option and the impacts on accepted farm practices or their costs of these selections.

Project Feasibility

There is no evidence that any "possible" interconnection transmission route is in fact possible or feasible. There is no evidence that a Stanfield substation to serve the project is "possible" or feasible. As such, the Application fails to evaluate the impact to farming practices and costs of a developed multimillion dollar windfarm with no connection to the grid.

On feasibility, it is worth noting there are two significant feasibility hurdles. One relates to the fact that any arrangement between UEC and the Applicant, if there is one, with respect to the intraconnection line is not disclosed. ORS 35.015 forbids UEC from condemning farms or homes if it intends to convey "fee title or a lesser interest than fee title" to a private party – like Wheatridge. *See also Kelo v. City of New London*, 545 US 469, 125 S Ct 2655, 162 L Ed 2d 43 (2005). If it is intended to convey any interest to Wheatridge or another private entity, no such condemnation may lawfully occur. Moreover, for UEC to construct such lines, permission must be sought from the PUC for the same. ORS 758.015. As far as the County is aware, no such petitions have been submitted to the Oregon PUC. Therefore, there is inadequate information in the Application to ascertain whether interconnection is feasible in any case.



⁵ As noted, these are the lines that connect Wheatridge East and Wheatridge West together. There is no commitment in the Application for the particular routes for these lines and associated substations, as explained above. ⁶ This Application Figure K-5 relies on Option 1 intraconnection.

Practical Issue With Failure to Decide Transmission

The Applicant's failure to evaluate the cumulative effects of its project, even as it limitedly describes it, on accepted farming practices and the costs of accepted farming practices makes meaningful evaluation of the project illusory. This is because this project to be an energy "facility", means it requires transmission. It is one thing to upgrade existing transmission facilities (as is ostensibly possible along Butter Creek Highway), and quite another to build wholly new transmission facilities (as the Application suggests is the preference). If existing transmission facilities along the Butter Creek Highway are not to be upgraded to serve the project and new transmission is to be built to serve the project instead, then the cumulative impact of this and other windfarms and their transmission facilities on the continuation of accepted farming practices and their costs in the area must be, and has not been, addressed. In this regard, the "area" affected by this cumulative impact issue is at least the area proximate to the "intratransmission" options, as well as the two "potential" interconnection transmission routes and potential substations disclosed in the Application, as well as other proximate farming areas already squeezed by energy facilities. The Planning Commission should consider seeking public input on what those cumulative impacts would be from a 500 MW windfarm in this particular area and the fact that such a facility requires and certainly will get transmission.

• Cumulative Effect of More Turbines

Moreover, the cumulative adverse environmental effects of an additional 500 MW windfarm turbines and related infrastructure, in addition to all the other turbines and infrastructure in the area, have not been evaluated, including adverse effects of more turbines and infrastructure on farming as well as aesthetic values.

How the Applicant addressed Potential Adverse Effects

The Applicant essentially concludes⁷ the Wheatridge Project has no adverse effects on farm practices or the cost of farm practices in the limited area the Application studies, because:

- a. Construction is temporary;
- b. Land lost to farming "due to siting of permanent project improvement is a de minimus percentage of the total farm use land in Umatilla County; therefore the inability to use the land for farm purposes is not significant;
- c. The applicant pays for roads and project facilities and the cost of these does not fall on farmers;
- d. Access roads for the Project will benefit agricultural land users through improved access to farm fields and "resulting in lower fuel costs":
- e. Farmer lessees will approve site plans for development on leased land;



⁷ See Application Exhibit K, p 19-20.

- f. "Wheatridge has confirmed that no landowners in the Project Area utilize aerial spraying of pesticides or fertilizers; the Project would not affect the application of pesticides or fertilizers using ground based methods";
- g. Wheatridge will control weeds;
- h. Wheatridge will record a covenant not to sue "against *its Project leasehold interests* with regard to generally accepted farming practices on adjacent farmland." (Emphasis supplied.);
- i. Construction and operation of the Project will implement dust and erosion control measures and limiting disturbance areas as "practicable";
- j. Wheatridge will consult with "area landowners" during construction and operation to "reduce or avoid any adverse impacts to farm practices or surrounding lands and to avoid any increase in farming costs."
- k. Disturbances from roadways, temporary utility requirements and laydown areas will be minimized and after construction temporary facility areas will be restored.
- 1. "The Project is designed and legally structures such that the cost burden of constructing and maintain access roads and other facilities would not fall on the landowner and would not increase the cost of farming for affected landowners." Participating landowners will be compensated.

The Planning Commission should take testimony, evaluate and recommend whether the Applicant has adequately established compliance with the direct and cumulative effects farm impacts standards of UCDO 152.061, reproduced below again for convenience:

- "(A) Will not force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; and
- "(B) Will not significantly increase the cost of accepted farm or forest practices on lands devoted to farm or forest use."

EFSC Cannot Grant a "Variance"

The Applicant asks that "to the extent the Project cannot comply with an applicable criterion, EFSC should approve a variance to the applicable criterion * * *." Application Exhibit K, p 1. EFSC has no authority to grant a "variance." Had the Applicant applied for a CUP from the County, conceivably the Applicant might have been able to also apply for a variance from the County, under County approval standards. But the Applicant elected to seek approval through the EFSC process, which does not include rights to "variances."

<u>Issues Raised to Date to be Considered by the Planning Commission</u> <u>Regarding the Failure to Comply with UCDO 152.061</u>

• There is no "Project" to Evaluate



Constituent commentators have noted that the "Project" is for an energy "facility" which is, as a matter of state law, defined to include transmission and substations. ORS 469.300(14) and (24). Without transmission, the "facility" cannot exist. Thus, the Application is either unapprovable as premature or must be denied as noncompliant with applicable standards. The statutory and rule program for energy facilities does not contemplate approval of "conceptual", speculative, contingent applications. If, as commentators suspect, intra and interconnection transmission route and substation(s) are known, they must be disclosed for a "facility" to be approved by EFSC. However, a "conceptual" facility with commitments to nothing, is not the equivalent of a "facility" that EFSC may approve, and without a "facility," there is no "project" that can be meaningfully evaluated against SAG identified criteria.

Per the requirements of OAR 345-021-00110(1)(c), an application is required to supply "Information about the location of the proposed facility, including (A) A map showing the proposed locations of the energy facility site, all related and supporting facility sites * * * (B) A description of the location of the proposed energy facility site, the proposed site of each related or supporting facility * * *." The proposal fails to describe the locations of all transmission lines in and between the project areas making it impossible to meaningfully evaluate the proposal. Identification of the location of proposed facilities is necessary to enable the required evaluation of impacts to agriculture and is also necessary to enable a determination of whether the Application contains sufficient evidence to establish compliance with the "applicable substantive criteria."

Land Use Impacts Have not Been Identified or Evaluated by the Applicant

The Application has failed to analyze the effects on agricultural practices and costs of any new transmission routes' and substations and the direct and cumulative effects of both on farm operations, especially circle irrigated farmland, compared with alternatives that do not require new facilities and improvements. The commentators note that this creates a disadvantage for farmers and others seeking to evaluate the application. As such, the Applicant made no effort to identify significant adverse impacts on land use as required and the Application is unresponsive to applicable standards.

• Agricultural Impacts Raised by Commentators to Date (Including Written Comments Objecting to the NOI for the Project)

Agricultural Policy and Occupying Pivot Irrigation Corners with Transmission Towers

Oregon land use policy favors and protects high value irrigated crop land. ORS 215.243(2) ("The preservation of a maximum amount of the limited supply of agricultural land is necessary to the conservation of the state's economic resources and the preservation of such land in large blocks is necessary in maintaining the agricultural economy of the state and for the assurance of adequate, healthful and nutritious food for the people of this state and nation"). The siting of energy facilities, is not immune to this important state agricultural land use policy. To the contrary, the siting of energy facilities is required to comply with state agricultural lands policy. ORS 469.504(b). The Application impermissibly ignores the substantial impacts on agricultural

practices caused by transmission corridors, in contravention of the requirements of state law that requires energy facilities pay particular attention to agricultural impacts.

The importance of Oregon agricultural land use policy to the instant Application cannot be overstated. Farmland is scarce and decreasing. This is especially true for irrigated farmland in the project area. The scarcity of valuable irrigated farmland resource is aggravated by the proposal which contemplates the potential for new transmission facilities on such land to reach the Stanfield substation, and also on such land located within a critical groundwater area. With limited surface and groundwater availability, new or expanded water rights are difficult and, in some instances, impossible to obtain. Correspondingly then, little if any new irrigated farmland can be developed in the area.

Despite the unavailability of new water rights, additional lands are being developed and irrigated as a result of new irrigation techniques and water storage programs. Because of the ease and affordability of modifying existing irrigation systems, newly developed and irrigated lands tend to be located in the corners of existing irrigated circles. Placement of towers in circle corners prevents farmers from the valuable opportunity to efficiently and affordably develop new irrigated cropland. Placement of wind turbines on farms means any irrigation must avoid towers. Essentially turbines make the large swaths of the farmland on which they sit, off limits to irrigation. The applicant has not explained whether the areas upon which the turbines are proposed to be situated have irrigation rights that will be compromised or lost. The loss of use of these circle pivot corners to irrigation due to towers, removes the incentive to improve irrigation efficiency and increases the scarcity and cost of high value irrigated farmland which are discouraged under state agricultural land use policy. The loss of irrigability or irrigation rights for active farms underlying wind turbine sites due to turbine location, diminishes the viability of the farms upon which turbines are situated, which adversely impacts that farming practice of irrigation and certainly increases its cost. The Application does not address these issues. The state's policy of protecting high value irrigated farmland is not furthered by any utility siting on the limited supply of irrigated cropland in the area.

Irrigation and Water Delivery Systems

The Applicant's failure to address impacts of the proposal on irrigated crop circles causes it to miss that it will cause significant and ongoing impacts on the irrigated crop circles and impose severe limitations on their agricultural use. The Application fails to deal with impacts related to electrical and magnetic interference with irrigation equipment. Landowners monitor and control irrigation systems through sensitive wireless systems and controls. The Application fails to address whether and to what extent these may be affected by overhead power lines and strong electrical and magnetic currents. Additionally, transmission line's currents are likely to exacerbate electrolysis that corrodes metal pipelines, parts, and controls which are the fundamental core of circle irrigation systems. This is a problem not only for high voltage lines but also smaller intra-transmission lines connecting the proposed east and west Wheatridge areas. The Applicant must address whether the proposed location of lines or towers will interfere with, or require any limitations on, or modifications of (1) the configuration or operation of above ground irrigation systems including center pivot irrigation equipment, electric equipment and controls, pump stations and controls, and all other above ground equipment necessary and

useful for crop irrigation, (2) the configuration or operation of all underground water delivery systems including pipes, valves, controls, meters, and all other equipment necessary and useful for irrigation water delivery, and (3) the full benefit, use, and enjoyment of all easements, licenses, or other agreements relating to the installation, repair, replacement, and use of water delivery systems.

Additionally, placement of towers and turbines affects the maintenance and operation of underground pipelines, pump stations, and controls, many of which are located in circle corners. Nothing in the Application contemplates or addresses the maintenance or replacement of above or below ground irrigation pipelines that may be beneath a transmission line tower.

Chemical Application / Mowing Interference

Irrigated crops require frequent application of herbicides, pesticides, fertilizers, and other chemicals both by air and ground application methods. Overhead lines and transmission towers as well as wind turbines themselves, complicate, limit, and in some instances prevent aerial chemical application which requires more expensive, more invasive, more damaging, and less effective chemical treatments and applications (all of which can result in crop damage and decreased yields). Ground application of herbicides to control weeds under and around transmission towers is similarly affected. Additionally, the transmission towers and turbines prevent mowing, which is a common and environmentally preferred weed control method.

A special note about aerial spraying is owed at this juncture.

While the Application states that there is no aerial spraying of pesticides or fertilizers in the "Project Area", that does not support a conclusion that the Application meets any of the standards "does not force a significant change in accepted farming practices"; or "significantly increase the cost of accepted farming practices" or has no adverse "cumulative effect" on farming practices affected by the proposal.

It is impossible to evaluate the potential adverse effects on aerial spraying from the facility, when miles of interconnection transmission and substations are not disclosed. The Application's failure to make a commitment about the location or route for transmission lines or substations to serve the wind farm, means it is impossible to evaluate the project's effect on aerial spraying operations that it will indisputably compromise. However, the "potential" two alternate interconnection routes located in Umatilla County, demonstrate how severe the adverse impact on aerial spraying on area farms will be. Either of the potential transmission routes will force a significant change to accepted farming practices (aerial spraying) and will significantly increase the cost of pesticide and fertilizer application on affected farms. There can be no doubt that either of the potential transmission routes will appreciably reduce safety to both the pilots of the crop duster aircraft and the surrounding public.

Regarding pilot safety, crop dusting requires the pilot to fly at altitudes as low as 10-15 feet above the ground, well below the height of the transmission lines which the Application states will be 80-150 feet tall. Transmission lines have a low profile and are difficult for pilots to see. This creates a collision hazard that could lead to the aircraft crashing and resulting in a loss of

life to the pilot and the public should the aircraft crash in an area occupied by persons on the ground. Statistical data and studies conducted by governmental aviation safety agencies and industry trade groups unquestionably support the conclusion that transmission lines present a clear danger to agricultural aviation operations. A recent study released by the National Transportation Safety Board showed that collision with ground obstacles resulted in 16 accidents in 2013 and continues to be the number one threat to the pilots who provide this critical service to America's food production industry. The Study explains:

"A review of the accidents that occurred in 2013 revealed trends consistent with historical accident data for the Part 137 GA sector: the top three defining events were in-flight collision with an obstacle (16), loss of aircraft control, and system or component failure (both powerplant and non-powerplant). Because it is consistently one of the most common (and often fatal) accident types, obstacle collision remains a top industry concern." National Transportation Safety Board. 2014. Special Investigation Report on the Safety of Agricultural Aircraft Operations. Special Investigation Report NTSB/SIR-14/01. Washington, DC.

Thus, if there is aerial spraying anywhere along either proposed transmission route, then those operations will have to stop or be significantly changed.

Demonstrating the seriousness of the problem is that crop dusters have little choice regarding their approach to a crop. This is because aerial spraying approaches are guided by prevailing winds. The prevailing winds in the area of the two alternate potential transmission routes are from the West/Southwest during the growing months. *See* below:

		PR	EVAI	LING	WIN	1D DI	RECT	'ION						
STATION	1	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOA	DEC	1
ASTORIA AIRPORT, OR (KAST).	'n	Ė	E	Е	S	W	W	NW	NW	NW	E	E	E	1
AURORA AIRPORT, OR (KUAO).	i	S	S	S	S	S	S	N	N	N	S	S	S	i
BAKER CITY AP, OR (KBKE). W	1	ESE	ESE	ESE	N	N	NNW	NNW	NNW	NNW	N	ESE	ESE	1
BURNS MUNI AP, OR (KBNO). W	1	E	E	WNW	NW	NM	WNW	WNW	WNW	MNM	MNM	Ε	E	1
CORVALLIS AP, OR (KCVO). WI	1	S	S	S	S	WNW	NW	NW	NW	WNW	S	S	S	1
EUGENE AIRPORT, OR (KEUG).	Î	S	S	S	S	N	N	N	N	N	S	S	S	Î
HERMISTON MUNI AP, OR (KHRI)	W	VSW	S	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW	S	WSW	

The potential routing of the transmission lines is along a North-South line which bisects the fields. This makes it impossible to maintain a spray pattern consistent with effective agricultural operations because the planes would no longer be able to spray upwind and downwind to the crops, it would restrict them to a side spray which is undesirable from a crop application perspective but also an environmental one. From a crop application perspective, side spray creates the greatest amount of drift and consequently loss of product. A side spray operation requires more product and more spraying passes, adding greater expense. Moreover, this greater drift and amount of pesticide needed to be applied presents environmental concerns. Manufacturers have indicated on their labeling that reduced amount of chemical is needed per acre if and only if the application is performed in the most effective way; a condition that side spray cannot meet. The key component in minimizing the drift is to apply the product into a consistent wind (headwind). Because of precision patterning and flow control systems used in today's applications, a 6 inch accuracy on spray patterns using as little as 1 gallon per acre of

water-chemical mixture is achieved with very little adverse environmental impact so long as product is applied into a consistent headwind.

The perceived if not actual safety of the public who live and work in the vicinity of farms that utilize a crop dusting service is compromised if a crop duster is forced to spray in a pattern that results in significant drift. The direction that a crop dusting pilot sprays a chemical is based on the direction of the wind. By adjusting the direction of the flight path in accordance with the direction of the wind, the pilot is able to prevent chemicals from blowing off the intended fields and into populated areas. However, the potential alternative transmission routes eliminate two important directions of flight path that would are needed to reduce drift. Thus, the proposal makes impossible for much if not all of the growing season the crop dusting flight pattern that is needed to (1) stay safe, (2) spray according to the label, (3) spray in a way that is cost effective, and (4) spray in the way least likely to result in drift. The spray pattern necessitated by either of the two "potential" transmission routes will significantly change and increase the cost of crop dusting which is an accepted farming practice. This is because crop dusting will no longer be possible without exposing the farmer to increased costs associated with crop dusting and claims by people who perceive that their exposure to drift has or could cause them harm.

The Application makes no effort to address this issue. Compounding the problem is that among those either living or working in the area that would be affected by overspray directly caused by either of the proposed transmission routes, are the Wheatridge employees and contractors. The claim that "Wheatridge will record a covenant not to sue against its Project leasehold interests * * " provides no protection to those farmers who are not "Project leasehold interests."

Equipment Use

Large equipment is used to farm under and around a transmission line, including tall cranes sometimes used in the repair or replacement of pumps and buried pipelines. The Application must address the height restrictions or parameters along the corridor to allow farmers to ascertain any possible equipment incompatibilities.

Moreover, with respect to the Owner's crop storage sheds, tower locations and height restrictions can easily interfere the large and tall equipment used to load and unload crops.

Requires an Unapprovable Goal 3 Exception

Applicant further impermissibly fails to quantify the number of high value farmland acres that will be permanently removed from production under the proposal including the two transmission options identified. It appears that the Facility will remove more than 12 acres high value farmland from production and, therefore, it requires a Goal 3 exception of the type described in OAR 660-033-130(17). A Goal 3 exception essentially requires selecting the reasonable alternate with the least impact to agriculture. ORS 197.732(2)(c)(A)-(D); see also ORS 469.504(2); OAR 345-021-0010(1)(b)(D)(iv) (requiring selection of route with "[1]east percentage of the total length of * * * transmission line that would be located within lands that require zone changes, variances or exceptions").

A Goal 3 exception would not be required for transmission entirely within an existing corridor and no showing is made about why existing corridors cannot be used. Using the existing transmission corridor will avoid or minimize the permanent loss of high value farmland from production. Similarly a program or practice is presumably in place along the existing corridor for controlling noxious weeds and pests. Selection of a new alignment with new transmission facilities to transmit to the Longhorn Substation require new and significant losses of high value farmland and the implementation of new, different, or more Application improperly avoids any discussion or analysis of these simple but significant comparisons between the Applicant's available options.

Cumulative Impacts from Other Possible Transmission Corridors

The proposed facility appears to be in yet another proposed project with wholly new transmission facilities in the same area as the Boardman-Hemingway and Perennial Wind Chaser transmission projects, and potentially others (Heppner Wind). The Applicant should be required to perform a cumulative impacts analysis of the proposal on the agricultural operations in the area, in light of potential transmission facilities to and from proposed, expected, and/or foreseeable electricity generation sources in the area. The Applicant should be required to describe project impacts in light of the cumulative impacts of all of these developments on affected agricultural operations.

Electric and Magnetic Fields and Fluxes

There are serious concerns regarding of interference with agricultural devices from electric and magnetic fields and fluxes. An additional problem, however, is that high voltage transmission lines increase consumers' increasing critical concerns about the growing conditions for crops and produce grown under or near high voltage power lines. OAR 345-024-0090 requires the Applicant to address human health and property damage impacts from EMF on soil, irrigation water and crops. Public health concerns about human health impacts may decrease the value of the farmers' crops and the Applicant should address existing studies (or acknowledge the lack thereof) on effects of EMF on crops and food safety and apply siting mitigation to avoid (1) food safety risks, and (2) lost farm / property value due to public perception of food safety risks. EFSC has noted its power to deal with concerns regarding Electric and Magnetic Fields (EMF) in the Columbia Crossing Project Order (p 30): "Although the Council does not have an EMF Standard, it does have a statutory mandate to adopt any conditions needed to ensure public health and safety. This mandate provides the regulatory basis for any findings or conditions, including setbacks, based on EMF considerations."

No Showing that Transmission Proposal Can be Permitted Under ORS 215.275

ORS 215.275 requires an applicant to establish that the siting of new transmission facilities on land zoned EFU is necessary. This includes that there are no existing available alternate transmission facilities or corridors with fewer agricultural impacts. The Application fails to make any effort to show the feasibility of compliance of the facility (as defined in ORS 469.300(14) and (24), which includes transmission and substations), with ORS 215.275.

No Showing that Transmission Facility can be Permitted Under ORS 215.283(1)(u)

The Facility is on EFU zoned land. Therefore, ORS 215.283 applies. As such this standard must be listed as a criterion to be satisfied. Per ORS 215.283(1)(u), the Facility is a "utility facility". ORS 215.283(1)(u) permits "Utility facility service lines" on land zoned EFU, but only under certain conditions. Utility facility service lines are defined as "utility lines and accessory facilities or structures that end at the point where the utility service is received by the customer and that are located on one or more of the following:

- "(A) A public right of way;
- "(B) Land immediately adjacent to a public right of way, provided the written consent of all adjacent property owners has been obtained; or
- "(C) The property to be served by the utility."

The transmission corridor terminating at the speculatively identified Stanford substation, to the extent it is disclosed, does not appear to be in a public right of way, does not have consent of adjacent property owners and is not on property owned by the Applicant utility. Therefore, because it does not comply with these requirements, the Facility's transmission corridor is not an authorized route under state statutes governing EFU lands.

Proposal Cannot Meet Standard for Commercial Utility Facilities in ORS 215.283(2)(g) / ORS 215.296

ORS 215.283(2)(g) authorizes "Commercial utility facilities for the purpose of generating power for public use by sale" if certain standards are met. Those standards are listed in ORS 215.296(1) and require a finding that the proposal does not do either of the following:

- (a) Force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; or
- (b) Significantly increase the cost of accepted farm or forest practices on surrounding lands devoted to farm or forest use."

The Application makes no effort to show that the facility as that term is defined in state and local law, meets these requirements and all indications are that if the transmission route to the speculative Stanfield Substation is selected, then the project cannot meet these requirements.

Other Concerns about Proposal mentioned by Commentators

Aesthetic and Property Value Impacts

As stewards of the land in times of increasing environmental awareness and sensitivity, the Facility will decrease the value of area properties both aesthetically and productively.

Aesthetically, the transmission lines and wind turbines will detract from the properties' natural appearance and condition, especially given its proximity to highways and the undeveloped vistas beyond. For the reasons set forth above, farm families believe that the proposal will decrease the value of farms.

DIVISION 24 SPECIFIC STANDARDS FOR SITING FACILITIES

Specific Standards for Wind Facilities

345-024-0010

Public Health and Safety Standards for Wind Energy Facilities

To issue a site certificate for a proposed wind energy facility, the Council must find that the applicant:

- (1) Can design, construct and operate the facility to exclude members of the public from close proximity to the turbine blades and electrical equipment.
- (2) Can design, construct and operate the facility to preclude structural failure of the tower or blades that could endanger the public safety and to have adequate safety devices and testing procedures designed to warn of impending failure and to minimize the consequences of such failure.

Stat. Authority: ORS 469.470, ORS 469.501

Stat. Implemented: ORS 469.501

345-024-0015

Cumulative Effects Standard for Wind Energy Facilities

To issue a site certificate for a proposed wind energy facility, the Council must find that the applicant can design and construct the facility to reduce cumulative adverse environmental effects in the vicinity by practicable measures including, but not limited to, the following:

- (1) Using existing roads to provide access to the facility site, or if new roads are needed, minimizing the amount of land used for new roads and locating them to reduce adverse environmental impacts.
 - (2) Using underground transmission lines and combining transmission routes.
- (3) Connecting the facility to existing substations, or if new substations are needed, minimizing the number of new substations.
- (4) Designing the facility to reduce the risk of injury to raptors or other vulnerable wildlife in areas near turbines or electrical equipment.
 - (5) Designing the components of the facility to minimize adverse visual features.
- (6) Using the minimum lighting necessary for safety and security purposes and using techniques to prevent casting glare from the site, except as otherwise required by the Federal Aviation Administration or the Oregon Department of Aviation.

Stat. Authority: ORS 469.470, ORS 469.501

Stat. Implemented: ORS 469 501

Specific Standards for Surface Facilities Related to Underground Gas Storage Reservoirs

345-024-0030

Public Health and Safety Standards for Surface Facilities Related to Underground Gas Storage Reservoirs

To issue a site certificate for a proposed surface facility related to an underground gas storage reservoir, the Council must make the following findings:

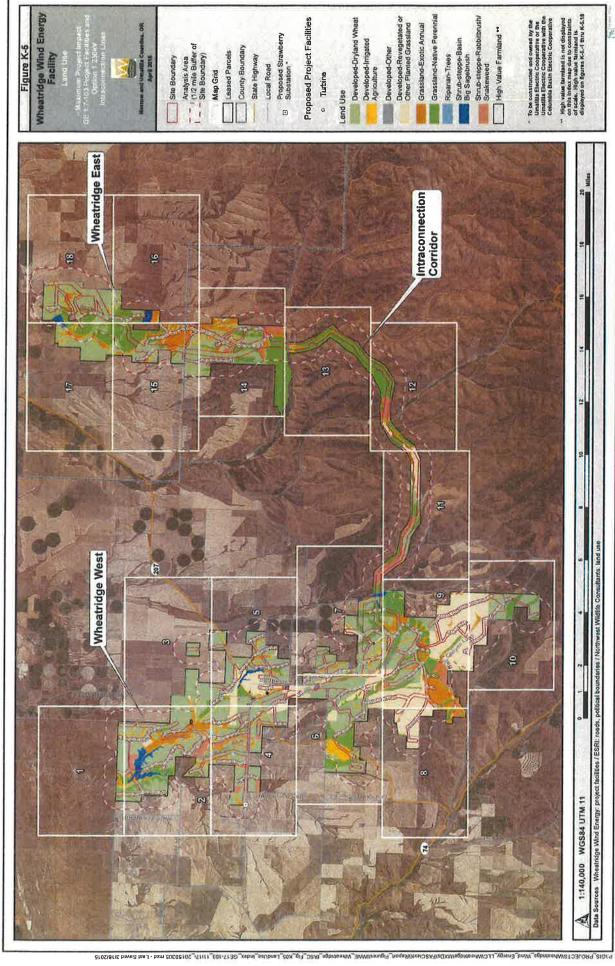




Exhibit B

Project Description

Prepared for



Wheatridge Wind Energy, LLC

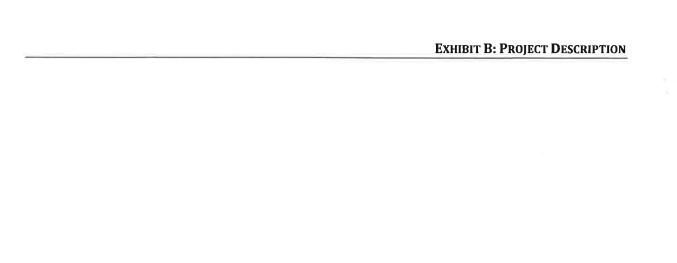
Wheatridge Wind Energy Facility

July 2015

Prepared by



Tetra Tech, Inc.



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Figure B-6. Typical Pad-Mounted GSU Transformer Foundation

Figure B-7. Typical Buried Cable Duck Back

Figure B-8. Typical Meteorological Tower Foundation

Terms and Definitions

Collector Line An underground or overhead electrical 34.5 kV line transmitting

power from the turbines to a Substation

Construction Yard The temporary area for construction activities and Project

component storage prior to installation

GE 1.7-103 Layout Project turbine layout comprised of 292 GE 1.7MW turbines with

80m hub heights and 103m rotor diameters

GE 2.5-120 Layout Project turbine layout comprised of 200 GE 2.5MW turbines with

85m hub heights and 120m rotor diameters

Gen-tie Line(s) One or two 230 kV transmission line(s) conveying power from the

Project to an interconnection point with the grid, which will be

permitted and built by UEC or UEC/CB

Intraconnection Corridor The intraconnection transmission line corridor connecting

Wheatridge East with Wheatridge West

Intraconnection Line(s) One or two overhead electrical 230 kV lines connecting the Project

Substations in Wheatridge East and Wheatridge West.

Met Tower Permanent meteorological tower

O&M Buildings Permanent operations and maintenance buildings, including parking

Project Wheatridge Wind Energy Facility

Site Access Road Private road to be constructed or improved for the purpose of

accessing turbines and associated Project facilities

Site Boundary The boundary within which all Project facilities will be constructed,

also known as the micrositing corridor

Substation A facility in which electric power from the turbines is aggregated,

stepped up in voltage, and connected to the Intraconnection Line(s)

or the Gen-tie Line(s)

Turbine A collective term for the foundation, tower, nacelle, blades and rotor

that comprise a wind turbine generator in the Project

Turbine Pad A cleared, graveled area around the base of each turbine

encompassing primarily the turbine's foundation

Wheatridge Wind Energy, LLC

Wheatridge East The eastern group of turbines

Wheatridge West The western group of turbines



Acronyms and Abbreviations

APLIC Avian Power Line Interaction Committee

ASC Application for Site Certificate

BMP Best Management Practice

BPA Bonneville Power Administration

CB Columbia Basin Electric Cooperative

EFSC Energy Facility Siting Council

EFU Exclusive Farm Use

FAA Federal Aviation Administration

GSU Generator step-up transformer

kV Kilovolt

mph Miles per hour

MW Megawatt

NESC National Electrical Safety Code

OAR Oregon Administrative Rules

ODOE Oregon Department of Energy

ORS Oregon Revised Statutes

rpm Revolutions per minute

RPS Renewables Portfolio Standard

RSA Rotor swept area

SCADA Supervisory control and data acquisition

UEC Umatilla Electric Cooperative

1.0 Introduction

Exhibit B provides a description of the proposed Wheatridge Wind Energy Facility (Project), as required to meet the submittal requirements of Oregon Administrative Rule (OAR) 345-021-0010(1)(b) paragraphs (A) through (F). OAR 345 Division 22 does not provide an approval standard specific to Exhibit B.

2.0 Overview of Proposed Facility

Wheatridge Wind Energy, LLC (Wheatridge), proposes to construct the Wheatridge Wind Energy Facility (Project), a wind generation facility with a maximum nominal generating capacity of 500 megawatts (MW) in Morrow and Umatilla counties, Oregon (see Figures C-1 and C-2). The Project is comprised of up to 292 turbines divided into two groups: a western group of turbines (Wheatridge West) and an eastern group of turbines (Wheatridge East). Wheatridge West and Wheatridge East are electrically connected by an 'Intraconnection Corridor' containing up to two parallel overhead 230-kilovolt (kV) transmission lines (Intraconnection Lines), each no longer than 35 miles in length. Other Project components include access roads (Site Access Roads), an electrical collection and control system, the Project's substations (Substations), operations and maintenance buildings (O&M Buildings), and temporary construction yards (Construction Yards). These facilities are all described in greater detail in Section 3.0.

Wheatridge West is located entirely within Morrow County, approximately 5 miles northeast of Lexington, and approximately 7 miles northwest of Heppner. Wheatridge West is bisected by Oregon Highway 207 (OR-207). Wheatridge East is located approximately 16 miles northeast of Heppner and encompasses land in both Morrow and Umatilla counties. The Intraconnection Corridor is located entirely within Morrow County and adjoins to the southeastern portion of Wheatridge West and the southern portion of Wheatridge East.

2.1 Definition of the Site Boundary

The Site Boundary establishes the micrositing corridors within which all Project facilities will be located. Permitting micrositing corridors allows Wheatridge the flexibility to adjust the specific location of Project facilities at the time of construction (a process referred to as micrositing), while establishing outer boundaries of potential construction which can then be used for purposes of impact assessment. The Site Boundary establishes the locations of turbine strings, and would encompass all of the permanent and temporary Project facilities. The Site Boundary is a minimum of approximately 660 feet in width around turbines, and wider in some locations. The Site Boundary width around Site Access Roads and electrical collection lines (Collector Lines) is narrower, between 200 feet and 500 feet in width. The Intraconnection Corridor is approximately 1,000 feet in width, and would contain all Intraconnection Lines and associated Site Access Roads. Wider areas of the Site Boundary would encompass the Substations, meteorological towers (Met



Towers), the O&M Buildings, and Construction Yards. The Site Boundary excludes areas where appropriate to avoid impacts to sensitive cultural, biological, or environmental resources such as wetlands.

2.2 Turbine Options

In order to allow flexibility in the choice of wind turbines at the time of construction, Wheatridge has analyzed impacts for two layouts using two different turbine models, while limiting the total generating capacity to 500MW. This approach would allow Wheatridge to select the most appropriate turbine model available at the time the turbines are acquired so long as the turbines are of no greater impact than allowed for in the Site Certificate and satisfy all the pre-construction conditions of Site Certificate. This flexibility is required because turbine manufacturers offer new turbine models with improved technology and retire older models approximately every 1 to 2 years.

Turbine layout Option 1 utilizes 292 1.7MW GE turbines with 80-meter (262-foot) hub heights and 103-meter (337-foot) rotor diameters and is referred to as the GE 1.7-103 layout in the Application for Site Certificate (ASC). Turbine layout Option 2 utilizes 200 2.5MW GE turbines with 85-meter (278-foot) hub heights and 120-meter (393-foot) rotor diameters and Option 2 is referred to as GE 2.5-120 layout in the ASC. This approach of analyzing impacts for two turbine types allows for the representation of a range of turbine technologies currently available and forecasted across all turbine vendors and their corresponding impacts in the Project. Wheatridge seeks micrositing flexibility within the Site Boundary in regard to the final layouts for both the studied GE 1.7-103 layout and GE 2.5-120 layout and any turbine model whose impacts are less than or equal to these two studied layouts and their associated facilities.

These two turbine layout options define the maximum number, size, visual impact, and noise limits of wind turbines for the Project. The ultimate number of wind turbines and the specific model and manufacturer used would be determined near the time of construction; however, the impacts associated with any turbine model chosen for construction would not exceed the impacts as bounded by this ASC. The number of turbines would not be greater than 292 (based on the GE 1.7-103 layout), the specific model selected for construction would not have a total rotor swept area (RSA) larger than the GE 2.5-120 layout, and the received sound levels at noise sensitive receptors from the ultimately selected turbine model and layout would not exceed the noise emissions of either the studied GE 1.7-103 or GE 2.5-120 layouts.

The preliminary Project layouts presented in the ASC are layouts which have involved significant engineering design work guiding the placement of turbines and supporting facilities while minimizing their impacts. These layouts were used to define the Site Boundary, which consists of corridors around all the turbines as currently designed and as likely designed during the final micrositing of the turbines and Project facilities. These preliminary Project layouts define the maximum impacts and are representative of the final layout but are not necessarily the specific location for each turbine, the final turbine model, or the final location of all the supporting Project facilities. For this reason, the analysis of the impacts of the turbines assumes both turbine types and



the Project layout with the largest potential impact to each element of the environment. The turbine type used may not be the same for each analysis. For example, the turbine with the largest RSA may not be the turbine with the loudest noise or the largest visual impact. The final layout will be determined prior to construction and will reflect additional survey data, final engineering design, and Wheatridge's ongoing process of avoiding and minimizing impacts.

2.3 Grid Interconnection

Wheatridge anticipates that the Project will connect to the Bonneville Power Administration (BPA) transmission system via overhead 230kV transmission lines (Gen-tie Line[s]) to be owned by either Umatilla Electric Cooperative (UEC) or UEC in partnership with the Columbia Basin Electric Cooperative (CB), but operated by BPA. The Gen-tie Line(s) will be permitted by UEC and/or CB separately from the Wheatridge Project; therefore, this application does not address impacts associated with the Gen-tie Line(s) and their associated substation(s).

The specific location of the future Gen-tie Line(s) is not yet known; however, several potential routes have been identified and are shown as conceptual alignments on figures in the ASC (see Figures C-4a/b/c/d). With the proposed Intraconnection Line(s) and multiple Substations, the Project is designed to accommodate a variety of Gen-tie Line route options. Several likely points of interconnection to the BPA transmission system exist, including the planned Stanfield substation near Stanfield, Oregon (Umatilla County) and the planned Longhorn substation at the Port of Morrow, Oregon (Morrow County). These two points of interconnection are the most likely and are shown throughout this ASC as illustrative of the Project's grid interconnection options, but other options may exist. The timeline and control of the interconnection options are largely established by BPA and other transmission customers in the area, which means the Project's construction timeline requires flexibility to be able to start construction when the interconnection facilities are ready.

3.0 Project Components, Structures, and Systems

3.1 Wind Turbines

The Project is designed around two representative wind turbine models: a GE 1.7MW 103-meter rotor diameter turbine and a GE 2.5MW 120-meter rotor diameter turbine. Table B-1 shows the key characteristics for each turbine layout option for Wheatridge East and Wheatridge West. The use of two layout options defines a representative range of turbine technical specifications and maximum impact parameters for the Project. The Project's total nominal generating capacity will be 500MW. The two turbine models represent the likely range of wind turbine generator ratings of 1.7MW to 2.5MW resulting in a maximum number of 292 turbines with the 1.7MW model. Rotor diameters are anticipated to be in the range of 103 meters (337 feet) to 120 meters (393 feet). Tower heights are similarly anticipated to range from 80 meters (262 feet) to 85 meters (278 feet). Total height (tower height plus blade length) for the turbines is likely in the range of 132 meters (433 feet) to 145 meters (476 feet). Turbines would be arrayed in rows, or strings, spaced approximately 700 to



1,000 feet apart within each string, with approximately 1 mile separating each row of turbines. This spacing is required by turbine manufacturers to minimize the turbines' turbulence. Figures C-5 and C-10 show representative turbine locations for the GE 1.7-103 and the GE 2.5-120 layouts.

	Tal	ble B-1. Wind	Turbine C	ption Chara	acteristics		
Project Area	Turbine Model	Generating Capacity	Tower Height	Rotor Diameter	Total Height	Total Number	Total Generating Capacity
		G	E 1.7-103 L	ayout	S PERSON		
Wheatridge East	GE 1.7-103	1.715MW	80m (262ft)	103m (338ft)	131.5m (431ft)	66 /1	113.2MW
Wheatridge West	GE 1.7-103	1.715MW	80m (262ft)	103m (338ft)	131.5m (431ft)	226	387.6MW
Total Project						292	500MW
TO THE REAL PROPERTY.	Carles Assessed	Gal Javanie A G	E 2.5-120 L	ayout	\$4.00 mg		NEWSTRANS
Wheatridge East	GE 2.5-120	2.5MW	85m (279ft)	120m (394ft)	145m (476ft)	50 /2	125MW
Wheatridge West	GE 2.5-120	2.5MW	85m (279ft)	120m (394ft)	145m (476ft)	150	375MW
Total Project						200	500MW

^{1. 31} turbines in Morrow County, and 35 in Umatilla County

A wind turbine generator consists of a three-bladed rotor, attached to a nacelle mounted atop a tubular tower (see Figure B-1); these components are described in greater detail below.

Nacelle

The nacelle sits atop the turbine tower and houses the gearbox, generator, brakes, and control systems for the turbine. Access to the nacelle is via a ladder inside the turbine tower, which is accessed by a locked doorway at the base of the tower. The nacelle is mounted to the turbine tower on a geared plate that functions to rotate the turbine horizontally on the tower, allowing the nacelle to turn and orient the rotor to face into the wind and maximize capture of the available wind resource.

The roof of the nacelle is designed to be removable or opened from within to accommodate major maintenance activities such as the replacement of a gearbox. The floor of the nacelle acts as a pan to contain any potential spills of gearbox or hydraulic fluid.

Blades and Rotors

The turbine blades are attached to the rotor hub, which is mounted to the front of the nacelle. A rotor blade is made of laminated fiberglass and carbon fiber and typically is constructed as a single piece. The rotor diameter of turbine models under consideration for the Project for maximum impact calculations and that are representative of ultimately selected turbine model range from 103 meters (337 feet) for the GE 1.7-103 layout to 120 meters (393 feet) for the GE 2.5-120 layout.



^{2. 20} turbines in Morrow County, and 30 in Umatilla County

Each blade would therefore be approximately 51 meters (167 feet) or 60 meters (197 feet) in length.

When operating, the rotor turns at a rate between 10 and 20 revolutions per minute (RPM). The turbine begins generating electricity at wind speeds of approximately 6 miles per hour (mph). At wind speeds greater than about 55mph, the turbine shuts down; the blades are feathered so they do not catch the wind, brakes are applied to slow and stop the rotor, and once stopped the rotor may be locked to prevent damage to the turbine.

Turbine Tower

The turbine tower is a cylindrical, usually steel, structure tapered from the base to the top, on top of which is mounted the nacelle. Tower heights vary by turbine model and manufacturer; those under consideration for the Project for maximum impact calculations and that are representative of ultimately selected turbine model would be either 80 meters (262 feet) for the GE 1.7-103 layout or 85 meters (278 feet) for the GE 2.5-120 layout. The interior of a tower is accessible by a locked door at ground level, and the tower features an internal ladder system providing protected access to the nacelle. A typical turbine tower would be approximately 15 feet (4.5 meters) across at the base, tapering to less than 10 feet across at the nacelle. Each tower would arrive at the Project in three or four sections, to be assembled on-site.

Turbine Foundation

Each turbine would be secured to a reinforced concrete foundation. Typical wind turbine foundations are reinforced concrete, spread-footing or plate foundations; other foundation types such as pile or caisson-type foundations may be considered based on site-specific soil conditions. The actual foundation design for each tower will be determined prior to construction based on site-specific geotechnical studies; however, for the purposes of the ASC, Wheatridge assumes that typical spread-footing foundations would be used (Figures B-2 and B-3). A typical spread-footing foundation consists of a reinforced concrete pad, up to 80 feet in diameter, extending to approximately 12 feet below grade. The center of the foundation would be approximately 6 feet thick, tapering to approximately 3 feet thick at the outer edges. A pedestal, upon which the turbine tower is mounted, projects from the center of the footing to above ground level.

Permanent Turbine Pad Impact Area

An engineered earth and gravel pad is maintained for the life of the Project atop the outer edges of the foundation footing. The earth and gravel effectively add weight to the foundation and further stabilizes the turbine; the gravel pad also serves as a parking area for maintenance vehicles. The permanent impact area within the maintained gravel pad is approximated by a 20-meter (65-foot) diameter circle, or 0.08 acres per turbine.

Temporary Turbine Construction Area

Construction of each turbine will require the temporary disturbance of an area around the foundation in order to accommodate foundation excavation and soil storage and to provide a stable area for the staging and assembly of turbine and tower components and the operation of



construction cranes and other heavy equipment (Figures B-4 and B-5). This temporary disturbance area is approximated by a 30-meter (98-foot) diameter circle around the turbine, or about 0.18 acres in size. Following erection of the turbines, the Construction Yards would be reclaimed through regrading to pre-construction contours, restoration of topsoil as needed, soil decompaction if necessary, and seeding and/or planting to restore habitat as appropriate. Wheatridge will coordinate with landowners for final restoration requirements in agricultural areas.

Turbine Marking and Lighting

The turbines will be marked and lighted according to Federal Aviation Administration (FAA) guidelines, but no other lighting would be used on the turbines. FAA guidelines call for painting the turbines and towers white or light gray, while making them highly visible to pilots from the air. Flashing red aviation lighting will be mounted atop selected turbines; FAA guidelines usually dictate for lighting at the end of each turbine string or around the perimeter of a project, and within a project such that the gap between lights is no greater than 0.5 miles. Under current FAA guidelines, all of the lights would be programmed to flash in unison, allowing the entire Project to be perceived as a single unit by pilots flying at night. The specific location of aviation lighting and the operation of the lighting system will be determined in consultation with FAA prior to beginning construction on the Project.

3.2 Electrical Collection System

The electrical collection system will carry power generated by the turbines to one of the Substations. Power would be initially generated at 575 to 690 volts (V) by the turbines, and then stepped up to 34.5kV through generator step-up (GSU) transformers installed at the base of each turbine. The Collector Lines would then carry the power to one of the Substations, at which the voltage would be stepped up from 34.5kV to 230kV for overhead transmission, either through the Intraconnection Line(s) or onto the Gen-tie Line(s).

Typically, the GSU transformer is a rectangular box with a footprint approximately 7.5 feet x 8.5 feet, located a few feet from the base of the turbine tower; it is therefore called a pad-mounted GSU transformer¹ (Figure B-6). A pad-mounted GSU transformer is typically mounted on an 8-inch thick concrete pad foundation, set within the engineered earth and gravel fill above the turbine foundation.

Electrical connections will be made underground or in enclosed junction boxes between the turbine and the pad-mounted GSU transformer, then from the transformer to the Collector Lines. The 34.5kV Collector Lines would typically run in trenches no less than 3 feet deep in tilled ground, generally located alongside the Site Access Roads, with junction splice boxes positioned intermittently along the lines for maintenance access (Figure B-7). Where land use and soil conditions make a buried depth of 3 feet infeasible, Collector Lines may be buried at a depth of less than 3 feet, while still adhering to National Electrical Safety Code (NESC) standards. Each Collector

¹ Note that in some Turbine models the GSU transformer is located in the nacelle or in the base of the tower.



Line circuit would consist of three wires, or phases; each wire would be an insulated, stranded metal conductor in a size range of 1/0 - 4/0 American wire gauge, nearly 3 inches in diameter.

It is possible that the Collector Lines may need to be run overhead in situations where a buried cable would be infeasible or would create unnecessary impacts, such as at stream or canyon crossings. In such instances overhead Collector Lines will be supported by a wooden or steel pole structure. Each support pole would be buried approximately 6 feet in the ground and would extend to a height of approximately 60 feet above ground, spaced 100 to 200 feet apart. Collector Lines are only anticipated to potentially need overhead placement in Wheatridge West. Based on existing topographic data, there would be no greater than 10.83 miles of overhead Collector Lines in the Project; however, the specific locations where Collector Lines may need to run overhead will not be known until site geotechnical work has been done.

The total length of Collector Lines needed would depend on the turbine model and number of turbines constructed. With the use of the GE 1.7-103 layout, approximately 88 miles of Collector Lines would be needed, while approximately 80 miles would be needed for the GE 2.5-120 layout. Tables C-3 and C-4 presents the Collector Line mileage for Wheatridge East and Wheatridge West by turbine layout option.

There would be no permanent impacts associated with the Collector Lines buried underground. Where not placed within a Site Access Road, the area above the buried line would be restored and revegetated following construction. For the purposes of the ASC, Wheatridge assumes a temporary impact corridor approximately 8 meters (26 feet) for the buried Collector Lines. Where Collector Lines may need to run overhead the permanent impact would be only the support poles for the overhead Collector Lines. Each pole's permanent impact would be a 1.5 meter diameter circle centered on the support pole; comprising no greater than 0.17 acres assuming all 10.83 miles of potential overhead support is needed for the Collector Lines.

Collector Substation(s)

The Project would likely include up to three Substations, in which power from the Collector Lines would be aggregated and stepped up to transmission voltage: with one or two Substations being located in Wheatridge West and one additional Substation being located in Wheatridge East. The proposed Substation locations for both Wheatridge East and Wheatridge West are shown on Figures C-4a/b/c/d and C-10.

This proposal describes three alternative locations for the Substations in Wheatridge West (Substations 1, 2a and 2b). While only two Substations are likely to be constructed in Wheatridge West, for the purposes of impact calculations all three potential Substation locations are considered within Wheatridge West. The final number and location of Substations in Wheatridge West will depend on the final location of the UEC or UEC/CB Gen-tie Line(s), as well as the route option used for the Intraconnection Line(s) (see Section 3.3).

Each Substation would occupy between 2 and 5 acres and would be enclosed by a locked 8-foot tall wire mesh fence to prohibit unauthorized access. Substation equipment would include transformers, transmission line termination structures, a bus bar, circuit breakers and fuses,

control systems, meters, and other equipment. The area within the fence line would be graded approximately flat, with a bed of crushed rock applied for a durable surface.

Substation 1 would likely be located near the Wheatridge West O&M Building on the southern side of Baseline Road. Substation 2a would likely be located south of Strawberry Lane, approximately 0.5 miles west of Bombing Range Road. Substation 2b would likely be located 0.5 miles east of Cutsforth Road, east of its intersection with Dolven Road. Substation 3 would likely be located near the Wheatridge East O&M Building, along an existing private road to be improved, west of Vey Road and approximately 1.25 miles north of the Umatilla County line.

3.3 Intraconnection Line(s)

Wheatridge East and Wheatridge West would be electrically connected by the Intraconnection Line(s), either single or a double circuit 230kV transmission line(s) running between the Substations in each area (Figures C-4a/b/c/d). If the Intraconnection Line is a single circuit, then one set of transmission line structures, either H-frame or monopole, will be constructed to carry the circuit. If the Intraconnection Line(s) is two circuits, then either one set of transmission line monopole structures carrying both circuits or two sets of parallel transmission line monopole structures each carrying one circuit will be constructed. The Intraconnection Line(s) would be designed to maintain a minimum conductor-to-ground clearance of 30 feet and the structures would be typically 60 feet tall and spaced approximately 400-800 feet apart depending on the terrain. The Intraconnection Line(s) will be designed following Avian Power Line Interaction Committee (APLIC) (2006) recommendations to prevent electrocution of birds. APLIC recommended measures are intended to protect raptors, cranes, and other large birds from accidental electrocution and are sufficient to protect even the largest birds that may try to roost on the Project Intraconnection Line(s). The engineering options for the Intraconnection Line structures are discussed in detail in Exhibit AA, including example drawings. The construction schedule of the Project may require that one circuit is constructed before the second circuit; discussed in greater detail in section 6.0.

The final Intraconnection Line routes will depend on the point of interconnection to the BPA grid, likely either the planned Longhorn or Stanfield substations, and on the number of Project Substations; likely there will be two or three. A shown on Figures C-4a/b/c/d, there are four Intraconnection Line route options, none of which is dependent upon the layout options. Any of these routes would work with either the GE 1.7-103 or GE 2.5-120 layouts. The Intraconnection Line route options are as follows:

- Option 1: Two Project Substations to Longhorn
 - o This option would run from Substation 3 in Wheatridge East to Substation 1 in Wheatridge West and then on to the proposed UEC/CB Strawberry substation, just to the west of Wheatridge West, for interconnection to a UEC or UEC/CB operated Gen-tie Line going to the proposed BPA Longhorn substation. The Intraconnection Line routes would be 31.5 miles (50.5 kilometers) in length.



- Option 2: Three Project Substations to Longhorn
 - o This option would run from Substation 3 in Wheatridge East to Substation 2b in Wheatridge West, then on to Substation 2a in Wheatridge West, and then on to the proposed UEC/CB Strawberry substation, just to the west of Wheatridge West, for interconnection to a UEC or UEC/CB operated Gen-tie Line going to the proposed BPA Longhorn substation. The Intraconnection Line routes would be 31.3 miles (50.3kilometers) in length.
- Option 3: Two Project Substations to Stanfield
 - This option would run from Substation 1 in Wheatridge West to Substation 3 in Wheatridge East for interconnection to a UEC operated Gen-tie Line going to the proposed BPA Stanfield substation. The Intraconnection Line routes would be 24.5miles (39.4 kilometers) in length.
- Option 4: Three Project Substations to Stanfield
 - o This option would run from Substation 2a in Wheatridge West to Substation 2b in Wheatridge West, and then on to Substation 3 in Wheatridge East for interconnection to a UEC operated Gen-tie Line going to the proposed BPA Stanfield substation. The Interconnection Line routes would be 27.8 miles (44.7 kilometers) in length.

For the purposes of impact assessment in the ASC, the longest route, Option 1, with two parallel overhead Intraconnection Lines, has the maximum impact of the options considered and is used for calculating the maximum impact of the Interconnection Lines. The use of any of the other Intraconnection Line route options would result in lesser impacts. The shortest route, Option 3, also assumes two parallel overhead Intraconnection Lines and is used to represent the minimum impacts of the Intraconnection Lines.

OAR 345-021-0010(1)(b)(D) requires a corridor selection assessment if the proposed energy facility is a pipeline or a transmission line or has, as a related or supporting facility, a transmission line or pipeline that, by itself, is an energy facility under the definition in ORS 469.300. ORS 469.300 defines a transmission line as an energy facility if it is (a) more than 10 miles in length, (b) with a capacity of 230,000 volts or more, and (c) would be constructed in more than one city or county. The proposed Intraconnection Line(s) would be more than 10 miles in length, would operate at 230kV, and would be located in both Morrow and Umatilla counties. The Intraconnection Line(s) alone would therefore be considered an energy facility according to ORS 469.300, and a corridor selection assessment is required.

Wheatridge examined a number of potentially viable routes for the Intraconnection Line(s); however, none appeared to be particularly advantageous or disadvantageous in terms of satisfying the requirements of the corridor selection assessment. Many routes could have been designed that would meet the corridor selection criteria. Ultimately, the route became defined based on the participation of landowners in the area.



Per the requirements of OAR 345-021-0010(1)(b)(D), "In the assessment, the applicant shall discuss the reasons for selecting the corridor(s), based upon evaluation of the following factors:

(i) Least disturbance to streams, rivers and wetlands during construction.

The Project and the Intraconnection Corridor are designed to avoid as many impacts to streams, rivers, and wetlands as possible during construction and operation. Where necessary, streams would be spanned by the proposed Intraconnection Line(s), with the nearest support poles accessed from opposite sides of the stream; no impacts to the streambed or riparian vegetation would occur. In areas of steep terrain, a helicopter may be used to bring Intraconnection Line components and construction personnel to access these areas.

Wheatridge feels that the potential use of a helicopter in construction of the Intraconnection Line(s) is exempt from state noise regulations under OAR 340-035-0035(5) which exempts sounds that originate at construction sites (g) and sounds created in the construction or maintenance of capital equipment (h) from Oregon state noise regulations. Wheatridge anticipates construction requiring the use of a helicopter to last no more than 2 weeks, during which periodic deliveries of Intraconnection Line(s) equipment and personnel will be airlifted between the area under construction within the Intraconnection Corridor and the temporary Construction Yards in Wheatridge East.

Additionally, in the areas within which a helicopter may be required for construction of the Interconnection Line(s), the area of the Interconnection Corridor south of Big Butter Creek Lane for approximately 6 miles to Little Butter Creek Road, there are no protected areas or recreation sites within 10 miles. See Exhibit X, Section 2.2.1 for more detail on exemptions to Oregon state noise regulations.

All impacts to wetlands have been avoided through the siting of Project facilities. Given the general scarcity of these resources in the area, other routes for the Intraconnection Corridor exist with similar impacts, but no alternative was identified with materially less impacts to these resources than the chosen route.

(ii) Least percentage of the total length of the pipeline or transmission line that would be located within areas of Habitat Category 1, as described by the Oregon Department of Fish and Wildlife.

The Intraconnection Line(s) would have no impacts to areas of Category 1 Habitat, which in this region is largely limited to Washington ground squirrel colonies and surrounding suitable habitat. It is likely that other routes could be defined that would also avoid all impacts to Category 1 Habitat.

(iii) Greatest percentage of the total length of the pipeline or transmission line that would be located within or adjacent to public roads and existing pipeline or transmission line rights-of-way.

The Intraconnection Line(s) would not be located within or adjacent to public roads or existing utility rights-of-way, except where it would cross roadways. There are no existing pipeline or transmission line rights-of-way in the area that could be utilized as a connection between Wheatridge East and Wheatridge West. The proposed Intraconnection Line route does not follow

existing roads, partially to avoid an unnecessary visual impact for users of those road segments. Rather, the proposed Intraconnection Line route runs in remote areas, in locations where it would be visible to only a few area residents or participating landowners.

(iv) Least percentage of the total length of the pipeline or transmission line that would be located within lands that require zone changes, variances or exceptions.

The proposed Intraconnection Line(s) are located entirely on land zoned for exclusive farm use (EFU), and does not require a zone change, variance, or exceptions to County regulations to be permitted. Exhibit K provides a discussion regarding zoning and compliance with local zoning regulations. All potentially viable alternative Intraconnection Line routes would similarly need to cross EFU-zoned land.

(v) Least percentage of the total length of the pipeline or transmission line that would be located in a protected area as described in OAR 345-022-0040.

The proposed Intraconnection Line(s) would not be located within or otherwise affect any protected area. All other potentially viable Intraconnection Line routes would similarly have been far from any protected area.

(vi) Least disturbance to areas where historical, cultural or archaeological resources are likely to exist.

Surveys of historical, cultural and archaeological resources throughout the Site Boundary have been completed, and the Project has been modified to avoid impacts to all known cultural resource sites. With the very limited impact footprint of the Intraconnection Line(s) and the sparse nature of cultural resources in the region, it is unlikely that previously unknown cultural resources would be found or impacted during construction. Exhibit S describes the findings of cultural resource surveys and avoidance efforts. All other potentially viable Intraconnection Line routes would cross a similar landscape and would likely have a similar level of sparsely distributed cultural resources, for which impacts could likewise be avoided.

(vii) Greatest percentage of the total length of the pipeline or transmission line that would be located to avoid seismic, geological and soils hazards.

As described in Exhibit H and Exhibit I, the Intraconnection Line routes have been sited to avoid known seismic, geologic, and soil hazards. They would not be located within any landslide or rock fall hazard areas, nor in any liquefaction or subsidence areas. The nature of the Intraconnection Line design is such that it would not be particularly vulnerable to damage from earthquakes, which have historically occurred in the region. To the extent that the route of the Intraconnection Lines may be affected by faults, earthquakes, or other geologic hazards, the use of robust engineering design would alleviate safety concerns related to geologic hazards. Exhibit I describes a number of soil hazards, which include disturbance and potential loss of soils susceptible to water or wind erosion, hydric soils, and soils with qualities that may make post-construction revegetation difficult. To the extent that Site Access Roads or construction activities cross soils particularly susceptible to erosion, the loss of soil would be limited through the use of Best Management Practices (BMPs) for erosion control, and spraying of water in open construction areas to avoid wind erosion. The



Revegetation and Weed Management Plan (see Exhibit P attachment) provides guidance for establishing vegetation in challenging sites.

The landscape that any other potentially viable Intraconnection Line route might cross is similarly largely free of geologic hazards, such that known hazard areas could similarly be avoided. To the extent that some geologic hazards cannot be avoided (e.g. the potential for future earthquakes), robust engineering design would be similarly employed to prevent safety concerns. Impacts to sensitive soils would likely be similar in scale, and would be mitigated through identical actions.

(viii) Least percentage of the total length of the pipeline or transmission line that would be located within lands zoned for exclusive farm use.

The entire Intraconnection Line route options are located in lands zoned EFU. In the area where the Intraconnection Lines are proposed, there are no lands that are not zoned EFU that could be used. All potentially viable alternative Intraconnection Line routes would similarly need to cross EFU-zoned land.

OAR 345-021-0010(1)(b)(E) If the proposed energy facility is a pipeline or transmission line, or has, as a related or supporting facility, a related or supporting facility, a transmission line or pipeline of any size:

(i) The length of the pipeline or transmission line.

The proposed Intraconnection Line(s) would be approximately 24.5 to 31.5 miles in length, depending on the route option selected.

(ii) The proposed right-of-way width of the pipeline or transmission line, including to what extent new right-of-way will be required or existing right-of-way will be widened.

The Intraconnection Line routes would require a 150-foot wide right-of-way, and would be approximately centered within that right-of-way. There is currently no existing utility right-of-way in the location of the proposed Intraconnection Line(s), and no utility right-of-way nearby that would provide appropriate routing for the Intraconnection Line(s). Wheatridge will obtain right-of-way easements from the private landowners along the proposed Intraconnection Line routes prior to construction; it is assumed that this will be a condition of the Site Certificate.

(iii) If the proposed transmission line or pipeline corridor follows or includes public right-of-way, a description of where the transmission line or pipeline would be located within the public right-of-way, to the extent known. If the applicant proposes to locate all or part of a transmission line or pipeline adjacent to but not within the public right-of-way, describe the reasons for locating the transmission line or pipeline outside the public right-of-way. The applicant must include a set of clear and objective criteria and a description of the type of evidence that would support locating the transmission line or pipeline outside the public right-of-way, based on those criteria.

Wheatridge does not intend to use public road right-of-ways. The proposed corridor for the Intraconnection Line(s) will not include public rights-of-way, except where the lines would cross existing public roads. There is currently no existing utility right-of-way in the location of the



proposed Intraconnection Line(s), and no utility right-of-way nearby that would provide appropriate routing for the Intraconnection Line(s).

(iv) For pipelines

[N/A]

(v) For transmission lines, the rated voltage, load carrying capacity, and type of current and a description of transmission line structures and their dimensions.

The proposed Intraconnection Line(s) would be comprised of one or two parallel overhead 230kV transmission lines supported by H-frame or monopole structures likely constructed of wood or steel. The transmission line structures would be approximately 60 to 150 feet tall and spaced approximately 400 to 800 feet apart depending on the terrain. The Intraconnection Line is designed as a single or double circuit transmission line, or as two parallel, single circuit transmission lines on two separate, parallel pole structures. The circuits consist of 3-phase alternating current transmitted on single or twin-bundled conductors usually of aluminum and steel. The peak line loading value assumed for the overhead 230kV Intraconnection Line is 500MW, or approximately 1,280 amperes per phase. The Intraconnection Line design is described in greater detail in Exhibit AA.

3.4 Meteorological Towers

The Project includes up to 12 permanent Met Towers spaced throughout the Project: five Met Towers are sited in Wheatridge East and seven in Wheatridge West. The number of Met Towers proposed is identical for both the GE 1.7-103 and GE 2.5-120 layouts. The Met Towers are required to measure the wind speeds around the Project separate from the wind turbines for verification of the wind turbines' performance in accordance with IEC standards and wind farm best practice operations. The Met Towers would be a freestanding, non-guyed design, with a height of approximately 100 meters (328 feet). FAA lighting may be installed on some of the Met Towers, depending on the overall lighting scheme for the Project as a whole, to be determined prior to construction and in consultation with FAA. Each Met Tower would have a foundation footprint approximated by a 10-meter (32-foot) diameter circle. The temporary disturbance area associated with the construction of each Met Tower is approximated by a 30-meter (98-foot) diameter circle (Figure B-8).

3.5 Communication and SCADA System

A communication system consisting of fiber optic and copper communication lines will connect the turbines, Met Towers, and Substations to the O&M Buildings. This communication system allows each turbine and Substation to be monitored by a Supervisory Control and Data Acquisition (SCADA) system, installed in the O&M Buildings. This system monitors each turbine and the Met Tower data for variables such as meteorological conditions, critical operating parameters, and power output. The turbines are controlled via the SCADA system, which can also be controlled remotely. SCADA software is tuned specifically to the needs of each wind project by the turbine



manufacturer or a third-party SCADA vendor. The communication lines for the SCADA system run alongside the Collector Lines, typically in a trench at least 3 feet deep or overhead, if necessary.

3.6 Operations and Maintenance Buildings

The Project includes sites for two 0&M Buildings, the first in Wheatridge East and a second in Wheatridge West. Each 0&M Building would be a single-story structure of approximately 6,000 to 9,000 square feet. Immediately adjacent to each building would be a parking lot for employees, visitors and Project equipment. Each 0&M Building would occupy a total of approximately 1.1 acres likely within a fenced enclosure. Each 0&M Building would include an office, break room, kitchen, lavatory with shower, utility room, covered vehicle parking, storage for maintenance supplies and equipment, and the SCADA system. Electricity and telephone service would be provided to each 0&M Building from local providers using overhead and/or underground lines. Water would be provided by an on-site well at each building. Water use is not anticipated to be greater than 5,000 gallons per day, so a water right would not be required for such a well. The kitchen, toilets, and shower would drain into an on-site septic system, to be permitted for each building prior to construction through either Morrow or Umatilla Counties.

Likely locations for the Wheatridge West O&M Building would be located on the southern side of Baseline Road, 0.75 miles east of Nichols Road near the Project Substation 1. The Wheatridge East O&M Building would be located in the portion of Wheatridge East in Umatilla County, along an existing private road to be improved by Wheatridge, approximately 1.5 miles west of Vey Road, about 1.25 miles north of the Umatilla County line, near Project Substation 3 (see Figures C-5 through C-10).

3.7 Access Roads

3.7.1 Access to the Site – Offsite Public Roads

The primary access to the Project would be from Interstate 84 (I-84) via Bombing Range Road or Oregon Route 207 (OR-207). Within the Site Boundary and surrounding area, existing county and private roads would provide access to the Project; these include, but are not limited to: Strawberry Lane, Kilkenny Road, Kemp Lane, Sand Hollow Road, Spur Lane, Butter Creek Road, Big Butter Creek Lane, and Little Butter Creek Road. Some improvements to existing public roads are likely to be needed to accommodate Project construction, such as flattening crests or filling dips, widening sharp corners, or adding road base material; specific improvements will be identified in consultation with the appropriate county road master prior to construction. Upgrades to existing roads will be done according to applicable state and county road standards and after consultation with Morrow and Umatilla County staff. A road use agreement with each county will specify requirements, including that all existing public roads used to access the Project will be left in as good or better condition than that which existed prior to the start of construction. See Figure U-2 for potential county road improvements.



3.7.2 Access Within the Site - Onsite Private Roads

Access to the turbines, Construction Yards, Substations, and O&M Buildings would be via a network of private Site Access Roads to be constructed or improved by Wheatridge as part of the Project's construction. In order to minimize impacts to agricultural operations, grazing lands, and wildlife habitat, existing private roads and farm access tracks would be utilized to the greatest extent practicable.

All newly constructed and improved Site Access Roads would be graded and graveled to meet load requirements for heavy construction equipment, as necessary. Most Site Access Roads would be initially constructed to be wider than needed for operations, to accommodate the large equipment needed for construction. Following turbine construction, the Site Access Roads would be narrowed for use during operations and maintenance. The additional disturbed width required during construction would be restored following the completion of construction by removing gravel surfacing, restoring appropriate contours with erosion and stormwater control Best Management Practices (BMPs), decompacting as needed, and revegetating the area appropriately. For purposes of impact assessment, a temporary impact corridor 12 meters (39 feet) in width and a permanent impact corridor 5 meters (16 feet) in width are used; these corridors would encompass the Site Access Roads and most cut and fill slopes and any necessary drainage or erosion control features. Where there are existing roads to be improved, the existing road area is assumed to be approximately 3 meters (10 feet) in width; this area has been subtracted out of the Project's impacts.

The total mileage of the Site Access Roads would vary slightly depending on the turbine option chosen at the time of construction. The GE 1.7-103 layout would require approximately 73 miles of Site Access Roads, of which approximately 61 miles would be new, and 12 miles would be improvements to existing roads. The GE 2.5-120 layout would require approximately 65 miles of Site Access Roads, of which nearly 53 miles would be new and 12 miles would be improved. Tables C-3 and C-4 present the length of Site Access Roads for Wheatridge East, Wheatridge West, and the Project as a whole for each turbine layout option, along with the areas of temporary and permanent disturbance associated with the Site Access Roads.

Site Access Roads would also be needed for the construction of the Intraconnection Line(s). All of the Site Access Roads for the Interconnection Line(s) would be temporary in nature, utilizing existing farm roads and edges of fields to access the Intraconnection Corridor. Because the Intraconnection Line(s) can be constructed and maintained using only large trucks rather than heavy construction cranes, and construction would take place during the dry time of year when the ground surface is hard enough to support those vehicles, it is expected that no Site Access Road improvements will be necessary. The same unimproved farm access tracks and field crossings would sufficiently serve the light trucks generally used for maintenance operations. As with other Site Access Roads, a 12 meter (39 feet) wide temporary impact corridor is used for purposes of assessing impacts of Site Access Roads used for constructing the Intraconnection Line(s); however, there is no permanent impact associated with these Site Access Roads.



The total mileage of the Site Access Roads used for constructing the Intraconnection Line(s) would vary depending on the Intraconnection Line route option chosen at the time of construction. The shortest route would require approximately 22.75 miles of Site Access Roads, while the longest would require approximately 25.5 miles. Table C-5 presents the length of Site Access Roads for the Intraconnection Line(s), for the longest and shortest routes, along with the areas of temporary and permanent disturbance associated with the Site Access Roads.

3.8 Construction Yards

During construction, Wheatridge would establish up to four Construction Yards within the Site Boundary, to facilitate the delivery and assembly of material and equipment. As many as two Construction Yards would be utilized in Wheatridge West, as well as up to two more in Wheatridge East. The Construction Yards would contain field construction offices; would be used to store construction equipment when not in use; would be used for storage of construction supplies and materials; may contain temporary concrete batch plants; and may be used for assembly of some Project components. Typically turbine and tower components would be delivered directly to each turbine site rather than being received and stored at the Construction Yards.

Each Construction Yard would occupy between 15 and 20 acres, and would be graded approximately level and surfaced in gravel. Construction Yards would be signed as private, no trespassing with on-site security staff.

All Construction Yards will be restored to pre-construction conditions unless an agreement with the landowner leads to some or all of a Construction Yard being retained after construction. Restoration of a Construction Yards would typically involve removal of gravel surfacing; regrading to pre-construction contours; restoration of topsoil as needed; soil decompaction if necessary; and seeding and/or planting to restore agricultural or habitat lands as appropriate. Wheatridge will coordinate with landowners for final restoration requirements in agricultural areas.

Figures C-5 through C-10 show the locations of proposed temporary Construction Yards. Construction Yards 1 and 2 are located in Wheatridge West. Construction Yard 1 is located on the south side of OR-207 approximately 0.4 miles west of Bombing Range Road, and Construction Yard 2 is be located to the southeast of the intersection of Nichols Road and Baseline Road. Within Wheatridge East are Construction Yards 3 and 4. Construction Yard 3 would be located to the west side of Vey Road, in Morrow County. Construction Yard 4 would also be located to the west of Vey Road but in Umatilla County, approximately 4 miles south of the Lexington-Echo Highway (a.k.a. OR-320 or Oregon Trail Road).

Temporary Concrete Batch Plant

Wheatridge anticipates that the construction contractor would utilize on-site temporary concrete batch plants instead of sourcing concrete from existing suppliers. Therefore, for the purposes of the ASC, Wheatridge assumes that one or more temporary concrete batch plants would be utilized during construction of the Project. The concrete batch plants would be located within the temporary Construction Yards, and therefore do not have associated independent impact areas. The



use of temporary batch plants will be permitted by the construction contractor through the county in which it will be located. In addition, each concrete batch plant requires a state air quality permit, which would also be held by the construction contractor or a qualified third-party contractor. These third-party permits are described in more detail in Exhibit E. Wheatridge may at the time of construction choose to instead purchase concrete directly from a licensed third-party contractor and have it delivered directly to the site as required, thereby removing the need for on-site batch plants.

Wheatridge assumes that rock for road construction and concrete mixing would be obtained from existing, permitted quarries near the Project, and therefore has not included rock quarrying or gravel mining as an integral part of the Project. However, if a new quarry is found to be necessary or advantageous, it would be permitted and developed at a future time by the construction contractor.

4.0 Other Systems and Information

4.1 Fuel and Chemical Storage

During construction of the Project, small quantities of a few hazardous materials may be utilized or stored in the Construction Yards. Such materials may include cleaners, insecticides or herbicides, paint, or solvents. None would be present in substantial reportable quantities; the amounts present (if at all) would be no greater than household quantities. When not in use these would be stored in a secure location within the Construction Yards.

Fuels would be the only hazardous material that may be stored in substantial quantities on-site during construction; Wheatridge anticipates that up to 1000 gallons of diesel fuel and 500 gallons of gasoline may be kept on-site for fueling of construction equipment. These would both be stored in temporary above-ground tanks in the construction yard(s), within an area that provides for secondary containment. Fuels would be delivered to the construction yard by a licensed specialized tanker vehicle. There would be no substantial quantities of lubricating oils, hydraulic fluid for construction equipment, or other hazardous materials maintained on-site during construction. Lubricating oil or hydraulic fluids for construction equipment would similarly be brought in on an as-needed basis for equipment maintenance by a licensed contractor using a specialized vehicle, and waste oils removed by the same maintenance contractor. Lubricating oils and hydraulic oils for the turbines and dielectric oils for the transformers would similarly arrive on an as-needed basis and transferred into the receiving components, such that none would be stored on-site.

During operations, there would be no substantial quantities of fuels, oils, or chemicals on-site, except as contained in qualified oil-filled equipment including the turbine gearboxes and Substation transformers. Lubricating oil would be brought in on an as-needed basis for periodic oil changes in the turbine gearboxes, by a maintenance contractor using a specialized vehicle, and waste oils would be removed in the same way. Small quantities of gear oil would likely be maintained on-site for occasional top-off; it is anticipated that less than 20 gallons would be stored in the O&M

Buildings at any given time. Very small quantities of pesticides or herbicides, paint, solvents or cleaners may also be kept on-site; when not in use these would be stored in the O&M Buildings. Due to the limited quantities of petroleum products or hazardous materials, no secondary containment systems are planned for the O&M buildings; however, sorbent materials will be maintained on-site to capture any small spills that may occur.

There are multiple viable alternatives for secondary containment for the fueling/fuel storage area. For example, a liner may be installed under the gravel surfacing, or the area may be surfaced with concrete; stormwater and any spilled liquids would pass through an oil-water separator and the spilled fuels would then flow into an enclosed sump that would be pumped out for disposal. Other satisfactory options include the use of drip pans while fueling, or provision of sorbent materials to capture minor spills, The specific methods and design will be determined by the construction contractor in conjunction with EPA prior to storing bulk quantities of fuel on-site.

Secondary containment is optional for the transformers and for the turbine gearboxes, as these are classified as qualified oil-filled operational equipment under the EPA's Amended Spill Prevention, Control, and Countermeasure (SPCC) Rule issued in 2006 (EPA-550-F-06-008). Per the Amended Rule, instead of providing secondary containment for qualified oil-filled operational equipment, an owner or operator may prepare an oil spill contingency plan and a written commitment of manpower, equipment, and materials to quickly control and remove discharged oil; the plan must include an inspection or monitoring program for the equipment to detect a failure and/or discharge. Alternatively, the transformers may be installed on foundations that provide secondary containment, or sorbent materials may be kept on-hand to capture minor leaks. The specific methods and design (if appropriate) will be determined prior to construction of the substations. The nacelles and turbine foundation will effectively function as secondary containment for the turbine gearboxes, such that no additional secondary containment systems are needed for the turbines.

4.2 Fire Prevention and Control

The greatest risk of fire would occur during construction of the Project, when welding and metal cutting for foundation rebar frames would take place, and vehicles and construction equipment may be used in areas of tall, dry grass. In order to prevent fires from occurring, the construction contractor will implement a number of systems and procedures. These would include requirements to conduct welding or metal cutting only in areas cleared of vegetation, and to keep emergency firefighting equipment on-site when potentially hazardous operations are taking place. Construction workers will be prohibited from parking vehicles in areas of tall dry vegetation, to prevent fires caused by contact with hot mufflers or catalytic converters.

The risk of fire during the operational phase of the Project is low. While incidents of wind turbine fires have occurred, these incidents are rare and have generally been traceable to poor maintenance or electrical malfunction. The risk of turbine fires will be minimized through proper maintenance of the turbine and its critical mechanical and electrical components. In addition, internal fire suppression systems would be installed in all of the turbines to prevent a catastrophic



turbine fire. Lightning protection systems are built into the turbine blades and tower to electrically ground the entire structure and eliminate the potential for lightning-caused fires. The electrical collection system and Intraconnection Line(s) are unlikely to cause a fire.

5.0 Rights-of-way

The Intraconnection Line(s) would require the acquisition of an approximately 150-foot wide right-of-way from private landowners; all of the landowners along the proposed Intraconnection Line routes are Project participants or have expressed a willingness to grant such rights-of-way to Wheatridge. The necessary legal documents granting the rights-of-way will be finalized and recorded with the appropriate county prior to beginning construction of the Intraconnection Line(s).

6.0 Construction Schedule

Wheatridge requests a Site Certificate from the Energy Facility Siting Council (EFSC) valid for 6 years within which to begin construction on one or more phases of the Project for the following reasons. The construction of the planned BPA Longhorn and/or Stanfield substations, into which the Project will interconnect to the grid, is dependent on the BPA, which is outside the control of Wheatridge and requires approximately a 3-year lead time to procure a 230kV to 500kV step-up transformer. Additionally, the market demand for renewable power is expected to significantly increase around 2020. According to Renewable Northwest, Oregon and Washington utilities are forecasted to have a shortfall of over 700 average MW in complying with the Renewable Portfolio Standard (RPS) requirements by 2020. The shortfall can be supplied by approximately 2000 MW of Northwest wind power. A 6-year Site Certificate allows Wheatridge to meet this strong and growing market demand and RPS requirement immediately and incrementally over 6 years.

The Project will be constructed in one or more phases each lasting up to 18 months. Wind projects of similar or larger sizes as Wheatridge built in Oregon and other parts of the country have been built in one or more phases due to constraints on wind turbine delivery schedules, the normal rate of wind farm construction, and the size of off-take agreements with purchasers of the wind power. Constructing the Project in phases also allows for each phase to satisfy incremental market demand, serve power to different customers, and possibly to different interconnections during the 6-year Site Certificate. Since the Project is likely to be built in phases, up to two Intraconnection Line circuits may be required so that power can be supplied to different customers at different times or interconnects from two different phases or groups of phases. For example, the first phase may supply power on the first circuit and then the second and third phases may supply power on a second circuit constructed later. Any phased construction schedule scenario or configuration of the Intraconnection Line(s) would not have greater impacts than the maximum impacts of the Project discussed throughout this ASC.



Each Project phase will be commissioned after the completion of its construction, testing, inspection, and interconnection to the grid. This includes inspections by state and county inspectors to satisfy permitting requirements and conditions of the Site Certificate. Inspection and testing of the turbines, Collector Lines, Substations, Intraconnection Line(s), SCADA system, and all supporting Project infrastructure will also occur to ensure safe and reliable operations of the Project in accordance with equipment manufacturer guidelines, NESC, and other applicable standards.



7.0 Submittal Requirements and Approval Standards

7.1 Submittal Requirements

Table B-2. Submittal Requirements Matrix	
Requirement	Location
OAR 345-021-0010(1)(b)(A) A description of the proposed energy facility, including as applicable:	
(i) The nominal electric generating capacity and the average electrical generating capacity, as defined in ORS 469.300.	Section 2.0
(ii) Major components, structures and systems, including a description of the size, type and configuration of equipment used to generate electricity and useful thermal energy.	Section 2.0 and 3.0
(iii) A site plan and general arrangement of buildings, equipment and structures;	Figures C-5 and C-7
(iv) Fuel and chemical storage faculties, including structures and systems for spill containment	Section 4.1
(v) Equipment and systems for fire prevention and control.	Section 4.2
(vi) For thermal power plants: (i) A discussion of the source, quantity and availability of all fuels proposed to be used in the facility to generate electricity or useful thermal energy. (ii) Process flow, including power cycle and steam cycle diagrams to describe the energy flows within the system; (iii) equipment and systems for disposal of waste heat; (iv) The fuel chargeable to power heat rate.	N/A
(vii) For surface facilities related to underground gas storage, estimated daily injection and withdrawal rates, horsepower compression required to operate at design injection or withdrawal rates, operating pressure range and fuel type of compressors.	N/A
(viii) For facilities to store liquefied natural gas, the volume, maximum pressure, liquefaction and gasification capacity in thousand cubic feet per hour.	N/A
OAR 345-021-0010(1)(b)(B) A description of major components, structures and systems of each related or supporting facility.	Section 3.0
OAR 345-021-0010(1)(b)(C) The approximate dimensions of major facility structures and visible features.	Section 3.0
OAR 345-021-0010(1)(b)(D) If the proposed energy facility is a pipeline or a transmission line or has, as a related or supporting facility, a transmission line or pipeline that, by itself, is an energy facility under the definition in ORS 469.300, a corridor selection assessment explaining how the applicant selected the corridor(s) for analysis in the application. In the assessment, the applicant shall evaluate the corridor adjustments the Department has described in the project order, if any. The applicant may select any corridor for analysis in the application and may select more than one corridor. However, if the applicant selects a new corridor, then the applicant must explain why the applicant did not present the new corridor for comment at an information meeting under OAR 345-015-0130. In the assessment, the applicant shall discuss the reasons for selecting the corridor(s), based upon evaluation of the following factors:	
(i) Least disturbance to streams, rivers and wetland during construction.	Section 3.3



Table B-2. Submittal Requirements Matrix	
Requirement	Location
(ii) Least percentage of the total length of the pipeline or transmission line that would be located within areas of Habitat Category 1, as described by the Oregon Department of Fish and Wildlife.	Section 3.3
(iii) Greatest percentage of the total length of the pipeline or transmission line that would be located within or adjacent to public roads, and existing pipeline or transmission line rights-of-way.	Section 3.3
(iv) Least percentage of the total length of the pipeline or transmission line that would be located within lands that require zone changes, variances or exceptions.	Section 3.3
(v) Least percentage of the total length of the pipeline or transmission line that would be located in a protected area as described in OAR 345-022-0040.	Section 3.3
(vi) Least disturbance to areas where historical, cultural or archaeological resources are likely to exist.	Section 3.3
(vii) Greatest percentage of the total length of the pipeline or transmission line that would be located to avoid seismic, geological and soils hazards.	Section 3.3
(viii) Least percentage of the total length of the pipeline or transmission line that would be located within lands zoned for exclusive farm use.	Section 3.3
AR 345-021-0010(1)(b)(E) If the proposed energy facility is a pipeline or transmission ne, or has, as a related or supporting facility, a transmission line or pipeline of any size:	
(i) The length of the pipeline or transmission line.	Section 3.3
(ii) The proposed right-of-way width of the pipeline or transmission line, including to what extent new right-of-way will be required or existing will be widened.	Section 3.3
(iii) If the proposed transmission line or pipeline corridor follows or includes public right-of-way, a description of where the transmission line or pipeline would be located within the public right-of-way, to the extent known. If the applicant proposes to locate all or part of a transmission line or pipeline adjacent to but not within the public right-of-way, describe the reasons for locating the transmission line or pipeline outside the public right-of-way. The applicant must include a set of clear and objective criteria and a description of the type of evidence that would support locating the transmission line or pipeline outside the public right-of-way, based on those criteria.	Section 3.3
(iv) For pipelines, the operating pressure and delivery capacity in thousand cubic feet per day and the diameter and location, above or below ground, of each pipeline.	N/A
(v) For transmission lines, the rated voltage, load carrying capacity, and type of current and a description of transmission line structures and their dimensions.	Section 3.3
ARR 345-021-0010(1)(b)(F) A construction schedule including the date by which the pplicant proposes to begin construction and the date by which the applicant proposes to complete construction. Construction is defined in OAR 345-001-0010. The applicant shall escribe in this exhibit all work on the site that the applicant intends to begin before the council issues a site certificate. The applicant shall include an estimate of the cost of that work. For the purpose of this exhibit, "work on the site" means any work within a site or corridor, other than surveying, exploration or other activities to define or characterize the ite or corridor that the applicant anticipates or has performed as of the time of ubmitting the application.	Section 6.0



Table B-2. Submittal Requirements Matrix			
Requirement	Location		
Project Order Comments	Location		
All paragraphs apply except (A)(vi)(vii) and (viii),			
Paragraph (D) only applies if any of the proposed transmission lines associated with the Wheatridge Wind Energy Facility meet the definition of an energy facility under ORS 469.300.	Section 3.3		

7.2 Approval Standard

OAR 345 Division 22 does not provide an approval standard specific to Exhibit B.

8.0 References

APLIC (Avian Power Line Interaction Committee) 2006. Suggested Practices for Raptor Protection on Power Lines; the State of the Art in 2006. Edison Electric Institute, APLIC and the California Energy Commission Washington, D.C and Sacramento, CA.

EPA (U.S. Environmental Protection Agency). 2006. Spill Prevention, Control, and Countermeasure (SPCC) Rule Amendment, Option for Qualified Oil-Filled Operational Equipment. EPA publication EPA-550-F-06-008. December 2006. Available online at: http://www.epa.gov/oem/content/spcc/factsheet oilfilledeq dec06.htm



Exhibit K

Land Use

Prepared for



Wheatridge Wind Energy, LLC

Wheatridge Wind Energy Facility
July 2015

Prepared by



Tetra Tech, Inc.



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- Figure K-7. Residential Setback (GE 1.7-103)
- Figure K-8. Residential Setback (GE 2.5-120)

Terms and Definitions

Collector Line An underground or overhead electrical 34.5 kV line transmitting

power from the turbines to a Substation

Construction Yard The temporary area for construction activities and Project

component storage prior to installation

GE 1.7-103 Layout Project turbine layout comprised of 292 GE 1.7MW turbines with

80m hub heights and 103m rotor diameters

GE 2.5-120 Layout Project turbine layout comprised of 200 GE 2.5MW turbines with

85m hub heights and 120m rotor diameters

Gen-tie Line(s) One or two 230 kV transmission line(s) conveying power from the

Project to an interconnection point with the grid, which will be

permitted and built by UEC or UEC/CB

Intraconnection Corridor The intraconnection transmission line corridor connecting

Wheatridge East with Wheatridge West

Intraconnection Line(s)

One or two overhead electrical 230 kV lines connecting the Project

Substations in Wheatridge East and Wheatridge West.

Met Tower Permanent meteorological tower

O&M Buildings Permanent operations and maintenance buildings, including parking

Project Wheatridge Wind Energy Facility

Site Access Road Private road to be constructed or improved for the purpose of

accessing turbines and associated Project facilities

Site Boundary The boundary within which all Project facilities will be constructed,

also known as the micrositing corridor

Substation A facility in which electric power from the turbines is aggregated,

stepped up in voltage, and connected to the Intraconnection Line(s)

or the Gen-tie Line(s)

Turbine A collective term for the foundation, tower, nacelle, blades and rotor

that comprise a wind turbine generator in the Project

Turbine Pad A cleared, graveled area around the base of each turbine

encompassing primarily the turbine's foundation

Wheatridge Wind Energy, LLC

Wheatridge East The eastern group of turbines

Wheatridge West The western group of turbines



Acronyms and Abbreviations

CB Columbia Basin Electric Cooperative

CTUIR Confederated Tribes of the Umatilla Indian Reservations

EFSC Energy Facility Siting Council

EFU Exclusive Farm Use

ESCP Erosion and Sediment Control Plan

kV kilovolts

LCDC Land Conservation and Development Commission

MCCP Morrow County Comprehensive Plan

MCZO Morrow County Zoning Ordinance

MW megawatts

NOI Notice of Intent

NPDES National Pollutant Discharge Elimination System

OAR Oregon Administrative Rule

ODEQ Oregon Department of Environmental Quality

ODFW Oregon Department of Fish and Wildlife

OR-## Oregon State Highway ##

ORS Oregon Revised Statutes

UCCP Umatilla County Comprehensive Plan

UCDO Umatilla County Development Ordinance

UEC Umatilla Electric Cooperative



1.0 Introduction

Wheatridge Wind Energy, LLC (Wheatridge), proposes to construct the Wheatridge Wind Energy Facility (Project), a wind generation facility with a maximum nominal generating capacity of 500 megawatts (MW) in Morrow and Umatilla counties, Oregon (see Figures C-1 and C-2). The Project is comprised of up to 292 turbines divided into two groups: a western group of turbines (Wheatridge West) and an eastern group of turbines (Wheatridge East). Wheatridge West and Wheatridge East are electrically connected by an 'Intraconnection Corridor' containing up to two parallel overhead 230-kilovolt (kV) transmission lines (Intraconnection Lines), each no longer than 35 miles in length. Other Project components include access roads (Site Access Roads), an electrical collection and control system, the Project's substations (Substations), operations and maintenance buildings (O&M Buildings), and temporary construction yards (Construction Yards). These facilities are described in greater detail in Exhibit B.

Wheatridge West is located entirely within Morrow County, approximately 5 miles northeast of Lexington, and approximately 7 miles northwest of Heppner. Wheatridge West is bisected by Oregon Highway 207 (OR-207). Wheatridge East is located approximately 16 miles northeast of Heppner and encompasses land in both Morrow and Umatilla counties. The Intraconnection Corridor is located primarily within Morrow County and adjoins to the southeastern portion of Wheatridge West and the southern portion of Wheatridge East.

This exhibit demonstrates that the Wheatridge Wind Energy Project (Project) complies with Energy Facility Siting Council's (EFSC) land use standard, which provides:

OAR 345-022-0030, Land Use

(1) To issue a site certificate, the Council must find that the proposed facility complies with the statewide planning goals adopted by the Land Conservation and Development Commission.

Wheatridge has elected to address EFSC's land use standard by obtaining a land use determination from EFSC pursuant to Oregon Revised Statutes (ORS) 469.504(1)(b). EFSC's rules state that an applicant seeking EFSC's land use approval must identify the "applicable substantive [land use] criteria" of the relevant local governments and must describe how the proposed facility complies with those criteria, as well as any Land Conservation and Development Commission (LCDC) rules, goals, or land use statutes that apply directly to the facility under ORS 197.646(3). If an applicant cannot demonstrate compliance with one or more of the applicable substantive criteria, the applicant must describe how the proposed facility complies with the Statewide Planning Goals adopted by the LCDC, or alternatively, warrants a goal exception (OAR 345-021-0010(1)(k)).

This exhibit demonstrates that the Project complies with the majority of the applicable local substantive criteria from the comprehensive plans and zoning codes for the jurisdictions in which the Project is located, and to the extent the Project cannot comply with an applicable criterion, EFSC should approve a variance to the applicable criterion or a goal exception.



Pursuant to the Project Order, the analysis area for purposes of this exhibit is "the area within the Site Boundary and one-half mile from the Site Boundary." Figure K-1 shows both the Site Boundary and the analysis area for this Exhibit. The alternative Project layouts for the GE 1.7-103 and 2.5-120 turbines are shown in Figures K-3 and K-4, respectively.

2.0 Compliance with Applicable Substantive Criteria

The Project and all related and supporting facilities will be located entirely within the Exclusive Farm Use (EFU) zones of both Morrow and Umatilla counties (Figure K-2). Both counties replied to the Project Notice of Intent (NOI) by identifying applicable substantive criteria from their respective codes, ordinances, plans and other authorities. The following section provides an assessment of compliance with the applicable local substantive criteria identified by the counties.

2.1 Applicable Criteria for Morrow County

This section demonstrates how the portion of the Project located in Morrow County satisfies the Morrow County applicable substantive criteria. In its April 12, 2013 response to the NOI, Morrow County identified the following applicable substantive criteria:

- Morrow County Comprehensive Plan (MCCP), Agricultural Policy 1 and Energy Policies 2 and 3:
- Fish and Wildlife Habitat Protection Plan for Morrow County dated January 1979;
- Morrow County Zoning Ordinance (MCZO), Sections 3.010, subsections A, C, D, D¹ and G, 4.165, 6.015, 6.020, 6.030, and 6.050;
- Morrow County Solid Waste Ordinance, Section 5.000; and
- Morrow County Weed Control Ordinance MC-C-3-90, as amended by Ordinance MC-C-2-99.

These substantive criteria are discussed in Sections 2.1.1 through 2.5.5 below.

2.1.1 MCCP Policies

<u>Agricultural Policy 1:</u> It shall be the policy of Morrow County, Oregon, to preserve agricultural lands, to protect agriculture as its main economic enterprise, to balance economic and environmental considerations, to limit non-compatible nonagricultural development, and to maintain a high level of livability in the County.

Response: Wind energy facilities are not inconsistent with an agriculturally-focused economy and land base, as evidenced by the multitude of existing wind projects in productive agricultural areas of Morrow County and elsewhere in the state and region. The Project will provide an economic benefit to Morrow County, will not degrade the environment and will provide positive environmental effects by reducing greenhouse gases



¹ MCZO Section 3.010 has two subsections identified as "D."

and combating climate change. Wind projects have not been shown to have any significant deleterious effect on livability, in Morrow County or other rural areas. Wind projects are expressly permitted in the Morrow County EFU zone. Agricultural Policy 1 is met.

<u>Energy Policy 2</u>: [It shall be the policy of Morrow County, Oregon,] to conserve energy and develop and use renewable resources.

<u>Response</u>: The Project is a wind energy facility, a renewable resource that furthers Energy Policy 2.

<u>Energy Policy 3</u>: [It shall be the policy of Morrow County, Oregon,] to encourage development of solar and wind resources.

Response: The Project is a wind energy facility in furtherance of Energy Policy 3.

2.1.2 Fish and Wildlife Habitat Protection Plan for Morrow County

Morrow County's letter identified as substantive criteria the Fish and Wildlife Habitat Protection Plan for Morrow County dated January 1979 (Protection Plan).

Response: The Project would have no significant impacts to the areas in Morrow County identified in the Protection Plan as sensitive habitat for fish or wildlife. Areas designated in the Protection Plan as sensitive big game habitat are located more than 10 miles to the south of the Site Boundary. Sensitive waterfowl habitat is limited to areas around the Columbia River and the Umatilla National Wildlife Refuge, which are more than 15 miles north of the Site Boundary. Sensitive nongame habitat is limited to the area within the Boardman Bombing Range. The Project would avoid all impacts to waters and potential sensitive fish habitat. Sensitive habitat for upland game birds and furbearers consists primarily of riparian habitat areas and three established wildlife management areas, none of which would be directly impacted by the Project. Potential Project effects to riparian areas would be limited to overhead transmission line(s) crossing the areas, with no direct disturbance to riparian vegetation. As discussed in Exhibit P, potential impacts to these areas have been previously discussed with the Oregon Department of Fish and Wildlife (ODFW) and were determined to be insignificant. The Project is a widely spaced series of turbines with minimal supporting infrastructure, much of which is located underground; as such it will not interfere with game movement or habitat. Further analysis of fish and wildlife impacts and mitigation is found in Exhibits P and Q.

2.1.3 MCZO Criteria

Morrow County's letter in response to the NOI identified the following provisions of the MCZO as applicable to the Project:

SECTION 3,010. EXCLUSIVE FARM USE, EFU ZONE.

In an EFU Zone, the following regulations shall apply:



A. PURPOSE: The purpose of the Exclusive Farm Use Zone is to preserve and maintain agricultural lands for farm use consistent with historical, existing, and future needs, including economic needs that pertain to the production of agricultural products, and to permit the establishment of only those uses that are compatible with agricultural activities.

Uses, buildings, or structures hereafter erected, structurally altered, enlarged, or moved and land hereafter used in the Exclusive Farm Use Zone shall comply with the following regulations.

<u>Response</u>: The uses proposed in connection with the Project all are permissible uses within the Morrow County EFU zone, either outright or as conditional uses. Consequently, all proposed uses are consistent with the purpose of the County's EFU zone.

C. USES PERMITTED OUTRIGHT.

In an EFU Zone the following uses and accessory uses thereof are permitted outright:

16. Utility and transmission towers not exceeding 200 feet in height.

<u>Response</u>: The towers for the above-ground electrical Collector Lines (should any above-ground segments be necessary), and for the Intraconnection Line(s) between Wheatridge East and Wheatridge West, would all be less than 200 feet in height. Thus, such uses are permitted outright.

D. CONDITIONAL USES PERMITTED. In an EFU Zone, the following uses and their accessory uses are permitted subject to demonstration of compliance with the requirements of Article 6 of this ordinance and Section (G) below:

16. Commercial utility facilities for the purposes of generating power for public use by sale. A power generation facility shall not preclude more than 12 acres of high value farmland or 20 acres of other land from commercial farm use unless an exception is approved pursuant to OAR 660 Division 4.

Response: The Project is commercial utility facility for the purpose of generating power for public use by sale. As shown in Table K-1, the Project would permanently preclude agricultural use of approximately 0.01 acres of high-value farmland and up to 146.26 acres of other farmed land in Morrow County. Consequently, MCZO 3.010.D.16 is not met, but the Applicant demonstrates below in Section 5 that a Goal 3 exception should be taken under ORS 469.504(2).

The lands devoted to farm use in Morrow County are used primarily for cultivation of wheat and grazing of livestock, and related accessory uses. Figures K-5 and K-6 show the areas dedicated to farm use, as well as the areas defined by the MCZO as High Value Farmlands.



Total Area Within Site Boundary in Morrow County	11,395 acres 10,815 acres total, of which 85.78 acres are High Value Farmland ² /	
Area Within Site Boundary in Morrow County Devoted to Farm Use ¹ /		
Acres Permanently Impacted by Project	Not High Value Farmland	High Value Farmland ² /
Wheatridge West		
GE 1.7-103 layout	128.83	0
GE 2.5-120 layout	108.56	0
Wheatridge East		
GE 1.7-103 layout	17.18	0
GE 2.5-120 layout	14.65	0
Intraconnection Lines		
Option 1 (Longest)	0.85	0.01
Option 3 (Shortest)	0.65	0.01
SUBTOTALS (worst-case scenario) ^{3/}	146.26 acres	0.01 acres
TOTAL (worst-case scenario)	146.27 acres	

^{1/} Consistent with the definition of "farm use" in ORS 215.203 and OAR 660-033-0020(7), all land shown on Figures K-5 and K-6 as Developed-Dryland Wheat, Developed-Irrigated Agriculture, Developed-Revegetated or Other Planted Grassland, Grassland-Exotic Annual and Grassland-Native Perennial has been included in the calculation of land devoted to farm use for this Exhibit.

17. Utility facilities "necessary" for public service, excluding commercial utility facilities for the purpose of generating power for public use by sale, and transmission towers over 200 feet in height. A utility facility is necessary for public service if the facility must be sited in an exclusive farm use zone in order to provide the service. To demonstrate that a utility facility is necessary, an applicant must show that reasonable alternatives have been considered and that the facility must be sited in an exclusive farm use zone due to one or more of the factors listed in OAR 660-033-0130(16).

Response: This Section implements ORS 215.275, which applies only to utility facilities necessary for public service. The Project is a commercial facility for the purpose of generating electrical power for public use by sale, and therefore is excluded from the definition of a utility facility necessary for public service. ORS 215.283(1)(c). Per discussion with Morrow County Planning Director Carla McLane on April 22, 2014, this criterion was included in the County's response to the NOI because of uncertainty at the time as to whether the transmission line (Gen-tie Line(s)) delivering energy from the Project Substations to the point of interconnection (POI) would obtain land use approval as part of the Project. It has since been determined that the Gen-tie Line(s) will be separately



^{2/} Pursuant to MCZO 3.010.D.16, this calculation applies the definition of "high-value farmland" from OAR 660-033-0020(8)(a) for lands in Eastern Oregon: land with soils that are irrigated or not irrigated, and classified as prime, unique, Class I or Class II by the USDA National Resource Conservation Service (NRCS).

 $^{3/\,\}text{The}$ worst-case scenario is the GE 1.7-103 layout with the longest Intraconnection Line.

permitted, constructed and owned by Umatilla Electric Cooperative (UEC) or UEC/ Columbia Basin Electric Cooperative (CB). Accordingly, MCZO 3.010(D)(17) does not apply to this proposal.

- D. LIMITATIONS ON CONDITIONAL USES. In addition to the general standards and conditions that may be attached to the approval of a conditional use as provided by Article 6 of this ordinance, the following limitations shall apply to a Conditional Use in the EFU Zone.
- 1. Will not force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; and
- Will not significantly increase the cost of accepted farm or forest practices on lands devoted to farm or forest use.

Response: There is no forest use within the analysis area. As shown in Table K-1, within the Site Boundary approximately 10,815 acres in Morrow County are "devoted to farm use." Once built, permanent Project facilities would occupy (at most) approximately 146.27 acres, or about 1.4% of the agricultural lands within the Site Boundary.

The lands devoted to farm use in Morrow County are used primarily for cultivation of wheat and grazing of livestock, and related accessory uses.

The impact of the Project would not force a significant change in accepted farm practices or significantly increase the cost of farm practices, for the reasons discussed below:

- Facility components and temporary construction laydown and staging areas would be sited to minimize disturbance to farming operations.
- Land permanently lost to farm use due to siting of permanent Project improvements is a de minimis percentage of the total farm use land in Morrow County; therefore the inability to use the land for farm purposes is not significant.
- Project Site Access Roads and other facilities would be constructed and maintained by Wheatridge, such that the cost burden for maintenance does not fall upon the farm or ranch owners.
- Private access roads improved or developed for the Project would benefit
 agricultural users of the land through improved access to farm fields and resulting
 lower fuel costs.
- Wheatridge will implement a weed control plan consistent with the Morrow County Weed Control Ordinance, which will reduce the risk of weed infestation in cultivated land and the associated cost to the farmer for weed control.
- Wheatridge will record a covenant not to sue against its Project leasehold interests with regard to generally accepted farming practices on adjacent farmland.
- Construction and operation of the Project could cause changes in routes of access to fields and changes in the pattern of cultivation, seeding, fertilizing and harvesting



near the turbines and Site Access Roads. To minimize this, Wheatridge, in consultation with the landowners, has laid out the facility components to minimize obstacles to farming in cultivated fields (facility components around which the farmer would have to plow, plant and harvest).

- Wheatridge will consult with area landowners during construction and operation of the facility to determine further measures to reduce or avoid any adverse impacts to farm practices on surrounding lands and to avoid any increase in farming costs.
- Construction of the Project could adversely affect soil quality by erosion or
 compaction. Some farmland would be temporarily disturbed and unavailable for
 farming during construction. To avoid or reduce adverse impacts to soil quality,
 Wheatridge will implement dust control and erosion-control measures during
 construction and operation of the facility (see Exhibit I). To the extent practicable,
 Wheatridge proposes to reduce impact to soils by using areas that are already
 disturbed and limiting the area of new disturbance.
- Construction vehicles will use previously disturbed areas including existing
 roadways and tracks. When practical, temporary Construction Yards and laydown
 areas will be located within the future footprint of permanent structures. The width
 of new permanent roadways will be the minimum consistent with safe use.
 Underground communication and electrical lines will be buried within the area
 disturbed by temporary road widening to the extent practicable, and turbine
 foundations will abut roadways as closely as possible. Upon completion of
 construction, Wheatridge will restore temporarily disturbed areas to their preconstruction condition.

G. DIMENSIONAL STANDARDS. In any EFU zone, the following dimensional standards shall apply: (Standards 1 through 6 omitted for brevity)

<u>Response:</u> This Section pertains to the size of parcels and the siting of dwellings. The Project does not involve subdivision of parcels or the development of dwellings. MCZO 3.010(G) contains no applicable substantive criteria for the Project.

SECTION 4.165 SITE PLAN REVIEW

Site Plan Review is a non-discretionary or "ministerial" review conducted without a public hearing by the County Planning Director or designee. Site Plan Review is for less complex developments and land uses that do not require site development or conditional use review and approval through a public hearing.

A. Purpose. The purpose of Site Plan Review (ministerial review) is based on clear and objective standards and ensures compliance with the basic development standards of the land use district, such as building setbacks, lot coverage, maximum building height, and similar provisions. Site Plan review also addresses conformity to floodplain regulations, consistency with the Transportation System Plan, and other standards identified below.



C. Applicability. Site Plan Review shall be required for all land use actions requiring a Zoning Permit as defined in Section 1.050 of this Ordinance. The approval shall lapse, and a new application shall be required, if a building permit has not been issued within one year of Site Review approval, or if development of the site is in violation of the approved plan or other applicable codes.

Response: MCZO 1.050 defines "Zoning Permit" as "an authorization issued prior to a building permit, or commencement of a use subject to administrative review, stating that the proposed use is in accordance with the requirements of the corresponding land use zone." Upon issuance of an EFSC Site Certificate, Morrow County shall issue a Zoning Permit pursuant to ORS 469.401(3). The Applicant acknowledges that Site Plan Review will be required prior to issuance of building permits for the Project in Morrow County, and will demonstrate compliance with the development standards of the EFSC Site Certificate at that time. Wheatridge anticipates that Site Plan Review would be accomplished in stages commensurate with phasing of Project construction.

- D. Review Criteria.
- 1. The lot area shall be adequate to meet the needs of the establishment.

Response: The Site Boundary encompasses about 11,395 acres in Morrow County, with the individual turbines and other project components sited according to prevailing standards in the wind energy industry. The land leased for the Project in Morrow County provides adequate space to site the Project as designed.

2. The proposed land use is permitted by the underlying land use district.

<u>Response</u>: The uses proposed in connection with the Project all are permissible uses within the Morrow County EFU zone, either outright or as conditional uses.

3. The land use, building/yard setback, lot area, lot dimension, density, lot coverage, building height and other applicable standards of the underlying land use district and any sub-district(s) are met.

Response: The land use standards of the EFU zone are met, as explained throughout this Exhibit. Any O&M Buildings and/or Substations in Morrow County will be sited to comply with all applicable development standards. The only other objective development standard in the Morrow County EFU zone that is applicable to the Project is MCZO 3.010.H.4 requiring septic installations be set back at least 100 feet from any lake or stream. This standard will be met with respect to the septic installation for the O&M Buildings.

4. Development in flood plains shall comply with Section 3.100 Flood Hazard Overlay Zone of the Ordinance.

Response: MCZO Section 3.100 applies to the development of "structures" in flood hazard areas. A "structure" is defined as "a walled and roofed building including a gas or liquid storage tank that is principally above ground." The Project does not involve the construction of any "structures" in flood hazard areas of Morrow County. Accordingly, the regulations of MCZO Section 3.100 are not implicated by the Project.



To the extent any improvements that are not "structures" are constructed in flood hazard areas, those improvements are either: (a) located underground and not susceptible to flood damage, or (b) consist of transmission lines high above the ground and with sufficient foundations or pole bedding to withstand even the most severe flood. Also, these types of improvements would not substantively alter the flood regime or flood water storage volume, and therefore would not exacerbate a flood hazard locally or elsewhere along a stream. The design of the Project is therefore consistent with the intent of MCZO Section 3.100.

5. Development in hazard areas identified in the Morrow County Comprehensive Plan shall safely accommodate and not exacerbate the hazard and shall not create new hazards.

Response: The MCCP, Natural Hazards Element, identifies hazard areas as "areas that are subject to natural events that are known to result in death or endanger the works of man, such as stream flooding, ocean flooding, ground water, erosion and deposition, landslides, earthquakes, weak foundation soils and other hazards" unique to the area in question. MCCP Natural Hazards Policy #8 places the burden on the project applicant to identify the existence and degree of natural hazards.

Flood hazards are discussed above in response to MCZO Section 4.165.D.4. Other potential geologic hazards as listed in the Natural Hazards Element are discussed in Exhibit H, which demonstrates that the Project will accommodate and not exacerbate existing hazards, nor create new ones.

6. Off-street parking and loading-unloading facilities shall be provided as required in Section 4.040 and 4.050 of the Morrow County Zoning Ordinance. Safe and convenient pedestrian access to off-street parking areas also shall be provided as applicable.

<u>Response</u>: Adequate off-street parking will be provided at the O&M Buildings and at Project Substations as required. No Project vehicles will be permitted to park within a public right-of-way.

7. County transportation facilities shall be located, designed and constructed in accordance with the design and access standards in the Morrow County Transportation System Plan.

<u>Response</u>: Improvements to public roads, whether necessary at the site access points or elsewhere on public roads to permit passage of construction or maintenance equipment and materials, will be designed and constructed in accordance with Morrow County standards.

8. Site planning, including the siting of structures, roadways and utility easements, shall provide, wherever practicable, for the protection of trees eight inch caliper or greater measured four feet from ground level, with the exception of noxious or invasive species, such as Russian olive trees.

<u>Response</u>: Wheatridge does not anticipate that development of the Project would cause impacts to any trees.



9. Development shall comply with Section 3.200 Significant Resources Overlay Zone or 3.300 Historic Buildings and Sites protecting inventoried significant natural and historic resources.

Response: Morrow County updated the Natural Resources Element of the MCCP on October 1, 2013. The updated Natural Resources Element calls for an ongoing four-step process to identify the following significant natural resources in the County: wetlands, wildlife habitat, groundwater resources, natural areas, historic resources, open space and scenic views and sites. The Project is in compliance with MCZO 3.200 and 3.300 regarding these significant resources as follows:

- The Project has been designed to avoid all impacts to wetlands, as discussed in Exhibit J.
- As discussed above in Section 2.1.2 and in Exhibits P and Q, the Project has been sited and designed to minimize impacts to wildlife habitat.
- The Project will have no material impact on groundwater resources due to its
 minimal operational water demand. Water for construction will be obtained from
 permitted municipal sources and will not exceed the combined available water
 rights for those sources.
- There are no designated natural areas or public open space, and the County has no protected scenic views or sites, within the analysis area.
- The Project would not impact any structure listed in the MCCP inventory of significant historical resources, as no such listed resources exist in the analysis area. Nonetheless, Wheatridge will protect all cultural and historic resources in Morrow County eligible or potentially eligible for regulatory protection consistent with the recommendations of the Confederated Tribes of the Umatilla Indian Reservations (CTUIR).
- The Project is located entirely on private land, none of which is designated as open space, and actually impacts only a very small percentage of the Project site. The Project will not significantly impact the existing open space character of the Project lands.

The impacts of the Project on scenic, protected, historic and recreational areas are also discussed in further detail in Exhibits R, L, S and T respectively.

10. The applicant shall determine if compliance is required with Oregon Water Resources Department water quantity and/or Oregon Department of Environmental Quality water quality designations.

Response: Water quantity issues are discussed in Exhibit O, and water quality issues are discussed in Exhibits I and O. As to water quantity, the Project will obtain water from existing municipal water providers not in excess of their service capacity and available water rights. As to water quality, the Project will obtain a National Pollutant Discharge Elimination System (NPDES) discharge permit and will implement all required best



management practices to preserve water quality. The Project will obtain appropriate permits from the Army Corps of Engineers to the extent required under the federal Clean Water Act. The Oregon Department of Environmental Quality (ODEQ) has previously confirmed that the Project will not have adverse impacts on any existing wells within the Site Boundary (personal communication between Robert Friedel, Tetra Tech and Krista Ratliff, ODEQ, November 27, 2013).

11. The applicant shall determine if previous Code Enforcement violations have been cleared as applicable.

<u>Response</u>: This is a new project and, as such, has no history of code enforcement in Morrow County.

12. The applicant shall determine the method of disposal for solid waste, with staff providing information to the applicant about recycling opportunities.

<u>Response</u>: Solid waste management and disposal are discussed in Exhibit V of this application. Wastes will be collected at each construction site and then consolidated at the construction laydown area for removal by a qualified third party for disposal at the Finley Butte landfill. Wastes will be recycled to the extent practicable.

13. The applicant shall obtain the necessary access permit through the Public Works Department as required by Morrow County Resolution R-29-2000.

<u>Response</u>: Prior to beginning construction of the Project, Wheatridge will obtain appropriate permits to allow access into the Project site from public rights-of-way.

E. Submittal Requirements. A site plan shall be submitted including all of the following information except for specific items determined at the pre-application review not to be applicable. All site plans shall have dimensions clearly indicated. An applicant may provide the information on separate sheets, if necessary or desirable for clarity.

(Submittal Requirements 1 through 10 omitted for brevity)

<u>Response</u>: Wheatridge will submit site plans with the required information at the time of Site Plan Review.

ARTICLE 6. CONDITIONAL USES

SECTION 6.015. REQUIREMENTS UNDER A STATE ENERGY FACILITY SITE CERTIFICATE.

If a holder of a Site Certificate issued by the Oregon Energy Facility Siting Council requests a conditional use permit for an energy facility as outlined under ORS 469.401(3) and pays the requisite fee, the Planning Director shall issue such conditional use permit. The conditional use permit shall incorporate only the standards and conditions in Morrow County's land use and other ordinances as contained in the site certificate. Issuance of the Conditional Use Permit shall be done promptly, not taking more than four weeks once it has been determined that a valid Site Certificate has been issued, the applicant has submitted a complete application and the fee has been received.



<u>Response</u>: Wheatridge will request issuance of a conditional use permit pursuant to Section 6.015 upon issuance of the requested EFSC Site Certificate.

SECTION 6.020. GENERAL CRITERIA.

In judging whether or not a conditional use proposal shall be approved or denied, the Commission shall weigh the proposal's appropriateness and desirability, or the public convenience or necessity to be served against any adverse conditions that would result from authorizing the particular development at the location proposed and, to approve such use, shall find that the following criteria are either met or can be met by observance of conditions.

A. The proposal will be consistent with the Comprehensive Plan and the objectives of the Zoning Ordinance and other applicable policies and regulations of the County.

Response: Issuance of an EFSC Site Certificate is dependent on a finding by the Council that the substantive criteria identified by the County as relevant to the proposed project, and addressed in this Exhibit, have been satisfied or otherwise resolved. Accordingly, this criterion is met upon a determination that all the Morrow County substantive criteria have been satisfactorily addressed.

B. If located within the Urban Growth Boundary of a city, that said city has had an opportunity to review and comment on the subject proposal.

<u>Response</u>: The Project is not located within any Urban Growth Boundary, so this criterion does not apply.

C. The proposal will not exceed carrying capacities of natural resources or public facilities.

Response: As described in Exhibit U of this application, the Project would not adversely affect any public facilities, and as described in Exhibits I, J, O, P and Q, the Project would not cause significant adverse effects to soils, surface or groundwater resources, or protected plant or animal species or their habitats.

SECTION 6.030. GENERAL CONDITIONS.

In addition to the standards and conditions set forth in a specific zone, this article, and other applicable regulations; in permitting a new conditional use or the alteration of an existing conditional use, the Commission may impose conditions which it finds necessary to avoid a detrimental impact and to otherwise protect the best interests of the surrounding area or the County as a whole. These conditions may include the following:

<u>Response</u>: The County may not impose conditions on a conditional use permit issued in furtherance of an approved EFSC Site Certificate. ORS 469.401(3). The following discussion demonstrates how the Project would satisfy the conditions that would typically be applied to a conditional use under MCDO 6.030.

A. Limiting the manner in which the use is conducted including restricting the time an activity may take place and restraints to minimize such environmental effects as noise, vibration, air pollution, glare and odor.



Response: The Project has been designed to minimize environmental effects. The Project will not cause air pollution or odors, and does not include equipment that would cause vibration. The Project is designed to comply with state noise standards, as described in Exhibit X of this application. The Project would have minimal outdoor lighting, at the O&M building and substation. Where outdoor lighting is necessary it will be shielded and aimed downward and inward to prevent offsite glare. Additionally, all outdoor lighting will use motion sensors and/or timers to ensure that lights are only on when needed. Red flashing lights must be installed atop select turbines per FAA marking requirements, but no other turbine lighting will be used.

B. Establishing a special yard or other open space or lot area or dimension.

Response: The Project incorporates several special setbacks for the wind turbines to avoid impacts to public roads and adjacent non-participating properties, and will adhere to existing County setback requirements for the O&M facility and substations. The Project does not involve the subdivision of land so lot area and dimensional standards are not applicable. The Project is located entirely on private land, none of which has been designated as open space; open space set-asides are inappropriate in this case.

C. Limiting the height, size or location of a building or other structure.

Response: Height, size and location limits for the wind turbines are established through the EFSC process as opposed to being established by the County. The O&M building and substations will be located and designed to comply with standard County height and setback limits.

- D. Designating the size, number, location and nature of vehicle access points.
 - 1. Where access to a county road is needed, a permit from Morrow County Public Works department is required. Where access to a state highway is needed, a permit from ODOT is required.

Response: The Project will require the development or improvement of access roads intersecting with county roads and state highways. The Applicant will work with the Morrow County Road Department to permit specific access locations and improvement requirements, as necessary, prior to making improvements at each county road access point. Similarly, the Applicant will work with ODOT for access roads that would intersect with a state highway.

2. In addition to the other standards and conditions set forth in this section, a Traffic Impact Analysis (TIA) will be required for all projects generating more than 400 passenger car equivalent trips per day. A TIA will include: trips generated by the project, trip distribution for the project, identification of intersections for which the project adds 30 or more peak hour passenger car equivalent trips, and level of service assessment, impacts of the project, and mitigation of the impacts. If the corridor is a State Highway, use ODOT standards. (MC-C-8-98)

Response: The Project would generate minimal amounts of traffic once in operation, likely less than 50 vehicle trips per day. On average, construction of the Project is likely to



generate fewer than 300 vehicle trips per day, but may generate more than 400 trips per day at peak times, depending on the timing of construction activities (see Exhibit U); however, construction traffic would be temporary and volumes will fluctuate. The traffic analysis in Exhibit U assumes that the entire Project would be constructed in a single phase, maximizing predicted construction traffic counts; however, the Project is likely to be built in several phases, such that construction activities are highly unlikely to generate more than 400 trips per day even at peak times. The Applicant will work with the Morrow County Road Department to identify specific construction traffic-related concerns, and will develop a traffic management plan prior to construction which will specify necessary traffic control measures to mitigate for the effects of the temporary increase in traffic volumes.

E. Increasing the amount of street dedication, roadway width or improvements within the street right-of-way.

1. It is the responsibility of the land owner to provide appropriate access for emergency vehicles at the time of development. (MC-C-8-98)

<u>Response</u>: All Project access roads will be constructed to accommodate heavy construction equipment, which will also make those roads suitable for emergency vehicles.

F. Designating the size, location, screening, drainage, surfacing or other improvement of a parking area or loading area.

Response: Parking and loading areas associated with the O&M building and substations will be surfaced with gravel, and will be graded to incorporate appropriate stormwater drainage to prevent erosion and offsite impacts. These facilities will be located and designed to comply with Morrow County standards. No screening or landscaping is currently proposed, as is consistent with most residential and agricultural facilities in the area; however, the Applicant will work with Morrow County either during the Site Plan Review process or at the building permit issuance stage to determine whether landscaping or screening may be necessary.

G. Limiting or otherwise designating the number, size, location, height, and lighting of signs.

Response: The Applicant does not propose any signage beyond a small business identification sign at the O&M facility, necessary safety signage at the substations, and a small identifying number sign on the base of each turbine. With the exception of the business identification sign, no commercial signage is proposed or will be permitted.

H. Limiting the location and intensity of outdoor lighting and requiring its shielding.

Response: The Project would have minimal outdoor lighting, at the O&M building and substation. Where outdoor lighting is necessary it will be shielded and aimed downward and inward to prevent offsite glare. Additionally, all outdoor lighting will use motion sensors and/or timers to ensure that lights are only on when needed. Red flashing lights must be installed atop select turbines per FAA marking requirements, but no other turbine lighting will be used.



I. Requiring diking, screening, landscaping or another facility to protect adjacent or nearby property and designating standards for its installation and maintenance.

Response: No screening or landscaping is currently proposed, as is consistent with most residential and agricultural facilities in the area; however, the Applicant will work with Morrow County either during the Site Plan Review process or at the building permit issuance stage to determine whether landscaping or screening may be necessary.

J. Designating the size, height, location and materials for a fence.

Response: No fencing is proposed; this standard is not applicable.

K. Protecting and preserving existing trees, vegetation, water resources, wildlife habitat or other significant natural resources.

Response: As described throughout this application, the Project is designed to protect and preserve existing natural resources to the extent practicable. The Project would have minimal effects on water resources, and no trees are expected to be affected. The Project has been designed to avoid impacts to critical habitat areas, and maintains the vast majority of the participating properties as open lands.

L. Other conditions necessary to permit the development of the County in conformity with the intent and purpose of this Ordinance and the policies of the Comprehensive Plan.

<u>Response</u>: Morrow County has not identified other potential conditions as necessary to achieve compliance with the MCDO or MCCP.

SECTION 6.050. STANDARDS GOVERNING CONDITIONAL USES.

A conditional use shall comply with the standards of the zone in which it is located and with the standards set forth in this subsection.

- O. Radio, television tower, utility station or substation:
- 1. In a residential zone, all equipment storage on the site may be required to be within an enclosed building.

<u>Response</u>: The Project is not proposed within a residential zone, so this standard does not apply.

2. The use may be required to be fenced and provided with landscaping.

Response: The Project Substations, O&M Buildings and temporary Construction Yards will be fenced for security. No other fencing or landscaping is proposed. As a final stage of Project construction, areas temporarily disturbed will be restored and revegetated to conditions appropriate for the use of the area. Where the intended use of a temporary disturbance area is non-agricultural, the area will be revegetated using a seed mix consisting of primarily native plants, as described in the draft Revegetation Plan (see Exhibit P). Where the intended use of a temporary disturbance area is agricultural, the area will be reseeded per the requirements of the landowner. These actions will minimize the



long-term visual effects of the Project, such that additional fencing or landscaping would be unnecessary.

3. The minimum lot size for a public utility facility may be waived on finding that the waiver will not result in noise or other detrimental effects to adjacent property.

<u>Response</u>: The minimum lot size for a public utility facility is not applicable, as no new lots are being created and all Project assets are located on existing large EFU parcels which exceed the public utility facility lot size minimum.

4. Transmission towers, hoses, overhead wires, plumbing stations, and similar gear shall be so located, designed and installed as to minimize their conflict with scenic values.

Response: There are no identified scenic views or resources located within or in the vicinity of the Site Boundary. Nonetheless, the proposed Intraconnection Line(s) have been routed to minimize their visibility for area residents and travelers on public roads, and designed to minimize visual impact through the use of monopoles or wooden H-frames and non-reflective finishes. Collector Lines will be placed underground to the extent practicable.

2.1.4 Morrow County Solid Waste Management Ordinance

In its response to the Project's Notice of Intent, Morrow County identified its Solid Waste Management Ordinance as containing applicable substantive criteria. Morrow County later clarified that the Solid Waste Ordinance does not contain applicable substantive land use criteria; therefore the ordinance is not addressed in this Exhibit. The Solid Waste Management Ordinance is instead addressed in Exhibit V of this application.

2.1.5 Morrow County Weed Control Ordinance

In its response to the Project's Notice of Intent, Morrow County identified its Weed Control Ordinance as containing applicable substantive criteria. Morrow County later clarified that the Weed Control Ordinance does not contain applicable substantive land use criteria; therefore the ordinance is not addressed in this Exhibit. The Weed Control Ordinance is instead addressed in Exhibit P of this application.

As described in Exhibit P, Wheatridge shall develop and implement a Weed Management Plan meeting the requirements of the Morrow County Weed Control Ordinance and the requirements of the Morrow County Weed Control District Advisory Board. A draft weed control plan is incorporated into a draft Revegetation Plan provided with this application (see Exhibit P, Attachment P-2).

2.2 Applicable Criteria for Umatilla County

This Section demonstrates how the portion of the Project located in Umatilla County satisfies the Umatilla County applicable substantive criteria. In its April 12, 2013 response to the NOI, Umatilla County identified the following applicable substantive criteria:



- Umatilla County Development Ordinance (UCDO) Sections 152.060, 152.061, 152.615 and 152.616(HHH)
- The following Umatilla County Comprehensive Plan (UCCP) policies:
 - o Citizen Involvement, Policies 1 and 5;
 - o Agriculture, Policies 1, 8 and 17;
 - Open Space, Scenic & Historic Areas, and Natural Areas, Policies 1(a), 5(a & b), 6(a), 8(a), 9(a), 10(c, d & e), 20 (a), 20(b)(1-8), 22, 23(a), 24(a), 26, 37 & 38(a-c), 39(a) and 42(a);
 - o Air, Land, Water Quality, Policies 1, 7 and 8;
 - o Natural Hazards, Policies 1 and 4;
 - o Recreational Needs, Policy 1;
 - o Economy of the County, Policies 1, 4 and 8(a-f);
 - o Public Facilities and Services, Policies 1(a-d), 2, 9 and 19;
 - o Transportation, Policies 18 and 20; and
 - o Energy Conservation, Policy 1.

These substantive criteria are discussed in Sections 2.2.1 and 2.2.2 below. Umatilla County also submitted other miscellaneous comments which are addressed below in Section 2.2.3.

2.2.1 UCDO Criteria

152.060 CONDITIONAL USES PERMITTED.

In an EFU zone the following uses may be permitted conditionally via administrative review (§ 152.769), subject to the requirements of this section, the applicable criteria in § 152.061, §§ 152.610 through 152.615, 152.617 and §§ 152.545 through 152.562. A zoning permit is required following the approval of a conditional use pursuant to § 152.025. Existing uses classified as conditional uses and listed in this section may be expanded subject to administrative review and subject to the requirements listed in OAR 660, Division 033.

(F) Commercial utility facilities for the purpose of generating power for public use by sale as provided in § 152.617 (I)(C). (For specific criteria for Wind Power Generation see § 152.617 (I)(W)²)

Response: The Project meets the definition of a commercial utility facility as defined in UCDO § 152.617 (I) (C). Upon issuance of an EFSC Site Certificate for the Project, Umatilla County shall issue a zoning permit without further conditions pursuant to ORS 469.401(3).

152.061 Standards for Conditional Uses on EFU lands.

 $^{^2}$ UCDO 152.617(I)(W) has been deleted in its entirety and the reader is cross-referenced to UCDO 152.616(HHH), which is discussed below.



The following limitations shall apply to all conditional uses in an EFU zone. Uses may be approved only where such uses:

- (A) Will not force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; and
- (B) Will not significantly increase the cost of accepted farm or forest practices on lands devoted to farm or forest use.

Response: There is no forest use within the analysis area. As shown in Table K-2, within the Site Boundary in Umatilla County approximately 1,689 acres, or 99% of the area, are "devoted to farm use." Once built, permanent Project facilities would occupy (at most) approximately 24.37 acres, or about 1.4% of the agricultural lands within the Site Boundary in Umatilla County.

The lands devoted to farm use in Umatilla County are used primarily for cultivation of wheat and grazing of livestock, and related accessory uses. Figures K-5 and K-6 show the areas dedicated to farm use, as well as the areas defined by the UCDO as High Value Farmlands.



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Table K-	2. Impacts to Farmland in Umat	tilla County
Total Area within Site Boundary in Umatilla County	1,702 acres 1,689 acres total, of which 569.17 acres are High Value Farmland ² /	
Area Within Site Boundary in Umatilla County Devoted to Farm Use ¹ /		
Acres Permanently Impacted by Project	Not High Value Farmland	High Value Farmland ² /
Wheatridge West		
GE 1.7-103	0	0
GE 2.5-120	0	0
Wheatridge East		
GE 1.7-103	14.97	9.36
GE 2,5-120	14.42	9.20
Intraconnection Lines		
Option 1 (Longest)	0.02	0.02
Option 3 (Shortest)	0.02	0.02
SUBTOTALS (worst-case scenario) ³ /	14.99	9.38
TOTAL (worst-case scenario)	24.37 acres	

^{1/} Consistent with the definition of "farm use" in ORS 215.203 and OAR 660-033-0020(7), all land shown on Figures K-5 and K-6 as Developed-Dryland Wheat, Developed-Irrigated Agriculture, Developed-Revegetated or Other Planted Grassland, Grassland-Exotic Annual and Grassland-Native Perennial has been included in the calculation of land devoted to farm use for this Exhibit.

The impact of the Project would not force a significant change in accepted farm practices or significantly increase the cost of farm practices, for the reasons discussed below:

- Facility components and temporary construction laydown and staging areas would be sited to minimize disturbance to farming operations.
- Land permanently lost to farm use due to siting of permanent Project improvements is a
 de minimis percentage of the total farm use land in Umatilla County; therefore the
 inability to use the land for farm purposes is not significant.
- Project Site Access Roads and other facilities would be constructed and maintained by Wheatridge, such that the cost burden for maintenance does not fall upon the farm or ranch owners.
- Private access roads improved or developed for the Project would benefit agricultural users of the land through improved access to farm fields and resulting lower fuel costs.



^{2/} Pursuant to UCDO 152.616(HHH)(6)(k) this calculation applies the definition of "high-value farmland" from ORS 195.300(10) for lands in Eastern Oregon: land with soils that are irrigated or not irrigated, and classified as prime, unique, Class I or Class II by the USDA National Resource Conservation Service (NRCS); and lands within the Columbia Basin Viticultural Area (which encompasses the entirety of the Project Area) that are below 3,001 feet elevation, with slopes no greater than 15% and an aspect between 67.5 and 292.5 degrees.

^{3/} The worst-case scenario is the GE 1.7-103 layout with the longest Intraconnection Line.

- As part of the lease agreements, each landowner must approve the site plan for facilities located on his lands; this mechanism assures that Project facilities would not be considered disruptive to the practices of each landowner.
- Wheatridge has confirmed that no landowners in the Project Area utilize aerial spraying
 of pesticides or fertilizers; the Project would not affect the application of pesticides or
 fertilizers using ground-based methods.
- Wheatridge will implement a weed control plan that will reduce the risk of weed infestation in cultivated land and the associated cost to the farmer for weed control.
- Wheatridge will record a covenant not to sue against its Project leasehold interests with regard to generally accepted farming practices on adjacent farmland.
- Construction and operation of the Project could cause changes in routes of access to
 fields and changes in the pattern of cultivation, seeding, fertilizing and harvesting near
 the turbines and access roads. To minimize this, Wheatridge, in consultation with the
 landowners, will minimize obstacles to farming in cultivated fields (facility components
 around which the farmer would have to plow, plant and harvest).
- Wheatridge will consult with area landowners during construction and operation of the
 facility to determine further measures to reduce or avoid any adverse impacts to farm
 practices on surrounding lands and to avoid any increase in farming costs.
- Construction of the Project could adversely affect soil quality by erosion or compaction. Some farmland would be temporarily disturbed and unavailable for farming during construction. To avoid or reduce adverse impacts to soil quality, Wheatridge will implement dust control and erosion-control measures during construction and operation of the facility (see Exhibit I). To the extent practicable, Wheatridge proposes to reduce impact to soils by using areas that are already disturbed and limiting the area of new disturbance.
- Construction vehicles will use previously disturbed areas including existing roadways
 and tracks. When practical, temporary Construction Yards and laydown areas will be
 located within the future footprint of permanent structures. The width of new
 permanent roadways will be the minimum consistent with safe use. Underground
 communication and electrical lines will be buried within the area disturbed by
 temporary road widening to the extent practicable, and turbine foundations will abut
 roadways as closely as possible. Upon completion of construction, Wheatridge will
 restore temporarily disturbed areas to their pre-construction condition.

The measures above are intended to avoid or minimize the impacts of the Project on farming operations, and to mitigate for necessary impacts. The Project is designed and legally structured such that the cost burden of constructing and maintaining access roads and other facilities would not fall on the landowner and would not increase the costs of farming for affected landowners. Additionally, each participating landowner will be compensated for the loss of agricultural lands,



and the new income stream from lease payments will help to stabilize often-fluctuating agricultural income, making farming more sustainable.

152.615 Additional Conditional Use Permit Restrictions

In addition to the requirements and criteria listed in this subchapter, the Hearings Officer, Planning Director or the appropriate planning authority may impose the following conditions upon a finding that circumstances warrant such additional restrictions: [list of conditions omitted for brevity]

<u>Response</u>: To the extent any restrictions or conditions of the type listed in Section 152.615 are deemed necessary to mitigate the impacts of the Project, they can and will be implemented through the EFSC Site Certificate process. ORS 469.401(2).

152.616 (HHH) Conditional use criteria for commercial wind energy facilities

Response. UCDO 152.616(HHH)(1) provides that the procedural requirements of 152.616(HHH)(1) through (5) do not apply to a wind energy facility permitted via an EFSC Site Certificate. UCDO 152.616(HHH)(1) through (4) contain only procedural requirements, while UCDO 152.616(HHH)(5) provides both procedural and substantive requirements in the form of a list of conditional use application submittal requirements. Consequently, this application only discusses the substantive criteria of 152.616(HHH)(5) through (11)

152.616(HHH)(5) Application Requirements

The following information shall be provided as part of the application, or subject to the County's discretionary authority, be require prior to the construction or operation of the Wind Power Generation Facility through a condition of approval: [subsections (a) through (l) omitted for brevity]

Response. UCDO 156.616(HHH)(5) lists information that would be required as part of an application for a County Conditional Use Permit. The information submitted as part of this application, and information that will be provided as a condition of approval attached to the Site Certificate, satisfy all of the information requirements identified by Umatilla County.

152.616(HHH)(6) Standards/Criteria of Approval.

The following requirements and restrictions apply to the siting of a Wind Power Generation Facility:

- (a) Setbacks. The minimum setback shall be a distance of not less than the following:
 - (1) From a turbine tower to a city urban growth boundary (UGB) shall be two miles. The measurement of the setback is from the centerline of a turbine tower to the edge of the UGB that was adopted by the city as of the date the application was deemed complete.

Response: The Project is consistent with this standard. The Site Boundary is located no closer than 5.5 miles from the nearest UGB in Umatilla County, for the city of Echo.

(2) From turbine tower to land zoned Unincorporated Community (UC) shall be 1 mile.



<u>Response</u>: The Project is consistent with this standard. There are no lands zoned UC within one mile of the Site Boundary.

(3) From a turbine tower to a rural residence shall be 2 miles. For purposes of this section, "rural residence" is defined as a legal, existing single family dwelling meeting the standards of §152.058 (F)(1)-(4), or a rural residence not yet in existence but for which a zoning permit has been issued, on a unit of land not a part of the Wind Power Generation Facility, on the date a Wind Power Generation Facility application is submitted. For purposes of this section, the setback does not apply to residences located on properties within the Wind Power Generation Facility project application. The measurement of the setback is from the centerline of the turbine tower to the center point of the rural residence.

<u>Response</u>: The Project is consistent with this standard. There is only one dwelling within Umatilla County located within two miles of any turbines, and it is located on a unit of land that is part of the Project. See Figures K-7 and K-8.

(4) From a turbine tower to the boundary right-of-way of County Roads, state and interstate highways, 110% of the overall tower-to-blade tip height. Note: The overall tower-to-blade tip height is the vertical distance measured from grade to the highest vertical point of the blade tip.

<u>Response</u>: Because the tallest turbine type under consideration is 145 meters (476 feet) in overall height, the minimum setback would be 159.5 meters (523 feet). The micrositing corridors are defined such that any turbine will be a minimum of 160 meters (525 feet) from the right-of-ways of any public roads. The Project is, therefore, in compliance with this requirement.

(5) From tower and project components, including transmission lines, underground conduits and access roads, to known archeological, historical or cultural sites shall be on a case by case basis, and for any known archeological, historical or cultural site of the Confederated Tribes of the Umatilla Indian Reservations the setback shall be no less than 164 feet (50 meters).

Response: The Project is designed to maintain a minimum 50 meter setback to all identified archaeological, historic and cultural resources of the CTUIR in Umatilla County.

Additionally, the Project has been designed to avoid impacts to all other known archaeological, historic and cultural resources deemed eligible or potentially eligible for listing on the National Register of Historic Places. In only one case would any Project infrastructure be located closer than 50 meters to a listed or potentially eligible historic resource in Umatilla County that is not associated with the CTUIR: the remaining evidence of the Vey Ranch phone line. A Project access road must cross what was once a linear feature but is now only a collection of widely scattered roadside utility poles with no wiring (although some are now used as fence posts); the remaining poles at this location are close enough to each other that it is not possible to achieve a setback of 50 meters. The access road would be approximately centered between two existing poles that are approximately 94.5 meters (310 feet) apart, yielding a setback of approximately 41 meters to each pole. This access road routing maximizes the setback to each pole and avoids direct impacts to



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the remaining evidence of the Vey Ranch Phone Line. In the event of unforeseen discoveries during construction, Wheatridge would immediately stop work in the area of the discovery and respond as described in Exhibit S.

(6) New electrical transmission lines associated with the project shall not be constructed closer than 500 feet to an existing residence without prior written approval of the homeowner, said written approval to be recorded with county deed records. Exceptions to the 500 feet setback include transmission lines placed in a public right of way. Note: Transmission and distribution lines constructed and owned by the applicant that are not within the project boundary are subject to a separate land use permit.

Response: No dwellings in Umatilla County are located within 500 feet of the Intraconnection Line(s). Wheatridge does not intend to construct or own any other transmission or distribution lines outside the Site Boundary in connection with the Project.

(7) The turbine/towers shall be of a size and design to help reduce noise or other detrimental effects. At a minimum, the Wind Power Generation Facility shall be designed and operated within the limits of noise standard(s) established by the State of Oregon. A credible noise study may be required to verify that noise impacts in all wind directions are in compliance with the State noise standard.

<u>Response</u>: The analysis presented in Exhibit X demonstrates that the Project is designed and can be operated within the limits of the State of Oregon's noise standards.

(b) Reasonable efforts shall be made to blend the wind turbine/towers with the natural surrounding area in order to minimize impacts upon open space and the natural landscape.

Response: Although no part of the analysis area is designated open space, the Project nonetheless is designed to minimize impacts upon undeveloped lands and the natural landscape by utilizing existing farm access roads as much as possible, and by siting roads at the edges of farm fields rather than in native grasslands where possible. This approach minimizes the need for grading and cut-and-fill slopes, allowing the Project to maintain natural contours to the greatest extent practicable. The turbines shall be painted standard white per FAA guidelines.

(c) The development and operation of the Wind Power Generation Facility will include reasonable efforts to protect and preserve existing trees, vegetation, water resources, wildlife, wildlife habitat, fish, avian, resources, historical, cultural and archaeological site.

<u>Response</u>: The Project design and development plan include efforts to protect and preserve existing vegetation, wildlife and wildlife habitat (including avian resources), and historic, cultural and archeological resources, as described in Exhibits P, Q and S. The Project would have no impact upon fish or water resources, as described in Exhibits J and O.

(d) The turbine towers shall be designed and constructed to discourage bird nesting and wildlife attraction.



Response: The considered turbine types are designed to discourage bird nesting and wildlife attraction. The turbine towers are hollow cylinders that do not provide perching or nesting opportunities. Likewise, the turbine nacelles are constructed with a smooth outer shell that does not facilitate perching or nesting.

(e) Private access roads established and controlled by the Wind Power Facility shall be gated and signed to protect the Wind Power Generation Facility and property owners from illegal or unwarranted trespass, illegal dumping and hunting and for emergency response.

<u>Response</u>: The Project is consistent with this standard. Wheatridge will install gates and notrespassing signs at all access roads established or improved for the purpose of Project construction and operation.

(f) Where practicable the electrical cable collector system shall be installed underground, at a minimum depth of 3 feet; elsewhere the cable collector system shall be installed to prevent adverse impacts on agriculture operations.

<u>Response</u>: The electrical collector system lines will be installed underground to the extent practicable. In agricultural fields, the minimum depth will be 3 feet such that they would not interfere with or be susceptible to damage from agricultural operations. In other areas the lines will be established as deep as practicable and will be designed and constructed to comply with National Electrical Safety Code (NESC) standards.

- (g) Required permanent maintenance/operations buildings shall be located off site in one of Umatilla County's appropriately zoned areas, except that such a building may be constructed on site if:
 - (1) The building is designed and constructed generally consistent with the character of similar buildings used by commercial farmers or ranchers, and
 - (2) The building will be removed or converted to farm use upon decommissioning of the Wind Power Generation Facility consistent with the provisions of §152.616 (HHH) (7).

Response: Any O&M Building constructed in Umatilla County will be a one-story building of about 6,000-9,000 square feet with adjacent parking, similar in appearance and construction to agricultural buildings commonly found in Umatilla County, and will be constructed within the Site Boundary. Upon decommissioning of the Project, Wheatridge will either convey the building to the underlying landowner for farm use or remove it in accordance with its approved decommissioning plan. The County will be protected against decommissioning costs pursuant to the decommissioning bond discussed in Exhibit W.

(h) A Wind Power Generation Facility shall comply with the Specific Safety Standards for Wind Energy Facilities delineated in OAR 345 024 0010 (as adopted at time of application).

<u>Response</u>: The Project is consistent with the Specific Safety Standards for Wind Energy Facilities, as discussed in Exhibit DD.

(i) A Covenant Not to Sue with regard to generally accepted farming practices shall be recorded with the County. Generally accepted farming practices shall be consistent with the definition of Farming



Practices under ORS 30.930. The Wind Power Generation Facility owner/operator shall covenant not to sue owners, operators, contractors, employees, or invitees of property zoned for farm use for generally accepted farming practices.

<u>Response</u>: Wheatridge will record a Covenant Not to Sue against its leasehold interests prior to construction of the Project.

(j) Roads.

(1) County Roads. A Road Use Agreement with Umatilla County regarding the impacts and mitigation on county roads shall be required as a condition of approval.

Response: Wheatridge acknowledges and will accept a condition of approval requiring that it enter into a Road Use Agreement with Umatilla County prior to beginning construction on the Project. Under the terms of the agreement, Wheatridge will leave all public roads utilized during construction of the Project in as good or better condition as exists at the time construction commences.

(2) Project Roads. Layout and design of the project roads shall use best management practices in consultation with the Soil Water Conservation District. The project road design shall be reviewed and certified by a civil engineer. Prior to road construction the applicant shall contact the State Department of Environmental Quality and if necessary, obtain a storm water permit (National Pollution Discharge Elimination System).

Response: Wheatridge will implement best management practices for storm water management as described in Exhibit I, and as will be required under the terms of the NPDES permit and the associated Erosion and Sediment Control Plan (ESCP). All Project roads will be designed and reviewed by certified civil engineer.

- (k) Demonstrate compliance with the standards found in OAR 660-033-0130 (37).
- OAR 660-033-0130(37) provides, in pertinent part, as follows:
 - (37) ... A proposal for a wind power generation facility shall be subject to the following provisions:
 - (a) For high-value farmland soils described at ORS 195.300(10), the governing body or its designate must find that all of the following are satisfied:
 - (A) Reasonable alternatives have been considered to show that siting the wind power generation facility or component thereof on high-value farmland soils is necessary for the facility or component to function properly or if a road system or turbine string must be placed on such soils to achieve a reasonably direct route considering the following factors:
 - (i) Technical and engineering feasibility;
 - (ii) Availability of existing rights of way; and
 - (iii) The long term environmental, economic, social and energy consequences of siting the facility or component on alternative sites, as determined under paragraph (B);



Response: As shown in Table K-2 and Figures K-5 and K-6, approximately one-third of the land within the analysis area in Umatilla County is high-value farmland. Within Umatilla County, the Project would permanently impact up to approximately 9.38 acres of high value farmland, which represents approximately 1.6% of the high value farmland within the Site Boundary in Umatilla County. As shown on Figures K-5 and K-6, surrounding lands within the analysis area have the same land use classifications, similar uses, and a similar proportion of high-value farmland as lands outside the Site Boundary, making any alternative siting unlikely to materially reduce the impact on high-value farmland while still meeting Project objectives.

Based on the proportion and location of high value farmland in and around the Project Area, it is not possible to completely avoid or to substantially further reduce impacts to high value farmlands without compromising the technical feasibility of the Project. Wind energy projects have specific siting needs that require turbines to be located near the tops of hills and ridges, away from objects or landforms that could shield the wind or cause turbulence. The relationship between turbine sites is also strictly controlled so as to avoid turbulence impacts from one turbine on another. Consequently, changing the proposed Project layouts would likely have significant detrimental economic and energy-generation impacts on the Project. Additionally, the location of turbines and associated facilities must be approved by each participating landowner pursuant to Wheatridge's lease agreements; the Project has been designed with landowner input to minimize disruption to current agricultural lands and practices, and does so in large part by utilizing existing agricultural access routes and placing turbines at the edges of farm fields.

Although some adjustments to facility locations are expected to occur during final engineering design, which are expected to result in further reductions of impacts, neither minor adjustments nor significant relocations of Project facilities would be likely to materially reduce the impact on high value farmland, due to the high proportion of high value farmland within the Site Boundary. Moreover, even if the Project were to be developed on similar agricultural lands in the general area, it is unlikely that a similar project would have significantly lower impacts to high value farmland or lands dedicated to agricultural use due to the similar land uses and proportion of high value farmland in the surrounding area. Development of the Project in another location would require a similar amount of land disturbance, and would likely have similar social and environmental consequences as the proposed Project.

Consequently, the evidence shows that feasible alternative layouts are not available that materially lessen the impacts on high-value farmland while still meeting Project objectives and not causing or increasing other adverse impacts.

(B) The long-term environmental, economic, social and energy consequences resulting from the wind power generation facility or any components thereof at the proposed site



with measures designed to reduce adverse impacts are not significantly more adverse than would typically result from the same proposal being located on other agricultural lands that do not include high-value farmland soils;

Response: High-value farmlands and lands dedicated to agricultural use are found throughout the Project Area and the surrounding vicinity, such that any chosen location in the general area would be likely to encompass similar proportions of both high value farmland and agricultural lands. Additionally, due to the way that high value farmlands are defined, it is unlikely that a significant amount of agricultural land that is not also classified as high value farmland and is suitable to wind energy development could be found in the vicinity. The impact avoidance and minimization measures described throughout this application would be implemented during project design, construction and operation regardless of specific location. Therefore, even if the entire Project were to be moved elsewhere in the vicinity, it would have a similar level of impacts as a whole, and similar levels of impacts to high value farmland and lands dedicated agricultural use as the Project as proposed in this application.

(C) Costs associated with any of the factors listed in paragraph (A) may be considered, but costs alone may not be the only consideration in determining that siting any component of a wind power generation facility on high-value farmland soils is necessary;

<u>Response</u>: See response to subsection (A) above. Feasible alternatives affecting materially less high-value farmland are not available in the general area, regardless of cost.

(D) The owner of a wind power generation facility approved under subsection (a) shall be responsible for restoring, as nearly as possible, to its former condition any agricultural land and associated improvements that are damaged or otherwise disturbed by the siting, maintenance, repair or reconstruction of the facility. Nothing in this subsection shall prevent the owner of the facility from requiring a bond or other security from a contractor or otherwise imposing on a contractor the responsibility for restoration; and

<u>Response</u>: The Applicant will meet all County requirements to ensure decommissioning, as described below in response to 152.616(HHH)(l).

(E) The criteria of subsection (b) are satisfied.

Response: The requirements of OAR 660-033-0130(37) subsection (b) are addressed below:

(b) For arable lands, meaning lands that are cultivated or suitable for cultivation, including high-value farmland soils described at ORS 195.300(10), the governing body or its designate must find that:



(A) The proposed wind power facility will not create unnecessary negative impacts on agricultural operations conducted on the subject property. Negative impacts could include, but are not limited to, the unnecessary construction of roads, dividing a field or multiple fields in such a way that creates small or isolated pieces of property that are more difficult to farm, and placing wind farm components such as meteorological towers on lands in a manner that could disrupt common and accepted farming practices;

Response: Measures to be taken by the Applicant to minimize the negative impacts on agricultural operations on the underlying property are outlined above in response to UCDO 152.061. As discussed above, the impact of the Project would not force a significant change in accepted farm practices or significantly increase the cost of farm practices, for the reasons discussed below:

- Facility components and temporary construction laydown and staging areas would be sited to minimize disturbance to farming operations.
- Land permanently lost to farm use due to siting of permanent Project improvements is a de minimis percentage of the total farm use land in Umatilla County; therefore the inability to use the land for farm purposes is not significant.
- Project Site Access Roads and other facilities would be constructed and maintained by Wheatridge, such that the cost burden for maintenance does not fall upon the farm or ranch owners.
- Private access roads improved or developed for the Project would benefit agricultural users of the land through improved access to farm fields and resulting lower fuel costs.
- As part of the lease agreements, each landowner must approve the site plan for
 facilities located on his lands; this mechanism assures that Project facilities would
 not be considered disruptive to the practices of each landowner.
- Wheatridge has confirmed that no landowners in the Project Area utilize aerial spraying of pesticides or fertilizers; the Project would not affect the application of pesticides or fertilizers using ground-based methods.
- Wheatridge will implement a weed control plan that will reduce the risk of weed infestation in cultivated land and the associated cost to the farmer for weed control.
- Wheatridge will record a covenant not to sue against its Project leasehold interests with regard to generally accepted farming practices on adjacent farmland.
- Construction and operation of the Project could cause changes in routes of access to
 fields and changes in the pattern of cultivation, seeding, fertilizing and harvesting
 near the turbines and access roads. To minimize this, Wheatridge, in consultation
 with the landowners, will minimize obstacles to farming in cultivated fields (facility
 components around which the farmer would have to plow, plant and harvest).



- Wheatridge will consult with area landowners during construction and operation of the facility to determine further measures to reduce or avoid any adverse impacts to farm practices on surrounding lands and to avoid any increase in farming costs.
- Construction of the Project could adversely affect soil quality by erosion or
 compaction. Some farmland would be temporarily disturbed and unavailable for
 farming during construction. To avoid or reduce adverse impacts to soil quality,
 Wheatridge will implement dust control and erosion-control measures during
 construction and operation of the facility (see Exhibit I). To the extent practicable,
 Wheatridge proposes to reduce impact to soils by using areas that are already
 disturbed and limiting the area of new disturbance.
- Construction vehicles will use previously disturbed areas including existing
 roadways and tracks. When practical, temporary Construction Yards and laydown
 areas will be located within the future footprint of permanent structures. The width
 of new permanent roadways will be the minimum consistent with safe use.
 Underground communication and electrical lines will be buried within the area
 disturbed by temporary road widening to the extent practicable, and turbine
 foundations will abut roadways as closely as possible. Upon completion of
 construction, Wheatridge will restore temporarily disturbed areas to their preconstruction condition.

The measures above are intended to avoid or minimize the impacts of the Project on farming operations, and to mitigate for necessary impacts. The Project is designed and legally structured such that the cost burden of constructing and maintaining access roads and other facilities would not fall on the landowner and would not increase the costs of farming for affected landowners. Additionally, each participating landowner will be compensated for the loss of agricultural lands, and the new income stream from lease payments will help to stabilize often-fluctuating agricultural income, making farming more sustainable.

(B) The presence of a proposed wind power facility will not result in unnecessary soil erosion or loss that could limit agricultural productivity on the subject property. This provision may be satisfied by the submittal and county approval of a soil and erosion control plan prepared by an adequately qualified individual, showing how unnecessary soil erosion will be avoided or remedied and how topsoil will be stripped, stockpiled and clearly marked. The approved plan shall be attached to the decision as a condition of approval;

Response: Mitigation of geologic impacts including soil erosion are discussed in Exhibits H and I, and in response to UCDO 152.061. Further, the Applicant will comply with the terms of its NPDES permit and the associated Erosion and Sediment Control Plan (ESCP).



(C) Construction or maintenance activities will not result in unnecessary soil compaction that reduces the productivity of soil for crop production. This provision may be satisfied by the submittal and county approval of a plan prepared by an adequately qualified individual, showing how unnecessary soil compaction will be avoided or remedied in a timely manner through deep soil decompaction or other appropriate practices. The approved plan shall be attached to the decision as a condition of approval; and

Response: Minimization of impacts to soil are discussed in Exhibit I and in response to UCDO 152.061.

(D) Construction or maintenance activities will not result in the unabated introduction or spread of noxious weeds and other undesirable weeds species. This provision may be satisfied by the submittal and county approval of a weed control plan prepared by an adequately qualified individual that includes a long-term maintenance agreement. The approved plan shall be attached to the decision as a condition of approval.

<u>Response</u>: As discussed in response to UDCO 152.061, Wheatridge will implement a weed control plan that will reduce the risk of weed infestation in cultivated land and the associated cost to the farmer for weed control.

(c) For nonarable lands, meaning lands that are not suitable for cultivation, the governing body or its designate must find that the requirements of OAR 660-033-0130(37)(b)(D) are satisfied.

Response: The Project is located primarily on arable lands, but would impact some non-arable lands as well. The above discussion demonstrates compliance with the requirements of OAR 660-033-0130(37)(b)(D).

(d) In the event that a wind power generation facility is proposed on a combination of arable and nonarable lands as described in OAR 660-033-0130(37)(b) and (c) the approval criteria of 660-033-0130(37)(b) shall apply to the entire project.

Response: The Project would impact some nonarable land around the edges of existing farm fields, thus would include both arable and nonarable lands. The above discussion demonstrates compliance with the approval criteria of OAR 660-033-0130(37)(b).

(l) Submit a plan for dismantling of uncompleted construction and/or decommissioning and/or repowering of the Wind Power Generation Facility as described in §152.616 (HHH) (7).

Response: The Project is designed to have a useful life of approximately 50 years, at which time it may be repowered or decommissioned. If the Project is to be decommissioned, Wheatridge will provide a decommissioning plan to Umatilla County prior to beginning decommissioning activities. Providing a decommissioning/repowering plan prior to initial construction of the Project is not an optimal approach because technologies and practices for wind project decommissioning and repowering are certain to change significantly between Project approval and the time at which decommissioning or repowering becomes



necessary. The County will be protected against decommissioning costs pursuant to the decommissioning bond discussed in Exhibit W.

(m) A surety bond shall be established to cover the cost of dismantling uncompleted construction and/or decommissioning of the Wind Power Generation Facility, and site rehabilitation pursuant to §152.616 (HHH) (7) and (8). The intent of this requirement is to guarantee performance (not just provide financial insurance) to protect the public interest and the county budget from unanticipated, unwarranted burden to decommission wind projects. For projects being sited by the State of Oregon's Energy Facility Siting Council (EFSC), the bond or letter of credit required by EFSC will be deemed to meet this requirement.

<u>Response</u>: As described in Exhibit W, Wheatridge will provide a bond or letter of credit to cover the cost of site rehabilitation in the event of decommissioning or dismantling of uncompleted construction, which will also satisfy the County's standard.

(n) The actual latitude and longitude location or Stateplane NAD 83(91) (suitable for GPS mapping) coordinates of each turbine tower, connecting lines, 0 & M building, substation, project roads and transmission lines, shall be provided to Umatilla County on or before starting electrical production.

<u>Response</u>: Prior to beginning commercial operations, Wheatridge will provide actual locational data to Umatilla County and area emergency service providers, in a form to be agreed upon at that time.

(o) An Operating and Facility Maintenance Plan shall be submitted and subject to County review and approval.

Response: Prior to beginning commercial operations, Wheatridge will provide an Operating and Facility Maintenance Plan for Umatilla County's review and approval.

(p) A summary of as built changes to the original plan, if any, shall be provided by the Wind Power Generation Facility owner/operator 90 days of starting electrical production.

<u>Response</u>: Within 90 days after beginning commercial operations, Wheatridge will provide a summary of any as built changes to the original plan to Umatilla County.

(q) Submit a Socioeconomic Assessment of the Wind Power Generation Facility.

<u>Response</u>: A socioeconomic assessment of the impacts of the Project is provided as part of Exhibit U and will be reviewed and approved by EFSC.

152.616(HHH) (7) Dismantling/Decommissioning.

A plan for dismantling and/or decommissioning that provides for completion of dismantling or decommissioning of the Wind Power Generation Facility without significant delay and protects public health, safety and the environment in compliance with the restoration requirements of this section. [Detailed list of plan contents omitted for brevity.]

Response: The Project is designed to have a useful life of approximately 50 years, at which time it may be repowered or decommissioned. If the Project is to be decommissioned, Wheatridge will provide a decommissioning plan to Umatilla County prior to beginning



decommissioning activities. Providing a decommissioning/repowering plan prior to initial construction of the Project is not an optimal approach because technologies and practices for wind project decommissioning and repowering are certain to change significantly between Project approval and the time at which decommissioning or repowering becomes necessary. The County will be protected against decommissioning costs pursuant to the decommissioning bond discussed in Exhibit W.

152.616(HHH)(8) Decommissioning Fund.

The Wind Power Generation Facility owner/operator shall submit to Umatilla County a bond acceptable to the County, in the amount of the decommissioning fund naming Umatilla County beneficiary or payee. [Detailed list of bond conditions omitted for brevity.]

<u>Response</u>: As described in Exhibit W, Wheatridge will provide a bond or letter of credit to cover the cost of site rehabilitation in the event of decommissioning or dismantling of uncompleted construction, which will also satisfy the County's standard.

152.616(HHH)(9) Annual Reporting.

Within 120 days after the end of each calendar year the Wind Power Generation Facility owner/operator shall provide Umatilla County a written and oral annual report including the following information: [Detailed list of report contents omitted for brevity.]

<u>Response</u>: Wheatridge will provide Umatilla County with annual reports of Project operations, within 120 days of the end of each calendar year, meeting the requirements of this subsection.

152.616(HHH)(10)Permit Amendments.

The Wind Power Generation Facility requirements shall be facility specific, but can be amended as long as the Wind Power Generation Facility does not exceed the boundaries of the Umatilla County conditional use permit where the original Wind Power Generation Facility was constructed. ... An amendment to a Site Certificate issued by EFSC will be governed by the rules for amendments established by [EFSC].

<u>Response</u>: As noted in the criterion, any amendment to the EFSC Site Certificate shall be processed with EFSC according to the applicable statutes and administrative rules governing amendment of Site Certificates.

152.616(HHH)(11) Walla Walla Watershed.

Response: This criterion applies only to land within the Walla Walla sub-basin east of Highway 11 and, as such, does not apply to this Project.

2.2.3 UCCP Policies

Citizen Involvement:



1. Provide information to the public on planning issues and programs, and encourage continuing citizen input to planning efforts.

<u>Response</u>: The ASC approval process incorporates opportunities for citizen input on the planning and permitting process, through the NOI, scoping meetings, informal informational meetings, official notices to surrounding property owners and solicitation of comments, and the public hearings process. Accordingly, this UCCP policy regarding citizen involvement is satisfied.

5. Through appropriate media, encourage those County residents' participation during both city and County deliberation proceedings.

Response: The Site Certificate process with EFSC provides ample opportunity for public review of application materials and input into the planning process, including at least one hearing in the local area. The EFSC process is consistent with Statewide Land Use Planning Goal 1 regarding citizen involvement. Accordingly, the UCCP policies regarding citizen involvement are also met.

Agriculture:

1. Umatilla County will protect, with Exclusive Farm Use zoning pursuant to ORS 215, lands meeting the definition of farmland in this plan and designated as Agricultural on the Comprehensive Plan Map.

Response: Umatilla County has adopted zoning and allocated lands identified as Agricultural on the Comprehensive Plan Map to the Exclusive Farm Use zoning district pursuant to ORS 215. The Site Boundary is located entirely within the EFU zone. As discussed above, the proposed project meets the applicable substantive criteria of the Umatilla County EFU zone.

8. The county shall require appropriate procedures/ standards/policies be met in the Comprehensive Plan and Development Ordinance when reviewing non-farm uses for compatibility with agriculture.

Response: The Project is located in the EFU zone, and this exhibit demonstrates consistency with applicable substantive criteria for the EFU zoning district in Umatilla County.

17. Continue to encourage timber management to occur on lower elevation seasonal grazing as permitted in the Exclusive Farm Use Zone.

Response: As noted in Umatilla County's letter dated April 12, 2013, most but not all comprehensive plan policies are implemented by the UCDO. In the case of these agricultural policies, they are implemented by the regulations of the EFU zone including the substantive criteria of the UCDO discussed above in Section 2.2.1. Specifically with respect to policy 17, there is no active timber management within the Site Boundary in Umatilla County.

Open Space, Scenic & Historic Areas, and Natural Areas:

1. (a) The County shall maintain this resource [Open Space] by limiting development mainly to existing built up areas.

Response: The Project will be built on existing, cultivated farmlands and will consist of wind turbines spaced at large intervals, and supporting infrastructure, much of which will be



buried underground. The Project is located entirely on private land, none of which is designated as open space, and actually impacts only a very small percentage of the Project site. The Project site is crossed by several highways, and there is an existing wind energy facility immediately to the west. The Project will not significantly alter the rural, sparsely developed character of the Project lands. The impacts of the Project on scenic, protected and recreational areas are discussed in further detail in Exhibits R, L and T respectively.

5. (a) The County shall maintain rural agricultural lands, Development shall be of low density to assure retention of upland game habitat,

Response: Although the Project encompasses a fairly large geographic area, the density of developed areas due to the Project and existing land uses will remain very low, and the vast majority of land within the Site Boundary will remain undeveloped. Additionally, most Project impacts will occur on agricultural lands such that upland game habitat, and particularly the streams, wetlands and riparian areas on which game relies, will be minimally affected.

(b) Land uses should maintain the vegetation along stream banks, fence rows, woodlots, etc. Research ways to reduce harassment and loss of upland game by free roaming dogs and cats.

<u>Response</u>: Existing agricultural uses of the Project lands will be able to continue with minimal disruption after Project construction is complete. The Project is a widely spaced series of turbines with minimal supporting infrastructure, much of which is located underground; as such it will not interfere with game movement or habitat. Sensitive habitat and vegetated areas along stream banks, fence rows and woodlots will not be permanently disturbed by the Project. There are no characteristics of the Project that would attract or exacerbate the problem of free roaming dogs and cats.

6. (a) Developments or land uses that require drainage, channelization, filling or excessive removal of riparian vegetation in sensitive waterfowl areas should be identified.

<u>Response</u>: The Project does not require drainage, channelization, filling or excessive removal of riparian vegetation in sensitive waterfowl areas.

8. (a) Setbacks shall be established to protect significant and other wetlands.

Response: Setbacks shall be established and met as required by UCDO 152.616(HHH)(a) for wind energy facilities. The Project has been designed to avoid impacts to wetlands, and maintains sufficient setbacks from wetland edges to prevent indirect impacts to nearby wetlands.

9. (a) The County shall encourage land use practices which protect and enhance significant wetlands.

 $\underline{Response} \hbox{: The Project has no impact on wetlands in Umatilla County, as further discussed in Exhibit J.}$



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10. (c) Compatible land use shall maintain the riparian vegetation along streams in the floodplain. Stream bank vegetation shall be maintained along streams outside of the floodplain by utilizing appropriate setbacks.

Response: The Project has been designed to avoid impacts to riparian or other stream bank vegetation. All setbacks required by the UCDO will be met.

(d) Development or land use that requires channelization, excessive removal of streamside vegetation, alteration of stream banks and filling into stream channels shall be restricted in order to maintain streams integrity.

Response: The Project has been designed to avoid nearly all impacts to streams, and would impact only ephemeral streams where access roads must cross. Where this would occur, all appropriate measures will be implemented to maintain stream integrity. The streams would be channelized only to the extent necessary to flow through a culvert under a road. Streamside vegetation removal will be avoided to the extent practicable, and areas disturbed temporarily will be restored to approximately original contours and reseeded with native species.

(e) New roads, bridges and access rights-of-way shall be designed to avoid channel capacity, and minimize removal of shoreline vegetation.

Response: These policies are largely addressed above. Any new or improved roads shall be sited in consultation with the affected landowner to minimize removal of shoreline vegetation, if any exists on the Project site. No new roads, bridges or access rights-of-way will adversely affect channel capacity.

20. (a) Developments of potentially high visual impacts shall address and mitigate adverse visual effects in their permit application, as outlined in the Development Ordinance standards.

Response: Visual impacts are mitigated as discussed in Exhibit R.

- (b) It is the position of the County that the Comprehensive Plan designations and zoning already limit scenic and aesthetic conflicts by limiting land uses or by mitigating conflicts through ordinance criteria. However, to address any specific, potential conflicts, the County shall insure special consideration of the following when reviewing a proposed change of land use:
 - (1) Maintaining natural vegetation whenever possible.
 - (2) Landscaping areas where vegetation is removed and erosion might result.
 - (3) Screening unsightly land uses, preferably with natural vegetation or landscaping.
 - (4) Limiting rights-of-way widths and numbers of roads intersecting scenic roadways to the minimum needed to safely and adequately serve the uses to which they connect.
 - (5) Limiting signs in size and design so as not to distract from the attractiveness of the area.
 - (6) Siting Developments to be compatible with surrounding area developments and recognizing the natural chrematistics or the location.



- (7) Limiting excavation and filling only to those areas where alteration of the natural terrain is necessary and re-vegetating such areas as soon as possible.
- (8) Protection vistas and other views which are important to be recognized because of their limited number and importance to the visual attractiveness of the area.

Response: Wind energy projects are a conditional use in the Umatilla County EFU zone. As called for by this UCCP policy, aesthetic and scenic conflicts are already largely mitigated through the substantive criteria applicable to the Project. Additionally, there are no identified or designated scenic views or resources in the vicinity of the Project, indicating that there are no specific scenic or aesthetic conflicts to be addressed. Nonetheless, the Project incorporates many of the design guidance elements enumerated in this policy, minimizing aesthetic impacts as well as other impact types. For example, vegetation removal would be largely limited to agricultural crops, with very little impacts to native vegetation and no impacts to trees. Disturbed area will be revegetated as soon as practicable following construction to restore the visual quality of the land and to prevent erosion. Project access roads have been reduced to the minimum length needed to develop the Project, and they will be narrowed following construction to a minimum width needed for typical maintenance vehicles. No Project access roads intersect with designated scenic roadways. Signage will be limited to small identifying markers and "no trespassing" signs at the base of each turbine, safety signage within each Substation, and a small identifying sign at the O&M Buildings; commercial signage (e.g., advertising) is not proposed and will not be permitted. Electrical Collector Lines will be underground to the extent practicable, while the Intraconnection Corridor has been routed to minimize the visibility of the Intraconnection Line(s) from major public roads. The access road routes and turbine locations have been chosen to limit the need for cut and fill, and to follow existing terrain as much as possible. While the turbines represent a nontraditional structure on the landscape that cannot reasonably be screened, the O&M Buildings will appear similar to other existing agricultural structures in the area.

22. The County shall cooperate with state agencies and other historical organizations to preserve historic buildings and sites, cultural areas, and archeological sites and artifacts.

Response: The Project would not impact historic buildings, as there are none located within the Site Boundary. All other known historic, cultural and archaeological resources have been avoided through modifications to the Project layout. The CTUIR was contracted to survey the area for cultural and archaeological resources, and provided a full report of their findings to SHPO. In the event that previously undiscovered sites or artifacts are found during construction, Wheatridge will coordinate with SHPO regarding an appropriate course of action to conserve the resource. Avoidance of impacts to cultural or archaeological resources is discussed in Section 4 of this exhibit, and Exhibit S.

23. (a) Umatilla County shall encourage and cooperate in developing a detailed county-wide historic site inventory.



<u>Response</u>: Any historic site information developed in the course of Project development shall be provided for inclusion in the Umatilla County historic site inventory.

24. (a) Umatilla County shall protect significant historical and cultural sites from land use activities which diminish their value as historical resources.

<u>Response</u>: Avoidance of impacts to cultural or historical resources is discussed in Section 4 of this exhibit, and Exhibit S. All identified sites eligible or potentially eligible for regulatory protection are avoided as required by applicable standards, except as discussed in Section 4 of this exhibit. There are no sites within the Project area presently listed on the National Register of Historic Places.

26. The County shall cooperate with the Tribe, Oregon State Historic Preservation Office, and others involved in concern identifying and protecting Indian cultural areas and archeological sites.

Response: Wheatridge has cooperated and consulted with the CTUIR and Oregon SHPO regarding cultural and archaeological resources, and, except as discussed in Section 4 of this exhibit, all identified Indian cultural and archaeological sites eligible or potentially eligible for regulatory protection are avoided as required by applicable standards.

37. The County shall ensure compatible interim uses provided through Development Ordinance standards, and where applicable consider agriculturally designated land as open space for appropriate and eventual resource or energy facilities use.

Response: The Project is an energy facility on agricultural open space, as encouraged by this policy.

38. (a) The County shall encourage mapping of future agencies [sic] sites, ensure their protection from conflicting adjacent land uses, and required reclamation plans.

Response: The Project does not impact any known aggregate sites, and no Project landowner has disclosed the existence of any such sites or prospective sites within the Project area. The Project would not prevent the future development of aggregate or mineral extraction sites , and would not represent a conflicting land use that would adversely affect or be adversely affected by mining activities in the vicinity.

(b) Aggregate and mineral exploration, extraction, and reclamation shall be conducted in conformance with the regulations of the Department of Geology and Mineral Industries.

<u>Response</u>: The Project does not involve aggregate or mineral exploration, extraction or reclamation, and would not impact any existing aggregate or mineral extraction site except to the extent that the Project may purchase aggregate from an existing, permitted mine.

(c) The County Development Ordinance shall include conditional use standards and other provisions to limit or mitigate conflicting uses between aggregate sites and surrounding land uses.

Response: The Project does not impact any known aggregate sites, and no Project landowner has disclosed the existence of any such sites or prospective sites within the Project area. The Project does not include the development of any aggregate or other



mining sites. The Project complies with all applicable substantive criteria related to protection of aggregate resources.

39. (a) The County shall strictly enforce state and county development standards pertaining to gravel extraction/processing uses through appropriate agencies; whether new operations or expansions of existing sites.

<u>Response</u>: The Project does not propose any new mining sites, nor the expansion of existing mining sites. Wheatridge will obtain gravel as needed from permitted providers outside the Project area.

42. (a) Encourage development of alternative sources of energy.

Response: This is an alternative energy project in furtherance of this policy.

Air, Land, Water Quality:

1. Discharges from existing and future developments shall not exceed applicable environmental standards.

<u>Response</u>: Wheatridge will obtain and comply with an NPDES permit for storm water discharge, and shall follow best management practices to minimize discharges and emissions during construction. Once operational, the Project will not discharge any pollutants or other materials regulated by environmental law.

7. Consider cumulative noise impacts and compatibility of future developments, including the adoption of appropriate mitigating requirements of plan updates.

<u>Response</u>: Noise impacts and mitigation are discussed in Exhibit X, which demonstrates that the Project is designed and can be operated to comply with state noise regulations.

8. Recognize that protection of existing wells has priority over development proposals requiring additional subsurface sewage disposal.

Response: The only subsurface sewage disposal will be at the O&M Buildings, which will be located sufficiently far from any existing wells to avoid any potential conflict.

Natural Hazards:

1. The County will endeavor, through appropriate regulations and cooperation with applicable governmental agencies, to protect life and property from natural hazards and disasters found to exist in Umatilla County.

Response: The Project would incorporate many features protective of life and property, and is in an area largely free of natural hazards. The Project incorporates substantial setbacks to public roads and existing structures, such that it would not represent a hazard to public health or safety even in the event of a catastrophic failure. Project facilities, in particular the turbines, will be located away from known hazard areas, and structures, in particular the turbine foundations, will be designed and build to rigorous engineering standards as required by current building codes so that they can withstand earthquakes.



4. Potentially hazardous major developments (e.g. power plants) must address earthquake hazard possibilities.

<u>Response</u>: There are no known liquefaction, subsidence or landslide risk areas within the Project site in Umatilla County. All foundations will be built to applicable engineering standards for earthquake safety, and all County setbacks from other structures and roads will be observed, reducing the risk that Project improvements could collapse onto other structures or roads.

Recreation Needs:

1. Encourage and work with local, state, federal agencies and private enterprise to provide recreational areas and opportunities to citizens and visitors to the County.

Response: The Project does not impact any existing recreational resources.

Economy:

1. Encourage diversification within existing and potential resource-based industries.

<u>Response</u>: The Project represents a diversification of existing resource-based industries. The existing economic use of Project land – agriculture – will not be significantly impacted by the Project, so the Project is an addition to the County economy rather than a replacement of one economic use for another.

4. Participate in selected economic development programs and projects applicable to the County desired growth.

<u>Response</u>: The Project monetizes the wind resource of Umatilla County without injury to other wind projects or natural resource uses. The Project will generate economic growth and jobs within Umatilla County.

8. Evaluate economic development proposals upon the following:

Will the proposal:

- a. increase or decrease available supplies?
- b. improve or degrade qualities?
- c. balance withdrawal with recharge rates?
- d, be a beneficial use?
- e. have sufficient quantities available to meet needs of the proposed project and other existing and reassembly anticipated needs?
- f. reduce other use opportunities and if so, will the loss be compensated by other equal opportunities?

<u>Response</u>: All of these policies are advanced by the Project. The Project monetizes the wind resource of Umatilla County without injury to other wind projects or natural resource uses. The Project will generate economic growth and jobs within Umatilla County. The Project has



no effect on natural resource supplies or quality, and will be a net beneficial use by reducing the need for carbon-intensive energy sources. The primary energy input – wind – is free and limitless. The existing economic use of Project land – agriculture – will not be significantly impacted by the Project, so the Project is an addition to the County economy rather than a replacement of one economic use for another. Additionally, the landowners' loss of available agricultural land will be compensated by lease payments to each landowner.

Public Facilities and Services:

- 1. The county will control land development in a timely, orderly, and efficient manner by requiring that public facilities and services be consistent with established levels of rural needs consistent with the level of service requirements listed on pages J-27 and J-28 of the Technical Report. Those needs are identified as follows:
 - a. Fire protection shall be provided consistent with Policies 8,9.,10.

Response: Policies 8, 9 and 10 call for the formation or expansion of rural fire districts in areas designated for non-resource use; the provision of adequate fire fighting water supplies for significant new rural developments in coordination with the appropriate fire district; and assistance by the County in locating satellite fire stations, respectively. As described in Exhibit U, the Project is located in an area served by several fire protection agencies. If the area within the Site Boundary is not already covered by an existing fire department, Wheatridge will work with one or more of the local fire districts, to extend under contract their coverage to the area(s) in question. During construction, and particularly during activities that present a potential fire hazard, Wheatridge will maintain water trucks on site for rapid response in the event of a fire. None of the fire departments have suggested that water supplies should be maintained for the Project; any specific requirements will be determined prior to beginning construction. The development of the Project would not preclude the use of other portions of the participating properties for use as the location of a future fire station.

b. Police protection shall be provided consistent with Policy 7.

Response: Policy 7 calls for the allocation of county funding to maintain at least the state average of 0.34 officers per 1,000 people. The Project would have 10 to 15 permanent employees, some of whom may be new residents in Umatilla County; however, the addition of a small number of families would not significantly affect the provision of police services. Additionally, the Project will contribute toward funding of police services through increase taxes, allowing the County to maintain this minimum level of service.

c. Surface. Water Drainage-Roadside drainage shall be maintained and plans for drainage shall be required in multiple use areas.

<u>Response</u>: Roadside drainage will be maintained on all roads developed or improved for the county, including at locations where Project access roads intersect county roads or state



highways. The specific requirements for roadside drainage will be determined through the NPDES permit and the associated Erosion and Sedimentation Control Plan.

d. Roads shall be maintained or improved to standards adopted by the County Road Department which are consistent with nationally accepted standards that correlate traffic to desired road conditions.

<u>Response</u>: Exhibit U demonstrates the adequacy of public services to serve the Project, and also that the impact of the Project on those services will not be significant.

2. Require that domestic water and sewage disposal systems for rural areas be provided and maintained at levels appropriate for rural use only. Rural services are not to be developed to support urban uses.

Response: Water supply and sewage disposal plans for the Project are consistent with the rural nature of the site. Once in operation the Project will not have significant water needs; water for the O&M Buildings will be provided by an exempt well. Construction water will be obtained from municipal water suppliers in quantities within the service capacity of those providers, and hauled to the Project site. Sewage disposal will be handled by an onsite septic system.

9. Require adequate water supplies for firefighting as part of significant new developments in rural areas in coordination with the appropriate rural fire district.

Response: Wind projects do not pose a significant fire risk. This policy is directed more at occupied development such as residential and commercial buildings. Nonetheless, Wheatridge has confirmed the adequacy of fire protection services in Umatilla County as discussed in Exhibit U.

19. Where feasible, all utility lines and facilities shall be located on or adjacent to existing public or private rights-of-way so as to avoid dividing existing farm or forest units; and transmission lines should be located within existing corridors as much as possible.

Response: Electrical Collector Lines will be placed adjacent to Project access roads, which are routed to avoid dividing existing farm fields and generally follow existing farm access tracks. Due to the location of the turbines it is not practical to place electrical Collector Lines in public rights-of-way. There are no existing transmission corridors in the vicinity of the Project that could be used to electrically connect Wheatridge East and Wheatridge West, therefore the route has been chosen to limit the visibility of the Intraconnection Line(s) from major public roads and minimize the lines' visual impact.

Transportation:

18. The County will review right-of-way acquisitions and proposals for transmission lines and pipelines so as to minimize adverse impacts on the community.



<u>Response</u>: No right-of-way acquisitions are needed for the Project. Electric transmission lines that are part of the Project will be reviewed by EFSC as part of this Site Certificate application.

20. Request larger industrial and commercial development proposals, consider sponsoring carpooling programs.

<u>Response</u>: The Project will permanently employ 8-12 people in a rural location. It will not generate enough traffic to justify carpooling arrangements.

Energy Conservation:

1. Encourage rehabilitation /weatherization of older structures and the utilization of locally feasibly renewable energy resources through use of tax and permit incentives.

<u>Response</u>: The Project does not involve the reuse of existing structures. The Project is a wind energy facility that utilizes locally feasible renewable energy resources, in furtherance of this policy.

2.2.3 Other Miscellaneous Comments from Umatilla County

Umatilla County notes that the Gen-tie Line delivering power from the Project to the point of interconnection (POI) has not been identified as a related and supporting facility. The Gen-tie Line, which will be proposed and permitted separately by UEC or UEC/CB, does not meet the definition of a "related and supported facility" under ORS 469.300(24) and OAR 345-001-0010(49) because it is not proposed by the applicant, and because it is not certain that the transmission line "would not be built [by UEC or UEC/CB] but for construction or operation" of the Project. As noted in Umatilla County's April 12, 2013 letter, it is anticipated that EFSC will condition any Site Certificate on proper permitting and construction of the gen-tie line and any associated Substation, and Wheatridge has no objection to such a condition.

Umatilla County requests that operation and maintenance of the Gen-tie Line be addressed in this application. It also states that it may require Wheatridge to survey any transmission route located in county road right-of-way. Since the Gen-tie Line is a separate and independent project to be permitted, built and operated by UEC or UEC/CB, and not a "related and supporting facility" to this Project, Umatilla County's assertions are misplaced. Siting, operations and maintenance issues for the gen-tie line will be addressed in the UEC or UEC/CB transmission line permitting process. Similarly, Umatilla County can work through the available regulatory processes to ensure that UEC or UEC/CB constructs the gen-tie line in accordance with NESC standards.

Umatilla County refers to a new 5-10 acre private substation adjacent to a BPA substation; however, Wheatridge has not included such a substation as part of the Project. The option for a private substation was discussed in the Notice of Intent but is no longer part of the Project.

Access road standards are discussed above in Section 2.2.1 in response to UCDO 152.616(HHH). Wheatridge acknowledges that a Road Use Agreement will be required for Project use of County roads.



Umatilla County has identified the Umatilla County Transportation System Plan as a source of policies and standards that may apply to the Project. Umatilla County has identified Transportation policies 18 and 20 specifically, and those have been addressed in Section 2.2.2 above. As noted above, Wheatridge will comply with the UCDO requirements for access roads and enter into a Road Use Agreement with Umatilla County to use county roads and ensure that they are left in "as good or better" condition following completion of Project construction as currently exists.

Wheatridge will agree to a condition requiring the filing of an Emergency Response Plan with Umatilla County.

3.0 LCDC Administrative Rules

The Project Order requires the Applicant to identify any LCDC administrative rules and goals and any land use statutes that apply directly to the Project. Pursuant to OAR 660-033-0120, wind power generation facilities must comply with the standards set forth in OAR 660-033-0130(5) and (37). The standards of OAR 660-033-0130(5) are discussed above in response to MCZO 3.010(D) and UCDO 152.061. The standards of OAR 660-033-0130(37) are discussed above in response to UCDO 152.616(HHH)(6)(k). All standards are met.

4.0 MCZO 3.010(D) - Goal 3 Exception

As shown in Table K-1, under the "worst-case" scenario, the Project will permanently impact about 146.27 acres of land devoted to farm use in Morrow County, of which about 0.01 acres is high-value farmland and about 146.26 acres is not high-value farmland. MCZO 3.010(D)(16) limits the permissible impacts to 12 acres of high-value farmland or 20 acres of other land devoted to farm use unless an exception is approved pursuant to OAR 660 Division 4. The Project impacts would be less than the 12 acre cap for high value farmland. However, it will impact more than 20 acres of non-high-value farmland that is devoted to farm use in Morrow County, so a Goal 3 exception is needed.

ORS 469.504(2) provides that, notwithstanding the requirements of ORS 197.732 or applicable LCDC rules, EFSC may approve a goal exception for an energy facility in any of three circumstances as described in ORS 469.504(2)(a), (b), or (c). See also OAR 345-022-0030(4)(c). In this case, an exception to Goal 3 to permit permanent impacts to more than 20 acres of non-high-value farmland is warranted as a "reasons" exception under ORS 469.504(2)(c) and OAR 345-022-0030(4)(c) because the Project is a locationally dependent facility that will significantly advance important state and local goals for renewable energy development and economic growth, while having minimal impacts on agricultural use.

ORS 469.504(2)(c) and OAR 345-022-0030(4)(c) require the following:

(A) Reasons justify why the state policy embodied in the applicable goal should not apply;



Response: As discussed above in Section 2 in response to MCZO 3.010(D) and UCDO 152.061, the Project will not have significant adverse effects on accepted farm or forest practices. Beyond that, an exception to Goal 3 for the Project is justified for three primary reasons.

- 1. The Project is locationally dependent and cannot be developed on non-agricultural lands while still meeting the overall Project objective to take advantage of excellent wind resources in the general area. Neither County has sufficient non-agricultural land to support a wind energy facility, and the Applicant is unaware of any meteorological information showing significant, developable wind resources on any non-agricultural land in the general area of the Project. The only significant non-agricultural land in the general area of the Project is in cities and towns, which are not suitable locations for a wind energy facility and do not have the necessary wind resources, adequately sized parcels of land, or proximate transmission system necessary to build the Project. Also, 94.9% of the land within the Site Boundary in Morrow County is devoted to farm use, and this percentage is not significantly different in other parts of the same general area. Thus, relocation of the Project to non-agricultural land is not fassible.
- The Project will further important County and state policies. As discussed above 2. in Section 2, both the MCZO and UCDO (and state law) expressly contemplate wind power generation facilities as a conditional use on EFU-zoned land, and both counties encourage renewable energy development on EFU land in their comprehensive plans. At the state level, ORS 215.213 and 215.283 both expressly allow wind energy facilities as conditional uses on EFU land. Also, the Oregon Renewable Energy Action Plan (Oregon Department of Energy, 2005) calls for significant, additional development of the state's renewable resources, including wind energy, and in 2007 Oregon adopted a Renewable Portfolio Standard for electricity requiring that 25 percent of Oregon's electric load come from new renewable energy by 2025. In addition, Statewide Land Use Planning Goal 13 calls for the development of renewable energy resources; the Legislature has enacted numerous tax credits and economic development incentives favoring renewable energy development; and Oregon has numerous other statutory programs together reflect a broad state policy to support renewable energy development. See, for example, ORS 757.612 (creating public purpose charge, a portion of the funds from which go to renewable energy); ORS 757.603(2) (requiring Oregon electric utilities to provide retail customers with at least one option including significant percentage of renewable energy).

At the same time, the actual impact to agricultural practices is minimal. While (at worst) 146.27 acres of farmland in Morrow County will be taken out of production (and 170.64 acres for the entire Project), this represents only 1.4%



of the land devoted to farm use within the analysis area in Morrow County (and 1.4% for the entire Project). Also, those acres will not come out of production as a single parcel or even a few large parcels. Rather, the land will come out of production in half-acre to two-acre pieces distributed across many properties as turbines, access roads and transmission lines are built. Most linear facilities such as roads and transmission lines will be sited at the edges of fields or along existing road or transmission corridors, further reducing impacts to agricultural use. For the most part, the owners of the surrounding property will be able to continue agricultural use of the surrounding lands with minimal disruption or inconvenience. Thus, the positive advancement of numerous County and state goals and policies for increased renewable energy and use of the state's wind resources far outweighs the relatively minimal negative impact on agricultural uses and Goal 3.

3. The Project will advance County and state policies to promote efficient development and economic growth. The Project will encourage the efficient siting of land uses, and facilitate multiple uses of land. The Project will allow access to farmland and continued agricultural operations while simultaneously using the land for renewable energy generation. This is not a case of replacing one use with another. Instead, the Project adds an additional use and source of energy and economic benefit to already productive agricultural lands, with minimal adverse impact on the ongoing use of the land for agriculture. The end result is a significant net increase in economic output from the same land.

The Project will also benefit the local economy through employment opportunities, and provide contributions to the local tax base. Facility construction is anticipated to take approximately 18 months per phase (assuming two construction phases). During construction, an estimated average workforce of 200 people will be employed, with a maximum of 475 people during the peak months of construction. Operation of the Project will require 8 to 12 full-time employees. These permanent jobs will contribute to the local economy. The Project also will result in an increase in annual property tax revenue to Morrow and Umatilla counties. The additional tax revenue generated by the existence of the Project will increase the counties' ability to provide roadways, police and fire protection, schools and other services to their citizens. Based on the state's experience with operating facilities in other counties, wind energy projects contribute significant annual property tax revenue to their host communities over the course of their operational lives (Renewable Northwest, 2004).

Lastly, the Project injects additional dollars into the local economy in the form of permanent and temporary wages, demand for supplies and services, and additional revenue to local landowners, all to the net economic benefit of the



counties and the state. In sum, the net economic and growth benefits far outweigh the minimal negative impact to agricultural uses in the counties.

(B) The significant environmental, economic, social and energy consequences anticipated as a result of the proposed facility have been identified and adverse impacts will be mitigated in accordance with rules of the Council applicable to the siting of the proposed facility;

<u>Response</u>: Impacts in each of the four categories have been identified and adequately mitigated as follows:

Environmental. The Project's environmental impacts and corresponding mitigation are discussed in Exhibits J, L, P and Q. These exhibits identify potential environmental consequences of Project construction and operation, and demonstrate that the Project, with implementation of the proposed mitigation measures, will not cause any significant adverse environmental consequences.

Economic and Social. Exhibits R, S and T show that the Project will have no significant, unmitigated adverse impacts on scenic, cultural, historical, archaeological, or recreational resources. Exhibit U demonstrates that the Project will not have significant, unmitigated adverse impacts on community services such as housing, sewer, water supply, waste disposal, health care, education, and transportation. As discussed above in response to ORS 469.504(2)(c)(A), the Project will create jobs and contribute significant income to the local communities without significant reduction of land available for agricultural use. These benefits far outweigh the relatively small amount of agricultural activity that will be displaced by the Project.

Energy. The energy consequences of the Project will be positive by producing renewable, emissions-free energy, thereby reducing carbon emissions and our society's reliance on fossil fuels, and contributing to the battle against climate change.

(C) The proposed facility is compatible with other adjacent uses or will be made compatible through measures designed to reduce adverse impacts.

Response: The Project is surrounded on all sides by rural, agricultural land which is used for growing crops, grazing and related agricultural uses, as well as existing wind energy facilities. As discussed above, the Project will have minimal impacts on the continued agricultural use of land both within the analysis area and surrounding it. Temporary impacts of construction will be mitigated as described elsewhere in this application. The Project is located far from any land uses that could reasonably suffer significant adverse impacts, such as residential areas. The adverse impacts of the Project on adjacent uses is minimal, and to the extent adverse impacts exist, they are all being mitigated to insignificant levels.

For the foregoing reasons, EFSC should take an exception to Goal 3 permitting permanent impacts to more than 12 acres of high-value farmland in Morrow County.



5.0 Conclusion

For the reasons set forth above, there is substantial evidence upon which EFSC can find that the Project meets the applicable land use standard for approval of a Site Certificate.

6.0 Submittal Requirements

Table K-3. Submittal Requirements Matrix		
Requirement	Location	
OAR 3450-021-0010 (1)(k) Information about the proposed facility's compliance with the statewide planning goals adopted by the Land Conservation and Development Commission, providing evidence to support a finding by the Council as required by OAR 345-022-0030. The applicant shall state whether the applicant elects to address the Council's land use standard by obtaining local land use approvals under ORS 469.504(1)(a) or by obtaining a Council determination under ORS 469.504(1)(b). An applicant may elect different processes for an energy facility and a related or supporting facility but may not otherwise combine the two processes. Once the applicant has made an election, the applicant may not amend the application to make a different election. In this subsection, "affected local government" means a local government that has land use jurisdiction over any part of the proposed site of the facility. In the application, the applicant shall:	Location	
(A) Include a map showing the comprehensive plan designations and land use zones in the analysis area.	Figure K-2	
(B) If the applicant elects to obtain local land use approvals:		
(i) Identify the affected local government(s) from which land use approvals will be sought.	N/A	
(ii) Describe the land use approvals required in order to satisfy the Council's land use standard.	N/A	
(iii) Describe the status of the applicant's application for each land use approval.	N/A	
(iv) Provide an estimate of time for issuance of local land use approvals.	N/A	
(C) If the applicant elects to obtain a Council determination on land use:		
(i) Identify the affected local government(s).	Section 2.0	
(ii) Identify the applicable substantive criteria from the affected local government's acknowledged comprehensive plan and land use regulations that are required by the statewide planning goals and that are in effect on the date the application is submitted and describe how the proposed facility complies with those criteria;	Sections 2.0, 4.0	



Table K-3. Submittal Requirements Matrix		
Requirement	Location	
(iii) Identify all Land Conservation and Development Commission administrative rules, statewide planning goals and land use statutes directly applicable to the facility under ORS 197.646(3) and describe how the proposed facility complies with those rules, goals and statutes.	Section 3.0	
(iv) If the proposed facility might not comply with all applicable substantive criteria, identify the applicable statewide planning goals and describe how the proposed facility complies with those goals.	Section 4.0	
(v) If the proposed facility might not comply with all applicable substantive criteria or applicable statewide planning goals, describe why an exception to any applicable statewide planning goal is justified, providing evidence to support all findings by the Council required under ORS 469.504(2).	Section 4.0	
O) If the proposed facility will be located on federal land:	N/A	
(i) Identify the applicable land management plan adopted by the federal agency with jurisdiction over the federal land;	N/A	
(ii) Explain any differences between state or local land use requirements and federal land management requirements.	N/A	
(iii) Describe how the proposed facility complies with the applicable federal land management plan.	N/A	
(iv) Describe any federal land use approvals required for the proposed facility and the status of application for each required federal land use approval.	N/A	
(v) Provide an estimate of time for issuance of federal land use approvals.	N/A	
(vi) If federal law or the land management plan conflicts with any applicable state or local land use requirements, explain the differences in the conflicting requirements, state whether the applicant requests Council waiver of the land use standard described under paragraph (B) or (C) of this subsection and explain the basis for a waiver.	N/A	

Table K-4. Approval Standard		
Approval Standard	Location	
OAR 345-022-0030 Land Use		
(1) To issue a site certificate, the Council must find that the proposed		
facility complies with the statewide planning goals adopted by the Land		
Conservation and Development Commission.		
(2) The Council shall find that a proposed facility complies with section (1)		
if:		
(a) The applicant elects to obtain local land use approvals under ORS	N/A	
469.504(1)(a) and the Council finds that the facility has received		
local land use approval under the acknowledged comprehensive		
plan and land use regulations of the affected local government; or		



Table K-4. Approval Standard		
Approval Standard	Location	
(b) The applicant elects to obtain a Council determination under ORS		
469.504(1)(b) and the Council determines that:		
(A) The proposed facility complies with applicable substantive		
criteria as described in section (3) and the facility complies with		
any Land Conservation and Development Commission	Sections 2-4	
administrative rules and goals and any land use statutes directly		
applicable to the facility under ORS 197.646(3);		
(B) For a proposed facility that does not comply with one or more		
of the applicable substantive criteria as described in section (3),		
the facility otherwise complies with the statewide planning	Section 4	
goals or an exception to any applicable statewide planning goal		
is justified under section (4); or		
(C) For a proposed facility that the Council decides, under sections		
(3) or (6), to evaluate against the statewide planning goals, the		
proposed facility complies with the applicable statewide	N/A	
planning goals or that an exception to any applicable statewide		
planning goal is justified under section (4).		
(3) As used in this rule, the "applicable substantive criteria" are criteria		
from the affected local government's acknowledged comprehensive		
plan and land use ordinances that are required by the statewide	[
planning goals and that are in effect on the date the applicant submits		
the application. If the special advisory group recommends applicable		
substantive criteria, as described under OAR 345-021-0050, the	N/A	
Council shall apply them. If the special advisory group does not		
recommend applicable substantive criteria, the Council shall decide		
either to make its own determination of the applicable substantive		
criteria and apply them or to evaluate the proposed facility against the		
statewide planning goals.		
(4) The Council may find goal compliance for a proposed facility that does		
not otherwise comply with one or more statewide planning goals by		
taking an exception to the applicable goal. Notwithstanding the		
requirements of ORS 197.732, the statewide planning goal pertaining		
to the exception process or any rules of the Land Conservation and		
Development Commission pertaining to the exception process, the		
Council may take an exception to a goal if the Council finds:		
(a) The land subject to the exception is physically developed to the	NI/A	
extent that the land is no longer available for uses allowed by the	N/A	
applicable goal;		
(b) The land subject to the exception is irrevocably committed as		
described by the rules of the Land Conservation and Development	BT / A	
Commission to uses not allowed by the applicable goal because	N/A	
existing adjacent uses and other relevant factors make uses allowed		
by the applicable goal impracticable; or		
(c) The following standards are met:		
(A) Reasons justify why the state policy embodied in the applicable	Section 4	
goal should not apply;		



Approval Standard	Location
(B) The significant environmental, economic, social and energy	
consequences anticipated as a result of the proposed facility	
have been identified and adverse impacts will be mitigated in	Section 4
accordance with rules of the Council applicable to the siting of	
the proposed facility; and	
(C) The proposed facility is compatible with other adjacent uses or	
will be made compatible through measures designed to reduce	Section 4
adverse impacts.	
) If the Council finds that applicable substantive local criteria and	
applicable statutes and state administrative rules would impose	N/A
conflicting requirements, the Council shall resolve the conflict	
consistent with the public interest. In resolving the conflict, the Council	
cannot waive any applicable state statute.	
) If the special advisory group recommends applicable substantive	
criteria for an energy facility described in ORS 469.300(10)(a)(C) to (E)	
or for a related or supporting facility that does not pass through more	
than one local government jurisdiction or more than three zones in any	
one jurisdiction, the Council shall apply the criteria recommended by	
the special advisory group. If the special advisory group recommends	
applicable substantive criteria for an energy facility described in ORS	
469.300(10)(a)(C) to (E) or a related or supporting facility that passes	****
through more than one jurisdiction or more than three zones in any	N/A
one jurisdiction, the Council shall review the recommended criteria	
and decide whether to evaluate the proposed facility against the	
applicable substantive criteria recommended by the special advisory	
group, against the statewide planning goals or against a combination of	
the applicable substantive criteria and statewide planning goals. In	
making the decision, the Council shall consult with the special advisory	
group, and shall consider:	
(a) The number of jurisdictions and zones in question;	N/A
(b) The degree to which the applicable substantive criteria reflect local	
government consideration of energy facilities in the planning	N/A
process; and	
(c) The level of consistence of the applicable substantive criteria from	N/A
the various zones and jurisdictions.	,



OREGON DEPARTMENT OF ENERGY ENERGY FACILITY SITING PROCESS



\ Oregon Department of Energy (ODOE) administers the Energy Facility Siting Council (EFSC) facility siting process, ich consolidates state agency and local government regulations into a single review process. State agencies and local governments participate throughout the process. The three orange oval stages indicate where public participation is encouraged.

Notice of Intent

Public Comment Period

• The NOI states the applicant's intention to submit an Application for a Site Certificate and includes general information about the project. It is not an application to construct the facility.

The information in the NOI allows reviewing agencies, local governments, and the public to identify applicable requirements and special issues of concern the applicant must address in the application.

· ODOE sends notice of the comment period to affected landowners, reviewing agencies and parties on EFSC's general mailing list. ODOE publishes a public notice in a local newspaper.

 Information provided during this comment period can help identify issues the applicant must address in the application.

Project Order

Application for a Site Certificate

> **Public** Information Meeting

Draft

Proposed Order

Public Hearing

- ODOE issues the Project Order, which defines the analysis area for various types of impacts and identifies the applicable statutes, rules and ordinances the applicant must address in the Application.
- The applicant submits its Application for a Site Certificate which describes the facility, its anticipated impacts and how it will meet EFSC's standards.
- The applicant must choose to either obtain local land use approval or have the land use decision incorporated into the EFSC process. If an applicant chooses the EFSC option, the applicant must address all applicable local land use criteria in the Application.
- ODOE staff and the applicant conduct a public information meeting to explain the Application and the EFSC evaluation process.

-> August 27th County Hearing public comments to SAG

- ODOE issues a Draft Proposed Order that addresses applicable issues identified by state and local agencies and includes preliminary evaluation and findings on whether the Application meets EFSC standards. The Draft Proposed Order includes recommended conditions of approval for the construction, operation and retirement of the facility.
- A hearing officer conducts a public hearing on the Draft Proposed Order.
- Members of the public and reviewing agencies have the opportunity to testify at the hearing or may submit written comments by the comment deadline.
- Failure to raise a relevant issue either orally at the hearing or in a timely submitted written comment precludes further participation in the EFSC process.

Proposed Order

Contested Case

- Following the public hearing, EFSC reviews the Draft Proposed Order during a Council meeting.
- Based on direction from EFSC, ODOE issues the Proposed Order and Notice of Contested Case.
- A hearing officer conducts the contested case proceeding.
- Only those persons who raised a relevant issue in person at the public hearing or in writing by the comment deadline on the Draft Proposed Order may participate in the contested case.
- The hearing officer issues a Recommended Contested Case Order.

Hearing

- EFSC reviews the hearing officer's Recommended Contested Case Order and issues a Final Order approving or denying the Application for a Site Certificate. If the Council approves the Application, EFSC also issues a Site Certificate.
- An appeal of the Final Order goes directly to the Oregon Supreme Court.

Final Order & Site Certificate

Oregon Department of Energy

DRAFT MINUTES UMATILLA COUNTY PLANNING COMMISSION

Meeting of Thursday, August 27, 2015 6:30 p.m., Umatilla County Justice Center, Media Room Pendleton, Oregon

COMMISSIONERS

PRESENT: Randy Randall, Gary Rhinhart, Tammie Williams, Suni

Danforth, Don Marlatt, David Lee

ABSENT: Don Wysocki, Cecil Thorne.

STAFF: Tamra Mabbott, Bob Waldher, Gina Miller.

NOTE: THE FOLLOWING IS A SUMMARY OF THE MEETING. A RECORDING OF THE MEETING IS AVAILABLE AT THE PLANNING DEPARTMENT OFFICE.

CALL TO ORDER:

To be completed.

MINUTES:

To be completed.

NEW HEARING:

To be completed.

NEW HEARING:

WHEATRIDGE WIND ENERGY FACILITY: Planning Commission will review the Wheatridge Wind Energy, LLC Application for Site Certificate (ASC) submitted to the Oregon Department of Energy, Energy Facility Siting Council (EFSC). Planning Commission will focus their attention on Exhibit K of the ASC but may consider all relevant issues. Planning Commission role is to make a recommendation to the Board of Commissioners who will submit comments to EFSC.

Chair Randall called the hearing to order and asked for declarations of ex-parte' contact, biases, conflicts of interest or abstentions.

Staff report: Tamra Mabbott, Planning Director, displayed a map of the proposed wind energy project on the screen. She advised that the Planning Commission was charged with making a recommendation to the Board of Commissioners on this project. Since

this is a 500 MW project, it is under the authority of Energy Facility Siting Council (EFSC), with the Board of Commissioners appointed as a special advisory group. Mrs. Mabbott explained the EFSC process of considering an application for a wind energy facility.

Mrs. Mabbott introduced Wendie Kellington, attorney, who completed a legal analysis of the proposed wind energy facility and the issue of the transmission line for the county.

Ms. Kellington explained that the Planning Commission must decide if the application contains enough information to show that it meets the county's identified applicable substantive criteria. She identified three criteria, having a meaningful impact on the decision to approve or deny, that the Planning Commission would need to primarily consider that would impact a decision; the county requirement for a map showing the location of all components of a wind energy facility, the identification of a route and a plan for transmission facilities connecting the project to the grid (substation locations, transmission locations, intra-connection connecting to the project itself, and connecting the project to the grid beyond), and demonstrate compliance with the "no significant change/no significant cost" to agricultural practices standard. Primarily, this standard outlines whether or not the proposed project will the proposal force a significant change in accepted farming practices on surrounding lands devoted to farm or forest use, and will it significantly increase the cost of accepted farming and forest practices. practice standard is both a direct and a cumulative impact standard. The testimony at this hearing that will be most helpful will include information on the impacts of 292 turbines added to the proposed area, substations including additional facilities to tie into, the effect of options for intra-connection as well as interconnection (gen-tie) lines.

Ms. Kellington displayed a map showing all the existing and proposed wind energy projects in a 10 mile area to show cumulative effect. She discussed some possible clear and objective conditions that could be suggested by the Commissioners. One suggested condition would be to ask EFSC to require the applicant to upgrade and co-locate on existing transmission facilities on Buttercreek Highway. Ms. Kellington advised that county code requires an evaluation of the entire facility, including interconnection. She advised that transmission does not already exist for the project but that it is necessary. Some form of transmission will have to be built. The application stated that the time and control of interconnection is established by other parties, and they would need to begin construction when interconnection facility is ready. Ms. Kellington stated that this was further evidence that interconnection is a part of this project. She said that if the transmission facility were to never be ready, the project would not be constructed. In order for the application to be evaluated, all components must be shown. She said that since the application was not proposing transmission, the applicant's premise was saying that transmission would not need to be evaluated under state law. Ms. Kellington stated that this was incorrect and that in order for this facility to exist, there has to be transmission as part of the proposal. She likened it to a proposal to build a shopping center but no parking for the center.

Ms. Kellington stated that the county code required that all components of the wind energy facility, including transmission routes, must be shown in the application. She stated that the application suggested that transmission could be a condition of approval. Ms. Kellington stated that transmission could not be a condition of approval because transmission needed to be evaluated for farm impact standards and if transmission was not a part of the application it would never be run through the applicable approval criteria. Compliance must be evaluated against the applicable criteria.

Ms. Kellington explained that county standards were approved by the state, and that EFSC must apply the county land use standards. In order for EFSC to approve the proposed application, they would be required to take an "exception". She described the proposed project on maps displayed overhead, and that this project would be located in both Morrow and Umatilla counties. The project would closely border the Urban Growth Boundary (UGB) of the city of Stanfield and the Strawberry substation. Mrs. Mabbott stated that the map being shown had been completed by county staff, but the "pink" line showing a possible route for transmission was provided by Umatilla Electric Cooperative (UEC). Mrs. Mabbott stated that UEC is not applying for any transmission lines as a part of this project application at this time. The county provided notice to the underlying land owners of the "pink" transmission line provided by UEC, and those same landowners would not have been notified about this project if it hadn't been for the The Commissioners agreed that the public needed to be informed and county notice. involved in this application.

Ms. Kellington said that there are no reasons that the county is aware of that this project could not connect to an existing transmission line on the Buttercreek Highway. The only two possible transmission lines that have been discussed are the ones provided by UEC. She discussed the application's analysis area and how it does not include any areas surrounding the Strawberry substation, Stanfield substation or the two possible Ms. Kellington talked about Exhibit "K" in the application and transmission routes. how it described the intra-connection corridor as being primarily in Morrow County. She discussed the concerns that have been raised about this application on how it fails to comply with county requirements because there is no proposal for transmission routes, both intra and interconnection, that can be subject to evaluation. Other concerns have been raised about the unacceptable direct cumulative impacts of a 500 mw windfarm, and how it will attract other transmission lines and substations and this may compromise high value farming operations. The application also fails to show an option of transmission through colocation along Buttercreek Highway. Ms. Kellington also discussed other significant and cumulative impacts to farming practices and costs from wind turbine locations and required intra-connection transmission.

Commissioner Rhinhart asked about a contract from whoever is going to be purchasing this energy. Ms. Kellington said that this information was not disclosed by the applicant. He said that this was just as important as having transmission information. Chair Randall said that the electric companies are required to purchase a minimum of renewable energy per federal guidelines, so he didn't think that the applicant would have trouble selling

energy. Mrs. Mabbott advised the Commission that she was handing out comment letters from interested parties to be entered into the record. She wrote out three possible recommendations that the Commission could make to the Board of Commissioners; 1)Concur or not concur with the legal analysis provided by Wendie Kellington, stating that a transmission line must be permitted as part of a project application or proof of an existing line they will connect to provided in order to satisfy county HHH standards of approval, 2) EFSC not approve the application until transmission is part of the application or transmission is permitted, 3) recommend that the developer meet with landowners and transmission line developers to identify a suitable path for the transmission line.

Chair Randall asked to adopt the additional letters of comment, recommendations from Mrs. Mabbott and informational packet into the record.

Public Testimony: Art Prior, Eagle Ranch, 32327 Oregon Trail Road, Echo, OR. Mr. Prior stated that the "pink" line proposed by UEC goes right through the center of their irrigated farm land. It would create obstacles to farm around and lower their property value, and create economic loss for them. He would like to see a route that did not go through their property, and they don't think it's necessary and will continue to protect this. Commissioner Rhinhart asked if the line would be owned by UEC, and if they don't know this, how can UEC proposed to cross land they don't own. Mr. Prior said that the applicant is using UEC as an "imminent domain" avenue to be able to cross private land. He is not opposed to the wind farm, but he doesn't want it creating obstacles on his farm land. He stated that the process taken by Wheatridge has been somewhat behind the scenes and doesn't understand why they won't disclose a transmission route that is acceptable to the county and citizens alike. Commissioner Danforth asked for specific details on how it would interrupt his practices, and Mr. Prior replied that he couldn't really answer because he did not have enough information from the applicant to know where the line would be going and how big the line would be. They have underground pipe and electrical wiring and a potato storage building existing in the area shown on the EUC map that would be impacted. They utilize aerial application of chemicals, and the presence of poles from the transmission line would prevent this. Mr. Prior said if a power pole was placed in the middle of an irrigated field of \$5-10,000 ground that would be a loss to him. Commissioner Danforth confirmed that a power line would interfere with their aerial application of chemicals.

Public Testimony: Bob Levy, 31471 Andrews Road, Echo, OR. Mr. Levy stated that he was present on his own behalf and has submitted written testimony and a petition from a group of land owners in the Echo area where the proposed transmission lines go through. He said there is a detailed description on the front page of the petition of what they are requesting. Mr. Levy read from a prepared statement, see record in file, and displayed maps on the overhead screen. One photo showed a road where one of the proposed lines was to go. Mr. Levy stated that this line would cut off the ends of irrigated circles and this would significantly impact their farming practice. He said that it would also impact the growing dairy farming going on in Umatilla County as a dairy cannot be placed near these lines as they affect the milk cows. The next slide Mr. Levy

displayed showed where a proposed line would have to either go right over an existing home or right through another irrigated circle. They would also possibly have to rebuild a distribution line from UEC on this proposed route. He said there are 5 existing homes in the proposed route for the transmission line, and that none of these property owners would have been notified if it hadn't been for the county notice. The next slide showed the existing transmission lines on Buttercreek Highway, and Mr. Levy noted that there had been no consideration given in the application to utilizing this existing route. He said this is a major failing in the system that existing corridors are not utilized instead of building new lines. There is also a Bonneville line available that could be rebuilt to accommodate this new project. Mr. Levy said there are 8 wind projects in the BPA system that need to get to Longhorn or Stanfield to connect to the grid. The problem is that no one wants to share a line, such as the Buttercreek Hwy line. He said that there is a great need for study of the cumulative impacts of all the wind projects in the area.

Commissioner Rhinhart asked Mr. Levy if the wind projects had increased the energy costs for his farming practices, and Mr. Levy said it had not yet, but he anticipated it would in the future.

Public Testimony: Robin Severe, 82422 Vansycle Road, Helix, OR. Mr. Severe discussed the issue of public safety in terms of the danger of fire being generated by wind farms. He stated that he has testified twice before EFSC to ask for a risk assessment requirement for fire danger from wind farms, and nothing has been done to date. Mr. Severe asked the Commission to require a risk assessment as a condition of approval from the Special Advisory Committee recommendation to EFSC for this project. He spoke about two fires in Umatilla County that have occurred as a result of wind projects, but according to EFSC there has never been a turbine related fire ever reported for this county. Mr. Severe urged the Planning Commission to consider a fire risk assessment as a Condition of Approval.

Public Testimony: Tom Rugg, 45422 Stewart Creek Road, Pilot Rock, OR. Mr. Rugg stated he would be addressing the topic of Met Towers and aviation safety. He said in his experience with flying in the area, Met Towers are virtually invisible to a pilot. There is no requirement for being marked if less than 200 feet in height. Due to recent fatal accidents, the National Transportation and Safety Board (NTSB) is recommending that Met Towers be lit and clearly marked for aviation, both the towers and guy wires that support them. Mr. Rugg read from a recent NTSB report on the lack of safety for Met Towers to aviation. He urged the Planning Commission to include this matter in their consideration for the conditions of approval for the application.

Commissioner Danforth asked what the height was that required marking, and Mr. Rugg replied that anything below 200 feet did not require marking of any kind. He noted an accident in Walla Walla County that resulted in a death.

Public Testimony: Dave Price, 80488 Zerba Road, Athena, OR. Mr. Price stated that he was speaking for the Blue Mountain Alliance. He noted that this project has a lengthy history going back nearly 2 years. He said that he had researched the legal definition of

the term "wind energy facility", and found that it included all the components such as the wind turbines, substations and transmission lines inside and out of the project. Mr. Price said there is very little information provided by the applicant that it makes it very difficult to determine how this project would impact the local resources of Umatilla County. He said that it was imperative to regard an entire project as one, including transmission capability for both intra and inter-connection. Nowhere in the application did it demonstrate compliance with Umatilla County development codes, specifically Chapter 152.616 (HHH)(5), application requirements. Mr. Price discussed the feasibility and viability requirements for the siting process, and noted that this project failed to meet these requirements. He referenced Section B on page 19 of the application, requesting a 6 year start date for construction. He urged the Commission to not allow this request, as conditions change over time. In closing, Mr. Price said that the application does not contain enough information to evaluate all the components of a wind energy facility and thus does not comply with the Umatilla County Development Code, and he opposed the 6 year construction start date.

Public Testimony: Cindy Severe, 82422 Vansycle Road, Helix, OR. Mrs. Severe asked to submit comment letters into the record from 3 other people that were not able to be in attendance at this meeting. Mrs. Severe discussed applicable, substantive criteria. She talked about the hearings that she participated with in 2011 that brought about the existing siting standards for a wind energy facility in Umatilla County, and that those criteria are legally binding in effect today. She noted that the applicant was unable or unwilling to supply the necessary information and be compliant with the standards for the County. Mrs. Severe read aloud from a prepared statement, see file for statement.

Public Testimony: Jerry Reitmann, 69115 Eller Road, Ione, OR. Mr. Reitmann said that he is one of the owners of the proposed project. He asked to speak with the other people that came with him at the end.

Public Testimony: Robert Lazinka, no address stated. Mr. Lazinka stated that a glaring omission in the application process is that the applicant is not asked to provide a report of the impact of the project on taxpayers. There is no discussion about the economics of the project included in the process.

Public Testimony: Clinton Reeder, 47647 Reeder Road, Pendleton, OR. Mr. Reeder discussed the history of how the wind farm siting standards were adopted by the county. He favors the 2-mile setback standard and thinks that it is working for the county and this standard must be protected. Mr. Reeder spoke about the need to long term development of energy infrastructure for the country. He said it makes good sense to utilize existing corridors for energy transmission. One of the primary questions is what best suits the character of the community in terms of wind development. He said that EFSC should not be allowed to operate independent of the county standards; it must be a cooperative effort. Mr. Reeder talked about the problem of confidentiality agreements that wind developers impose on the property owners they lease land from. This contract prevents data collection about health impacts from the people most affected by the wind farms. He said there should be an escape clause in every land lease agreement made with wind

developers, so property owners have a way out if they cannot tolerate living next to wind turbines. The wind farm owner would be required to buy them out. Mr. Reeder said that the primary focus should be the neighbors of a wind farm, and mitigation terms should be imposed to protect them. They are receiving no benefit from the wind farm. Mr. Reeder discussed adverse health affects from wind farms, such as sleep interruption and low frequency sounds. He also spoke about the dangers of fire associated with wind farms, and agreed that a fire risk assessment should be included in the conditions. Mr. Reeder said that enhancing the character of the community should be the primary goal of everyone in that community, for that determines the character of society itself.

Public Testimony: Jerry Reitmann, Ione, OR. Mr. Reitmann said he is a wheat farmer here and in Gilliam County. He has several wind farms on his property. He got into developing wind farms to increase the tax base to help keep the schools funded. Mr. Reitmann discussed the history of how this project came about and how they developed the funding and location for the project. They worked with UEC on the lines and UEC said they would determine where the lines would go. Mr. Reitmann stated they believed that they were operating within how the permitting process works. understands the concern about not having information in their application about a transmission line, but they will never own the transmission line and will only have rights to run power from Point a to Point b. The utility will decide where the line will go, and the utility will not go where it is not wanted. Their primary focus has been to get to the Longhorn substation at Boardman because it can handle 1250 MW of power and the Stanfield substation is inferior and can only handle 600 MW of power. They did acquire rights to the Stanfield substation as a backup plan. They do not expect EFCS to allow them to build without a transmission line being permitted. Mr. Reitmann said that UEC wanted to build a corridor, and would build a line with added capacity that would be available to others. He is optimistic about gaining a compromise along the Bombing range access and that will open a corridor to south Morrow County. He understands the concerns that people have about wind, but he feels that they have played by the rules and didn't try to mislead people. He said there is a very collaborative process in Morrow County and there has been a planner and County Commissioner at every land owner meeting, and he would like to see a similar process in Umatilla County.

Rob Friddel, 215 SE 30th Place, Portland, OR. Mr. Friddel is the project manager and put together this application. He discussed the options for the two substations, and described where the various aspects of the project would be located. He said that they do not know at this time where they will hook up to the grid. The Longhorn and Stanfield substations will be BPA and they haven't made any decisions yet about this. They are leaving heavily towards going west to the bombing range route to the Longhorn substation, but are staying flexible in case they have to go to the east. The intraconnection lines exist solely for the use of the project. There will be overhead 230 kV lines that will be suspended from H-frame or similar monopoles. He referenced Exhibit K and that was used for their land use analysis on the assumption that it could never be a bigger impact. Mr. Friddel stated that the UEC lines are mutually exclusive and will not overlap. UEC wanted the lines shown as conceptual lines, and it is shown simply to illustrate where they would hook up to UEC lines to convey power to the grid. He stated

that their lines stop at the Strawberry substation or substation #3. Anything after that would be owned and operated by UEC.

Commissioner Rhinhart asked if they had any agreements in writing with UEC to this affect. Mr. Reitmann said they have made a request on their system and have paid deposits, and have signed letters of understanding to the design. Commissioner Rhinhart said he is concerned that they do not have a complete application without the transmission system to review. Mr. Reitmann said that the reality was that BPA could take up to 3 years to build a substation and they would need \$80 million dollars to build it. He described how the market is driving their project and how the investors are taking the risks. He commented on who will eventually own this company and the project.

David Peterson, attorney, 888 SW 5th Ave, Suite 1600, Portland, OR. Mr. Peterson referenced the presentation from Ms. Kellington. He explained the difference between the gen-tie lines that are owned by the applicant and how it is a part of the project. The sole purpose is to move power from the turbines. The interconnection lines will be owned by UEC and will go to a BPA substation. He said that the gen-tie lines do not need to be a part of the energy facility application, and he has provided some Oregon statutes and administrative rules to support this. He reviewed these statutes and administrative rules for the Commission. He said that the gen-tie lines are not a related and supporting facility, and is not proposed by the applicant and will not be constructed in relation to the energy facility. The intra-connection lines are proposed by the applicant and are a related and supporting facility and have been included in the application. Mr. Peterson referenced a memorandum from Ms. Kellington dated August 17, stating that all transmission facilities are related and supporting facilities and he contends that this is not true. He said that Ms. Kellington stated that the energy facility should not be defined by state law, but instead by the county code, specifically Chapter 152.616 (HHH) (5V and 5C3). He said this is not the case, and that energy facilities are cited by state law by EFSC. They use the state definition in their application and why the project is described as it is.

He discussed the options analysis and corridor assessment. He said that the transmission line is an energy facility by itself and therefore the gen-tie line is not a related and supporting facility so there does not need to be a corridor analysis for this application. He said that the public will be able to participate in the process when UEC decides they need a gen-tie line and will apply for this through EFSC. They have followed the law, and have not done anything inappropriate. The application is therefore properly composed and complete.

Commissioner Rhinhart commented that he is concerned about the lack of a transmission line in this application and that they had to go to someone else to build it. Mr. Peterson said that the opposite is true and by going to a utility to build the transmission line that will serve more than one project will reduce the amount of lines. He said that UEC is a local cooperative and is very sensitive to the needs of the farmers they serve.

Commissioner Lee asked about the letter of intent, and Mr. Reitmann said they had made a request to put transmission into their system just like any other facility. They have a letter of understanding between them and UEC describing their expectations of the route and who will pay for what. Mr. Reitmann said that UEC has also sent a letter to the County Commissioners outlining the principles of the project and a letter was also sent to the landowners who were noticed by the county. He read aloud a letter from Steve Eldridge, UEC, into the record. Mr. Reitmann read aloud a letter of principles from UEC into the record. He said he is gambling that UEC will be a responsible party and will provide transmission lines as they have promised. He understands the animosity against wind, but he believes UEC and they will have to permit their own line and that is why they are not a part of their application. Commissioner Rhinhart stated that he agreed that transmission lines are better owned and maintained by the utility. Mr. Reitmann discussed why an existing line was not considered, and stated that the Navy was an obstacle with that line.

Andrew O'Connell, 6007 NE 30th, Portland, OR. Mr. O'Connell referred to a comment from Mr. Levy about why they weren't using an existing corridor with BPA. He discussed why this route didn't work for them or for Mr. Levy. They tried to avoid going over land owned privately, but the Federal agency would not agree to the project. BPA is very sensitive about approaching developers.

Mrs. Mabbott asked if the applicant would like to enter the 2 UEC letters into the record, as these letters were not submitted into the record by the applicant.

Commissioner Danforth asked if there was anything where the intra-connection corridor was, and Mr. Reitmann replied that there was nothing but pasture. She asked if that was the only option, and they explained they chose this route because it was out of sight from the road. She asked what type of pole they would use, and the applicant replied that it would depend on which substation they would connect to. There will also be a temporary access road. Commissioner Danforth asked about an impact study. The applicant replied they did an impact study for option #3, including a cultural study.

Public Testimony: Tim O'Rourke, 1213 NW, Pendleton, OR, attorney with Corey, Byler and Rew. Mr. O'Rourke represents land owners that have been approached by wind developers. He said that some issues, like fire safety, are dealt with by the landowner and their attorney with the developer. He said it is important for the landowner to have representation by an attorney. His client's have had very positive experiences with wind development on their lands and it has sometimes made the difference between keeping and losing their farms. He discussed subsidies for wind development and for agriculture. He said that wind farms have been a great asset for landowners who have low value farm soils.

Rebuttal: Ms. Kellington stated that the application is what the Planning Commission was charged to evaluate. The application does not have any disclosure about transmission lines, and assurances provided by UEC are not enforceable. The Planning Commission is supposed to determine if it meets the criteria. She stated that if there is no

transmission, then the project cannot go forward according to land use law. If a project does not have transmission to tie into, then the project does not comply with relevant standards. Ms. Kellington talked about capacity for the project. Testimony indicated that there was likely to be a 230 kV gen-tie line, but this type of line can only carry between 300-500 MW and the project is slated to be 500 MW. In her opinion, the project would never happen without transmission to the grid. The county standards are acknowledged by the state as being in compliance with the goals and the Planning Commission heard testimony that the transmission line is a part of the project and the county standards require that transmission routes must be identified. Ms. Kellington stated that the reason that the applicant was not identifying transmission lines was because the application is subject to the farm impact standard. She said that the application with transmission would have unacceptable farm impacts and would not meet this standard. But if UEC were to create a transmission line all by itself later on, this same farm impact standard may not apply. It may be a Sub-1(ORS 215.283(1)) use that cannot be denied in farm use zones. Ms. Kellington stated this is the reason that the county code requires transmission lines to be a part of a complete project application, so that a transmission line cannot be separated out from the application and therefore not subject to the same farm impact standards. By making the transmission lines a part of the complete application, then it is subject to the same farm impact standards as the rest of the project components. She advised the Planning Commission that they can find that the application does not meet the standards and is therefore incomplete and can make the recommendation to the Commissions that it be denied, or they can find that the application is complete with that recommendation to the Commissioners.

Commissioner Rhinhart asked Ms. Kellington to confirm that EFSC said they would use the county code. He said that he had heard testimony at this hearing the EFSC would not consider the county code in their consideration of this project. Ms. Kellington said that EFSC does not have the authority to ignore the county code unless they take an exception. She said the Commissioners would be making a recommendation to EFSC and as a Special Advisory commission, EFSC would be bound to follow what the Commissioners say. She did not believe that EFSC would say that the project complies with statewide planning goals and they would have a tough time taking an exception.

Mrs. Mabbott stated that Exhibit K says that the application complies with the majority of the applicable local criteria, and for the criteria that the project cannot demonstrate compliance; EFSC should approve a variance to the applicable criteria or a goal exception. She said there is no standard in EFSC rules that provides for EFSC to apply a variance to a land use standard.

Commissioner Rhinhart asked about a surety bond, and commented that the application had offered a letter of credit. He wanted to confirm that Umatilla County only acknowledges surety bonds, not letters of credit.

Chair Randall closed the hearing and moved to deliberation.

Commissioner Williams said that this was a matter of trust and she was having trouble with the application. She said that UEC was not in attendance at this hearing to provide comment on their proposed transmission line. She is concerned that when it comes to putting in the transmission line, it will be all about the money and the easiest way to put the line in. She wants to make sure that all landowners are informed, and that someone doesn't get condemned in this process by a public utility.

Chair Randall spoke about being on the developer side of things, and understands why UEC wants to be in control of the transmission line. He would have liked to see a UEC representative at this hearing. He also believes that the transmission line needs to be in place before the application can be considered complete.

Commissioner Rhinhart suggested they use Recommendation #2; EFSC not approve the application until such time that a transmission line is part of the application or transmission is permitted prior to the energy facility being permitted. He asked if they could add a requirement that UEC submit an application in at the same time for the transmission line. Mrs. Mabbott said that the applicant would have to amend their application for the site certificate to include the transmission line.

Chair Randall said that he supported all three of the recommendations. He does feel that the application is incomplete, and would like to see UEC meet with impacted landowners.

Commissioner Marlatt stated that he wanted to see the transmission line be a part of the project and needs to be treated the same in front of EFSC. He does not want to see the standards changed for a transmission line and to the landowners impacted. He also questioned the 6-year construction extension. Further discussion followed on these standards.

Commissioner Danforth supports Option #1 for a recommendation. If all of the information is not present, it cannot be evaluated and the application must be deemed incomplete. She said she supports having the surety bond instead of a letter of credit as well. She asked about a fire risk assessment requirement being added, as there has been considerable testimony offered on this topic. Discussion followed on what these criteria would accomplish or what should be required of the applicant. Mrs. Mabbott stated that the HHH chapter already requires an emergency plan, including fire assessment.

Chair Randall said that he was comfortable with all three recommendations. Commissioner Williams moved to accept all three recommendations to the Board of Commissioners, and Commissioner Danforth seconded the motion. Motion passed 6:0.