

## FACT SHEET

### Kittitas Valley Wind Power Project Addendum to Draft Environmental Impact Statement (EIS)

**Lead Agency and Responsible Official:** Energy Facility Site Evaluation Council (EFSEC); Allen Fiksdal, EFSEC Manager, 925 Plum Street SE, Building 4, P.O. Box 43172; Olympia, WA 98504-3172; (360) 956-2152.

**Abstract:** Sagebrush Power Partners LLC (or Applicant) proposes to construct and operate up to 80 wind turbines that would generate up to 246 megawatts (MW) of wind power in Kittitas County, Washington. The proposed project would occupy between 93 and 118 acres of land on either side of US 97 roughly halfway between Ellensburg and Cle Elum, Washington.

The project also includes: (1) approximately 19 miles of new roads and improvements to roughly 7 miles of existing roads, (2) approximately 23 miles of underground and 2 miles of overhead 34.5-kilovolt (kV) electrical power lines, (3) two new substations, (4) an approximately 5,000-square-foot operations and maintenance facility, and (5) up to nine permanent meteorological towers.

EFSEC issued a Draft Environmental Impact Statement (EIS) in December 2003, and a Draft Supplemental EIS in August 2004. In October 2005 Sagebrush Power Partners LLC submitted a Development Activities Application (DAA) to Kittitas County to attempt to resolve the project's inconsistency with local land use plans and zoning regulations. In the DAA, the Applicant has revised the layout of wind generator turbine strings to reduce the impacts of the project.

The purpose of this Addendum to the Draft EIS is to: update the project description; to determine whether the significance of any identified unavoidable adverse impacts has changed from the assessment made in the Draft EIS or Draft Supplemental EIS; and to identify any new significant adverse environmental impacts that may be caused as a result of the project layout revision.

**Proposal's Sponsor:** Sagebrush Power Partners LLC, a subsidiary of Horizon Wind Energy, Houston, Texas.

**Date of Implementation:** The start of construction depends on the date the governor of Washington approves and executes the Site Certification Agreement for this project. Construction would begin no sooner than the late summer of 2006, and would last for approximately one year.

**List of Possible Permits, Approvals, and Licenses:** EFSEC is the sole non-federal agency authorized to permit the proposed project. For informational purposes, Table 1-2 of the December 2003 Draft EIS lists the major state and local permitting requirements preempted by EFSEC, as well as federal requirements. Not all listed permits and approvals may be required. The EFSEC Site Certification Agreement would provide construction and operational

requirements and all other relevant local and Washington state permits and approvals for the project.

**Authors and Principal Contributors to the EIS:** Shapiro and Associates, Inc., an independent consultant to EFSEC, was the principal author of the Draft EIS. EFSEC staff prepared the Draft Supplemental EIS and the Addendum to the Draft EIS.

**Subsequent Environmental Review:** Adjudicative Hearings (March 2006)  
Final EIS (Summer 2006)

**Date of Final Lead Agency Action:** After EFSEC deliberates on the facts, testimony, and EIS contents, it will send a recommendation to the governor of the state of Washington to approve or deny the project (expected in the summer of 2006). The governor has 60 days to accept or reject the recommendation or to remand the recommendation to EFSEC for further investigation.

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**Location of Background Information:** You may access this Draft EIS, Draft Supplemental EIS, and the Addendum to the Draft EIS and find additional information about the project on the EFSEC Web site at [www.efsec.wa.gov](http://www.efsec.wa.gov). Copies of the Kittitas Valley Wind Power Project Application for Site Certification, EFSEC No. 2003-01, and the EIS documents are available for public review at the following locations:

Ellensburg Public Library  
209 North Ruby St  
Ellensburg, WA 98926  
(509) 962-7250

Brooks Library  
Central Washington  
University  
400 E. University Way  
Ellensburg, WA, 98926  
(509) 963-1021  
(800) 290-3327

Carpenter Memorial  
(Cle Elum) Library  
302 Pennsylvania Ave  
Cle Elum, WA 98922-1196  
(509) 674-2313

Washington State Library  
Joel M. Pritchard Library  
Point Plaza East  
6880 Capitol Blvd  
Tumwater, WA, 98504-2460  
(360) 704-5200

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**Cost of Addendum to the EIS Copy to the Public:** There will be no cost for copies of the Addendum to the Draft EIS.

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## CHAPTER 1: INTRODUCTION

### 1.1 What is the Kittitas Valley Wind Power Project?

The Kittitas Valley Wind Power Project (KVVWPP) is a wind turbine generation facility being proposed in Kittitas County, Washington, by Sagebrush Power Partners LLC (the Applicant), a limited liability corporation wholly owned by Horizon Wind Energy<sup>1</sup>. In January 2003 the Applicant proposed a project consisting of between 82 and 150 wind turbine generators with a total nameplate capacity of between 181.5 to 246 megawatts (MW). The project would be located on open ridgetops on each side of US 97 roughly halfway between Ellensburg and Cle Elum, as shown in Addendum Figure 1-1.

The project would also include the following facilities:

- approximately 19 miles of new roads,
- improvements to roughly 7 miles of existing roads,
- approximately 23 miles of underground 34.5-kV electrical power lines,
- approximately 2 miles of overhead 34.5-kV electrical power lines,
- two substations,
- one 5,000-square-foot operations and maintenance facility with parking, and
- up to nine permanent meteorological towers.

The KVVWPP would be constructed across a land area of approximately 7,000 acres, although the actual permanent facility footprint would comprise between 93 to 118 acres of land under the middle and lower end scenarios, respectively. The majority of the KVVWPP site and the proposed interconnect points lie on privately owned lands; five parcels are owned by the Washington State Department of Natural Resources (DNR). The Applicant has obtained wind option agreements with landowners for all private lands within the project site boundary necessary for project installation. In June 2003, the Applicant executed a lease agreement for use of the DNR property in the project area.

### 1.2 Background – Where is EFSEC’s Review Process?

On January 13, 2003, the Applicant filed Application for Site Certification (ASC) No. 2003-01 with the Washington State Energy Facility Site Evaluation Council (EFSEC). The Applicant chose to receive certification of the KVVWPP according to the Revised Code of Washington (RCW) 80.50.060. EFSEC has jurisdiction over the evaluation of major energy facilities including the proposed project. As such, EFSEC will recommend approval or denial of the proposed wind facility to the governor of Washington after completing the environmental review.

Since January 2003, EFSEC has initiated and/or completed a number of review steps:

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<sup>1</sup> In the summer of 2005, Zilkha Renewable Energy was purchased by the Goldman Sachs Group, and the Zilkha company name was subsequently changed to “Horizon Wind Energy” (Taylor 2005)

- EFSEC reviewed the Application for consistency with its requirements in Washington Administrative Code (WAC) 463-42;
- EFSEC began conducting an environmental review in accordance with the Washington State Environmental Policy Act (SEPA) and EFSEC's SEPA Rules (Chapter 463-47 WAC);
- EFSEC held an information and scoping meeting, and a land-use hearing on March 12, 2003.
- EFSEC issued a Draft Environmental Impact Statement (EIS) for public comment in December 2003 (Energy Facility Site Evaluation Council 2004a);
- EFSEC issued a Draft Supplemental EIS addressing the analysis of off-site alternatives (Energy Facility Site Evaluation Council 2004b);
- EFSEC held public hearings on both the Draft EIS and Draft Supplemental EIS;
- EFSEC began an adjudicative Process as required by its laws, with an adjudicative hearing scheduled for March 2006.

In February 2004, the Applicant filed a request for preemption of local land use plans and zoning ordinances with EFSEC. However, during the summer of 2005, the Applicant informed EFSEC that it would submit a new Development Activities Application (DAA) to Kittitas County, seeking a determination of consistency with local land-use plans and ordinances in accordance with WAC 463-28-020. The applicant submitted a DAA to the County in August 2005, and on October 27, 2005, Kittitas County initiated its own review process (Sagebrush Power Partners LLC 2005). In conjunction with the County review process, the Applicant withdrew its request for preemption before EFSEC.

### **1.3 Proposed 2005 KVVWPP Layout Revisions – What is Different?**

The Applicant presented revisions to the project description and turbine layout in the October 2005 DAA. The Applicant proposed the revisions to address concerns raised by the County and by the public through the SEPA review undertaken by EFSEC. EFSEC staff reviewed the DAA to determine whether additional information would be required to ensure a complete review under SEPA by the EFSEC. A detailed revised project description is given in Chapter 2 of this Addendum. The major changes to the project are also summarized below. It should be noted, that the revised turbine layout is not an alternative to the original layout proposed by the Applicant, but replaces the layout originally proposed.

#### **The most probable scenario is now in the Middle to Lower End Scenario range.**

The Applicant requested certification of a range of wind generation turbine sizes, within a specific turbine layout footprint. The Draft EIS identified three scenarios to capture the full range of potential impacts to the environment:

- Lower End Scenario: The lower end scenario represents the project configuration with the lowest number of turbines erected. For turbines with a nameplate capacity of 3 MW each, up to 82 turbines would be used for a total nameplate capacity of 246 MW.
- Middle Scenario: For turbines with a nameplate capacity of 1.5 MW each, 121 turbines would be used for a total nameplate capacity of 181.5 MW.

- Upper End Scenario: The upper end scenario represents the project configuration with the highest number of turbines erected. For turbines with a nameplate capacity of 1.3 MW each, up to 150 turbines would be used for a total nameplate capacity of 195 MW.

With their DAA, the Applicant now brings forward the range of the Middle to Lower End Scenario as that most probable to be constructed. It is unlikely that the Upper End Scenario (1.3 MW turbines) would be constructed. Regardless of whether the Middle or Lower End Scenario is chosen, the project would consist of no more than 80 turbines.

**Changes have been made to certain turbine string corridors.**

The Applicant has also moved or removed portions of the strings from the turbine corridors originally proposed. The revised KVVWPP layout is shown in Addendum Figure 2-1. A comparison of Addendum Figure 2-1 with Figure 2-1 of the Draft EIS shows the following differences:

**Addendum Table 1-1: Summary of Revisions to Turbine String Layout**

Turbine String	Revision to Layout
A	The previous string A and the northern portion of the previous string D have been re-oriented into a revised string "A", located in the northwest corner of Township Section 16.
B	Turbine string B is in the same location; there will be fewer turbines sited along this string.
C	Turbine string C is in the same location; there will be fewer turbines sited along this string.
D	The north portion of string D has been re-oriented and incorporated into string A. The southern portion of string D has been eliminated.
E	Turbine string E is in the same location; there will be fewer turbines sited along this string.
F	Turbine string F is in the same location; there will be fewer turbines sited along this string.
G	The north portion of turbine string G has been eliminated; there will also be fewer turbines sited along this string.
H	The northern portion of turbine string H has been eliminated.
I	The northern portion of turbine string I has been extended.
J	Turbine string J is in the same location; there will be fewer turbines sited along this string.

Source. Sagebrush Power Partners LLC 2005.

The DAA also corrects the location of construction and permanent road access to turbine string "G" on the east side of US 97. The Applicant had previously agreed to relocate this access to address concerns raised by the Washington State Department of Transportation (see Section 3.10.2 of the Draft EIS).

**Setbacks from residences and property lines have been increased.**

The Applicant incorporated minimum setbacks into the proposed project layout based on safety, avoidance of nuisance concerns, and industry standards. In the revised DAA, the Applicant has increased the setback from property lines of neighboring landowners without project agreements from 50 feet to 541 feet beyond the tip of the blade at its closest point to the property line. The complete list of setbacks is given in Section 2.2 of this Addendum.

**1.4 What is the Purpose of this Addendum?**

This document is a SEPA Addendum to the KVVWPP Draft EIS. It is being issued by EFSEC according to WAC 197-11-625. The purpose of this Addendum is to update the project description. Chapter 3 of this Addendum documents the results of the analysis performed to:

- 1) confirm that impacts resulting from the revisions to the turbine layout were already analyzed and documented in the Draft EIS or Draft Supplemental EIS;
- 2) if the impacts were not analyzed, present new information about the impacts that was submitted by the Applicant to EFSEC in support of the revised KVVWPP layout;
- 3) evaluate whether the changes to the KVVWPP layout would have a probable significant adverse environmental impact on any element of the environment that could not be mitigated;
- 4) determine whether the significance of any identified unavoidable adverse impacts has changed from the assessment made in the Draft EIS or Draft Supplemental EIS.

The Addendum will not repeat information presented in the Draft and Supplemental Draft EIS that has not changed as a result of the revision to the turbine layout, unless such clarification is helpful for context. In order to assist the reader to identify the project elements that have changed, text relating to changes to the project has been underlined in sections that substantially repeat information originally presented in the Draft EIS.

The Addendum was prepared by EFSEC staff, based on review of the documents regarding the revised KVVWPP layout submitted by the Applicant. Only new document references are listed in Chapter 4 of this Addendum. Documents previously referenced in the Draft EIS and Draft Supplemental EIS are not re-listed in Chapter 4 of the Addendum.

**1.5 Does the Revised KVVWPP Layout Cause or Change the Significance of Any Adverse Environmental Impact?**

Section 1.10 of the Draft EIS identified two areas of the environment where a significant adverse environmental impact might occur: cultural resources and visual resources.

At the time the Draft EIS was published, the indirect visual impacts on potentially affected cultural resources in the immediate project vicinity were not yet determined. The determination depended upon receipt of requested information from the Washington State Office of Archaeology and Historic Preservation (OAHP) regarding the boundaries of the “area of

potential effect". In addition, clarification of the National Register of Historic Places (NRHP) eligibility status of the North Branch Canal tunnel had been requested from OAHP to determine indirect visual impacts on this resource.

In July 2004, Lithic Analysts prepared a report on behalf of the Applicant entitled *Cultural Landscapes Investigation and Impacts to Historical Inventory for the Kittitas Valley Wind Power Project* (Trautman 2004). This report outlined the potential impacts on the North Branch Canal tunnel and other eligible NRHP resources in the project area, including cultural landscapes. Lithic Analysts concluded that the project would not indirectly affect potentially significant cultural resources in the project area and that the section of the North Branch Canal in the project area is not eligible for inclusion in the NRHP. OAHP reviewed this report and concurred with the findings.

By reducing the number of turbines, and eliminating certain portions of turbine strings altogether, the Applicant has reduced the overall visual impact of the KVVPP (see the discussion in Section 3.9 of this Addendum). Therefore the conclusions made by Lithic Analysts remain valid.

Section 1.10.2 of the Draft EIS concluded that for many viewers, the presence of the wind turbines represents a significant unavoidable adverse impact because it significantly alters the appearance of the rural landscape over a large area of the Kittitas Valley. Flashing of lights on the tops of turbines would similarly be considered a significant unavoidable adverse impact. The level of adversity of these impacts depended on the viewer's location and sensitivity and the impact on view quality.

The revised KVVPP layout will not create additional significant adverse impacts to visual resources. With the proposed layout changes, the project will have less of an impact on visual resources particularly for viewpoints located near the north and northwestern portions of the project area. In addition, impacts from lighting of the turbines required by the Federal Aviation Administration (FAA) for aviation safety reasons will be significantly reduced (see Sections 2.3 and 3.9.2 of this Addendum). However, the adverse perception of the remaining impact on visual resources remains subjective.

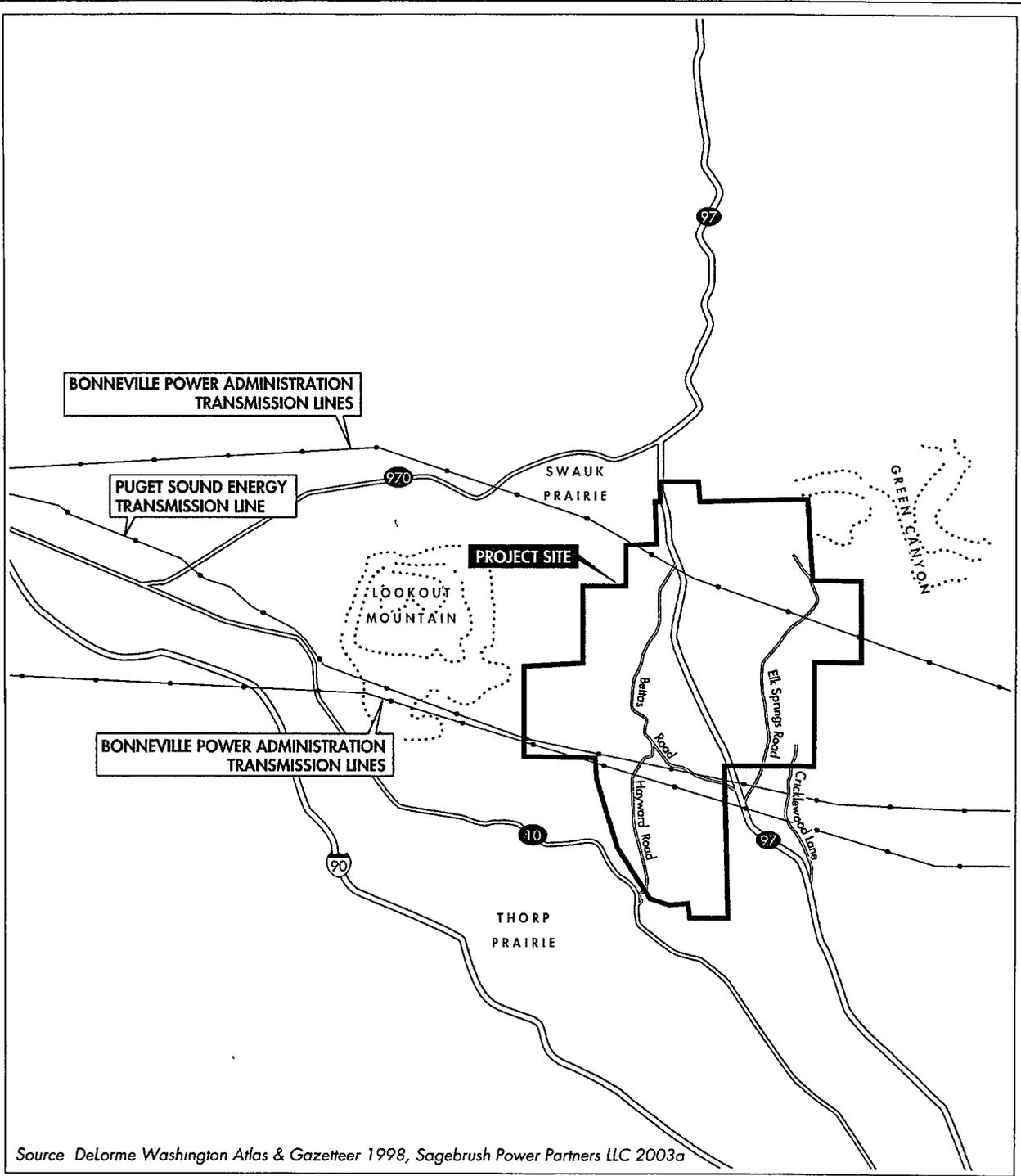
As discussed in Chapter 3 of this Addendum, the revised KVVPP layout does not cause significant adverse environmental impacts, nor does it change the significance of any environmental impacts that have been identified in the Draft EIS.

## **1.6 What Will Happen Next with the Environmental Impact Statement?**

EFSEC rules require that the Final EIS be issued after the adjudicative hearings are concluded (WAC 463-47-060 (2)). EFSEC will prepare a Final EIS that incorporates: the Draft EIS; the Draft Supplemental EIS; this Addendum; comments received on the Draft and Draft Supplemental EIS, and responses to those comments; and relevant new information made available through the Adjudicative Hearing process. The Final EIS will also include updated information regarding public involvement, consultation and coordination, and reflecting the remainder of the review process that will have been completed in 2006. The Final EIS will be

issued after the March 2006 hearings, and prior to EFSEC making a recommendation to the Governor of Washington State.

If the Governor approves the proposed project, EFSEC would specify the conditions of construction and operation, issue a Site Certification Agreement in stead of any individual state or local permitting authority, and would manage the environmental and safety oversight program of project operations. EFSEC's Site Certification Agreement would act as an umbrella authorization that incorporates the requirements of all state laws and regulations.



Source Delorme Washington Atlas & Gazetteer 1998, Sagebrush Power Partners LLC 2003a



Addendum Fig. 1-1  
PROJECT SITE MAP

## CHAPTER 2: PROJECT DESCRIPTION

*In order to assist the reader to identify the project elements that have changed, text relating to changes to the project has been underlined in sections that substantially repeat information originally presented in the Draft EIS.*

### 2.1 Project Overview

This section of the Addendum updates the project overview presented in Section 2.2.1 of the Draft EIS.

Sagebrush Power Partners LLC proposes to construct and operate a series of wind turbines that would harness the natural wind at the proposed KVVPP site in Kittitas County, Washington. The project would install three-bladed wind turbines on tubular steel towers ranging in size from 1.8 MW to 3 MW (generator nameplate capacity) in the project area. Energy from the spinning turbines will be turned into up to 246 megawatts of power. Elements of the project include wind turbine generators, roads, foundations, underground and overhead electrical lines, grid interconnection facilities, one or two substations, an operations and maintenance (O&M) facility, and associated supporting infrastructure and facilities.

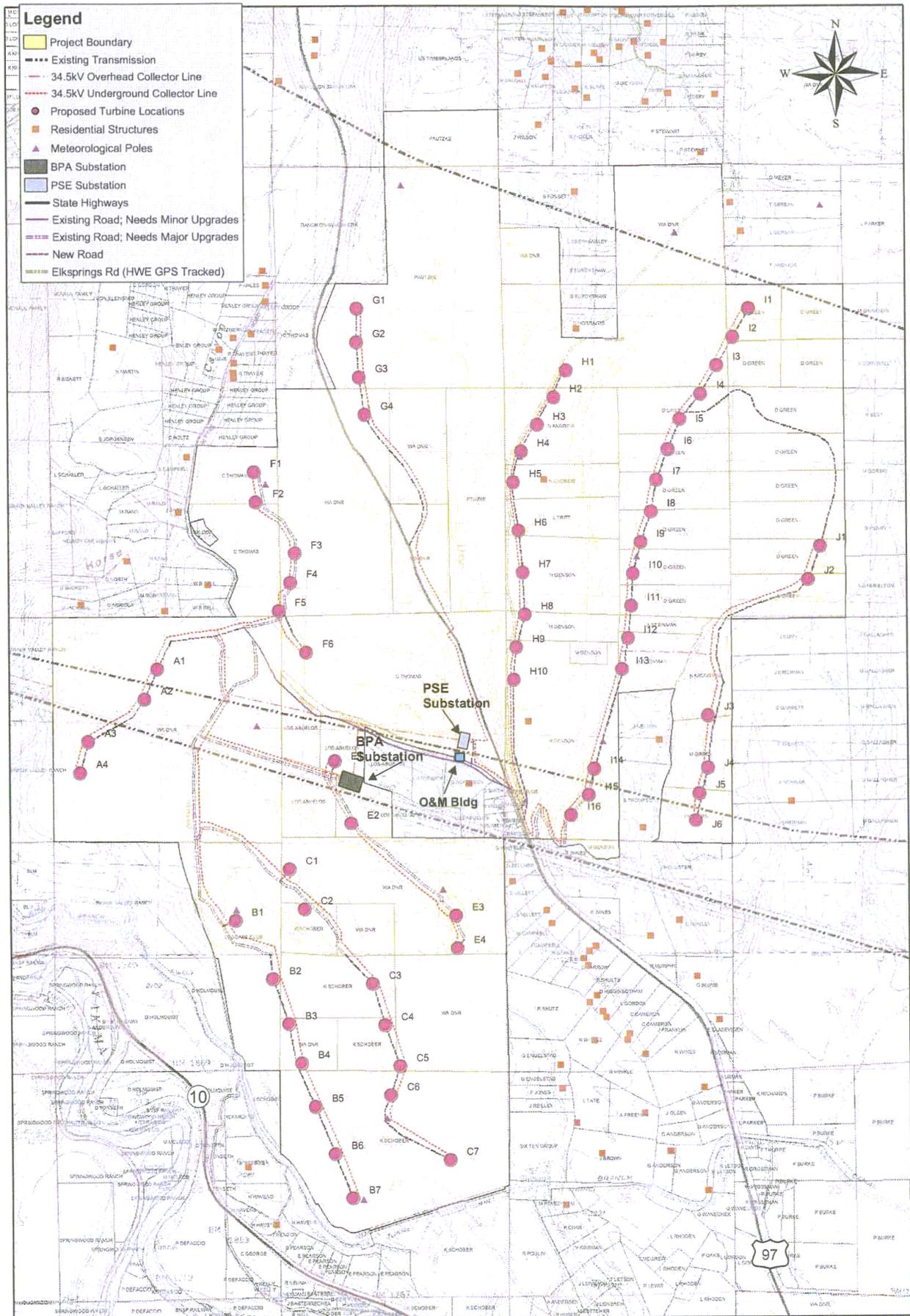
To capture a “reasonable range” of potential project impacts, the Draft EIS defined and evaluated the following three project scenarios:

- Lower End Scenario: The lower end scenario represents the project configuration with the lowest number of turbines erected. For turbines with a nameplate capacity of 3 MW, up to 82 turbines would be used, resulting in nameplate capacity of 246 MW.
- Middle Scenario: For turbines with a nameplate capacity of 1.5 MW each, 121 turbines would be used for a total for a total of 181.5 MW. This scenario is illustrated in Figure 2-1.
- Upper End Scenario: The upper end scenario represents the project configuration with the highest number of turbines erected. For turbines with a nameplate capacity of 1.3 MW each, up to 150 turbines would be used, resulting in a project total nameplate capacity of 195 MW.

With its submittal of the Development Activities Application (DAA) to Kittitas County, Sagebrush Power Partners has indicated that the project would most likely implement turbines ranging in size from 1.8 MW to 3 MW, i.e. a configuration in the Middle to Lower End Scenario range. In the DAA Sagebrush requests to construct a maximum of 80 turbines with a maximum project nameplate capacity up to 246 MW.

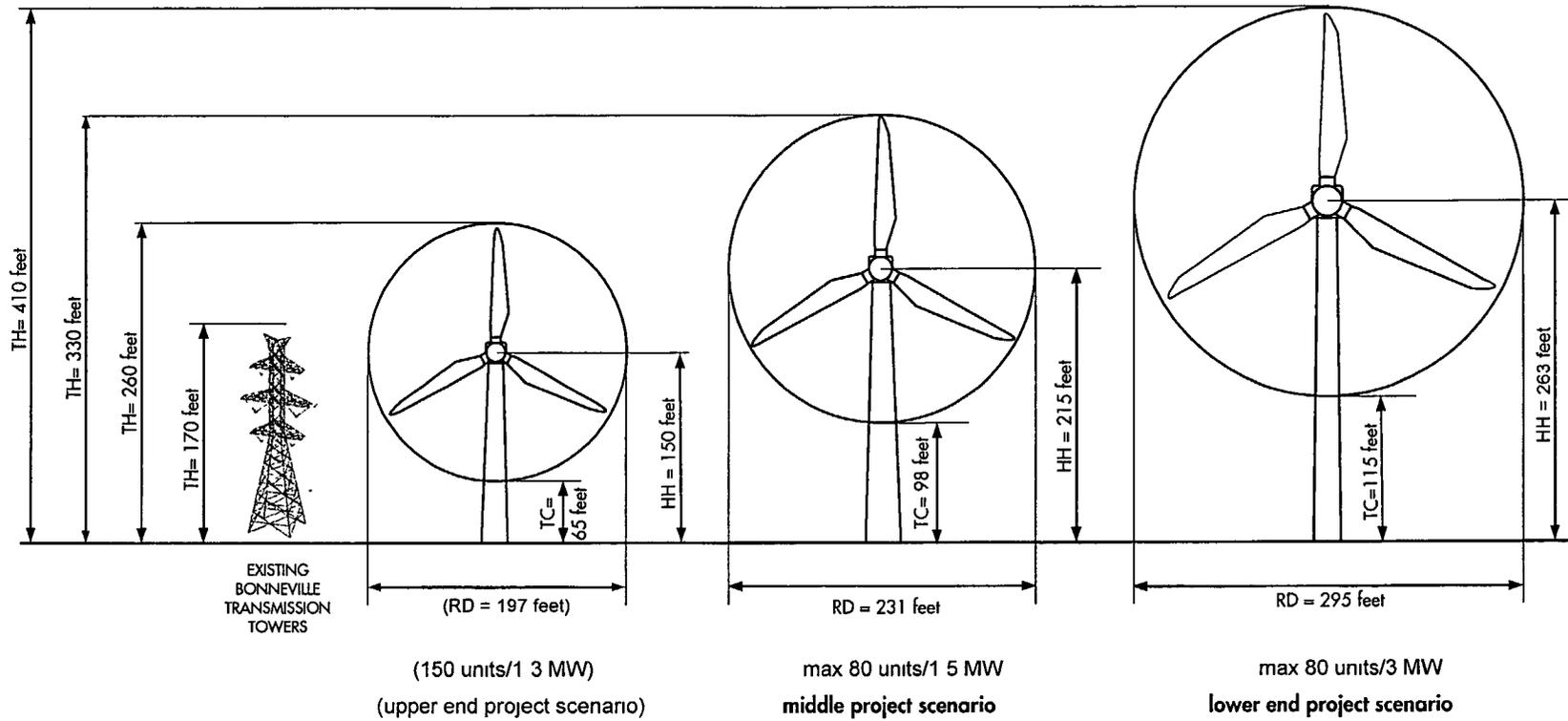
Addendum Figure 2-1 illustrates the general site layout of these key elements as revised in the October 2005 DAA. Addendum Figure 2-2 illustrates the maximum dimensions not be exceeded of the three project scenarios.

Tables 2-1 and 2-2 of the Draft EIS summarized the proposed project facilities and the total area that would be permanently and temporarily occupied, respectively, by each project element for the three defined project scenarios. The data presented for the Middle and Lower End Scenarios does not change with the revised turbine layout. The permanent project footprint (for the life of



Addendum Figure 2-1:  
 Kittitas Valley Wind Power Project  
 Revised Site Layout  
 Source: Schafer 2005i





Source Sagebrush Power Partners LLC 2003a, 2005a

HH hub height  
 RD rotor diameter  
 TC tip clearance  
 TH tip height

Addendum Figure 2-2:  
 TYPICAL WIND TURBINE DIMENSIONS



the project) would occupy between 93 and 118 acres for wind turbines, access roads, substations, and other facilities. Between approximately 231 and 371 acres would be temporarily occupied during construction by facilities such as staging areas and equipment laydown areas. The only features that would vary in size between the project scenarios would be the temporary laydown areas at each wind turbine during construction and the permanent roadway and turbine and transformer pad footprints; under the lower end scenario, roads would be wider to accommodate larger construction cranes. The amount of land disturbance required for the operations and maintenance facility, substations, and meteorological towers would not change under the three scenarios.

Up to 80 turbines would be arranged in numerous “strings” labeled A through J throughout the project site, for a maximum of 23 total miles of turbine strings (Addendum Figure 2-1). The length of the 9 turbine strings would remain constant under the three project scenarios; only the density of turbines sited within each string would change. The height of the turbines (referred to as the “tip height”) would range from about 260 feet to 410 feet from the ground to the blade tip in its highest position, depending on the turbine size selected (see Addendum Figure 2-2). In any scenario chosen by the Applicant only a single size of turbines would be used; different sizes of turbines would not be mixed.

The Draft EIS reported that up to 7 miles of existing private roads would be improved, and up to 19 miles of new access roads would be constructed to access and service the wind turbines and other facilities at the site. With the project layout revisions, the miles of new road would be reduced to approximately 13. One O&M facility, approximately 5,000 square feet on a 2-acre site, also would be constructed. Electrical lines would be installed to connect the turbines and strings (see Addendum Figure 2-1). Lines connecting individual turbines in each string would be located underground, and lines connecting the strings primarily would be underground with some overhead.

## **2.2 Project Location and Project Site**

This section of the Addendum updates the description of project location and project site presented in Section 2.2.2 of the Draft EIS.

The project is located on open ridgetops between Ellensburg and Cle Elum, about 12 miles northwest of the City of Ellensburg in Kittitas County, Washington. The estimated 90-acre project site lies within an area covering approximately 3.5 miles (east-west) by 5 miles (north-south). For purposes of this EIS, the terms “project site” and “project area” are defined as follows:

- Project site: Actual locations within the project area where construction and operation activities would occur. As explained in more detail below, the project site will change with the revised KVVPP layout.
- Project area: The general area that surrounds the project site; this includes the tax parcels where all project facilities are proposed. The project area has not changed as a result of the October 2005 revised KVVPP layout.

Project site ridges rise as high as 1,300 feet above the surrounding valley floor. Strong northwest winds in the project area are compressed as they pass by Lookout Mountain and are further accelerated as they pass over the site's ridgetops. The center of the site is located approximately at the intersection of the main Bonneville Power Administration (Bonneville) and the Puget Sound Energy (PSE) east-west transmission line corridors with US 97.

Under the Lower End Scenario, wind turbines would be installed along roadways as shown in Addendum Figure 2-1. The layout design is based on wind turbines with a rotor diameter of approximately 295 feet. Because of possible variances that may be discovered during the final site survey, some flexibility in determining the exact facility locations is required. Generally, it will not be necessary to relocate roads significantly from their proposed locations; however, the exact location of the turbines along the planned roadways may need to be altered from the plan shown in Addendum Figure 2-1 because of a number of factors including:

- The results of geotechnical investigations to be conducted at each surveyed turbine location may reveal underground voids or fractures. In this case, the turbine location may need to be altered or eliminated.
- The final onsite field survey with the meteorologists may dictate that turbines be spaced slightly closer together in some areas and farther apart in other areas.
- Turbine spacing may be adjusted based on the final rotor diameter selected.
- The final field measurement test surveys of communication microwave paths may require that some turbine locations be adjusted slightly to avoid line-of-sight interference.

Given that rotor diameters proposed for the wind turbines would range from approximately 200 feet under the upper end scenario to 295 feet under the lower end scenario, turbines would not vary from their proposed locations by more than 350 feet. Adjustments to final turbine tower locations would not bring them closer to public roads, power lines, property lines of non-participating landowners, or residences; the setbacks currently shown in Addendum Figure 2-1 would be not be reduced.

Addendum Figure 2-1 also shows property ownership at the time the DAA was submitted to Kittitas County.

### **Project Setbacks**

The minimum setbacks incorporated into the proposed project layout are based on several factors, including safety and avoidance of nuisance concerns, industry standards, and on the Applicant's experience in operating wind power projects. Some are fixed distances (i.e., 1,000 feet) that are based on estimates or modeling of potential nuisance impacts such as noise and shadow-flicker. Others, such as tip height, are related to the size of the actual turbines to be installed. (Tip height refers to the total distance from the base of the turbine to the tip of the blade at its highest point; see Addendum Figure 2-2.) Tip height setbacks are primarily safety-related (e.g., if an entire tower and turbine were to collapse from a massive earthquake either combined with or independent from hurricane force wind, they would not fall on a public road or a neighbor's property). The proposed setbacks for the project's proposed turbine towers are as

follows (Sagebrush Power Partners LLC 2003c, Section 2.3.12; Sagebrush Power Partners LLC 2005):

- Setback from residences of neighboring landowners (i.e., those without signed agreements with the Applicant): 1,000 feet.
- Setback from property lines of neighboring landowners: this setback has been increased to 541 feet beyond the tip of the blade at its closest point to the property line.
- Setback from residences with signed agreements with the Applicant: At least blade tip height. However, it may be greater based on the property owner's approval. Some landowners want to have turbines closer than 1,000 feet to their residence in exchange for more turbines on their land and the revenue generated by them.
- Setback from property lines of landowners with signed agreements with the Applicant: None. All property owners with signed agreements with the Applicant have agreed to a zero setback from property lines, as this allows the most efficient and lowest impact of wind turbines on various landowners' property.
- Setback from Bonneville/PSE transmission lines: Blade tip height.
- Distance from county/state roads: Turbine tip height.

Minor adjustments would be made to the proposed project layout such as moving the turbine tower foundations to maintain the setbacks described above. The proposed setback for the meteorological towers from public roads and residences is tip height. There are no designated setbacks for the other project components such as the O&M facility, substations, and gravel access roads.

### **2.3 Facilities**

This section of the Addendum updates the description of project facilities presented in Section 2.2.3 of the Draft EIS.

The project would be located on privately-owned open rangeland and rangeland owned by DNR pursuant to leases negotiated between the landowners and the Applicant. These leases would allow construction and operation of wind facilities for a negotiated term. In exchange, each landowner leasing property would receive financial compensation.

The project would consist of wind turbines, associated electrical systems (including an electrical collector system, substations, and interconnection facilities), meteorological towers, access roads, and an operation and maintenance building (see Addendum Figure 2-1). Each of these features is described in more detail below.

#### **Wind Turbines**

Wind turbines consist of three main components—the turbine tower, nacelle, and rotor blades.

The design features for the 1.3- to 3-MW wind turbines considered in the Draft EIS (see Draft EIS Table 2-4 below) still represent the boundaries for the project description range, and as a result, only the Tower hub height for the Lower End Scenario has increased by 1 foot.

**Revised Draft EIS Table 2-4: Wind Turbine Features, Kittitas Valley Wind Power Project**

Design Feature	Description		
	(Upper End Scenario) <sup>1</sup>	Middle Scenario	Lower End Scenario
Rated output of turbine	(1.3 MW)	1.5 MW	3 MW
Number of turbines	(150)	80	80
Axis	(Horizontal)	Horizontal	Horizontal
Rotor orientation	(Upwind)	Upwind	Upwind
Minimum wind speed for turbines to begin operating	(7-10 miles per hour <sup>2</sup> )	7-10 miles per hour <sup>2</sup>	7-10 miles per hour <sup>2</sup>
Number of blades	(Three)	Three	Three
Rotor (blade) diameter	(197 feet)	231 feet	295 feet
Tower type	(Tubular steel)	Tubular steel	Tubular steel
Tower hub (nacelle) height	(150 feet)	215 feet	263 feet
Total (tip) height (to top of vertical rotor)	(260 feet)	330 feet	410 feet
Rotational speed	(10-23 rotations per minute)	10-23 rotations per minute	10-23 rotations per minute
Nacelle	(Fully enclosed steel or steel or reinforced fiberglass)	Fully enclosed steel or steel reinforced fiberglass	Fully enclosed steel or steel reinforced fiberglass
Color	(Neutral gray)	Neutral gray	Neutral gray

Source Sagebrush Power Partners LLC 2003a, Sagebrush Power Partners LLC 2005

1 With the Revised Development Activities Application, the Applicant no longer proposes the Lower End Scenario as a likely project configuration

2 Wind turbines rotate in winds as low as 2-3 mph, but generator cut-in occurs at 7-10 mph

### Towers

Towers would be approximately 150 to 263 feet tall at the turbine hub (referred to as the “hub height”) under the upper and lower end scenarios, respectively. With the nacelle and blades mounted, the total height of the wind turbine (“tip height”) would be approximately 260 to 410 feet with a blade in the vertical position. The towers would be a tubular conical steel structure manufactured in multiple sections depending on the tower height and approximately 12 to 16 feet in diameter at the base. The towers would be painted a neutral gray color to be visually less obtrusive. A service platform at the top of each section would allow for access to the tower’s connecting bolts for routine inspection. A ladder inside the structure would ascend to the nacelle to provide access for turbine maintenance. The tower would be equipped with interior lighting and a safety glide cable alongside the ladder.

The towers would be fabricated and erected in two to four sections. Turbine tower sections would be transported to the site on trailers that could each carry one tower section per truck. Tower sections would be delivered by truck to a staging area and then to each tower location. They would be erected using a large construction crane.

### Nacelle

The nacelle houses the main mechanical components of the wind turbine generator—the drive train, gearbox, and generator. The nacelle would be equipped with an anemometer and a wind

vane that signals wind speed and direction information to an electronic controller. A mechanism would use electric motors to rotate (yaw) the nacelle and rotor to keep the turbine pointed into the wind to maximize energy capture. An enclosed steel-reinforced fiberglass shell houses the nacelle to protect internal machinery from the elements.

### Rotor Blades

Modern wind turbines have three-bladed rotors. The diameter of the circle swept by the blades would range from approximately 200 to 300 feet under the upper and lower end scenarios, respectively (that is, each blade would be approximately 100 to 150 feet long). The blades would turn at about 10 to 23 rotations per minute (RPM). Newer turbines representative of those considered for the Lower End Scenario range turn at about 17 to 20 RPM. Generally, larger wind turbine generators have slower rotating blades, but the specific RPM values depend on aerodynamic design and vary across machines. The rotor blades would be typically made from glass-reinforced polyester composite.

### **Electrical System**

The project's electrical system would have two key elements: (1) a collector system, which would collect energy at between 575 and 690 volts (V) from each wind turbine (depending on the type of turbine used), increase it to 34.5 kilovolts (kV) through a pad-mounted transformer, and connect to the project substations; and (2) the substations and interconnection facilities, which would transform energy from the collection lines (at 34.5 kV) to the transmission level (230 kV for the PSE line and Bonneville's Columbia to Covington line or 287 kV for Bonneville's Grand Coulee to Olympia line). A schematic of the electrical collection system and interconnection facilities was shown in Draft EIS Figure 2-5.

### Collector System

Power from the wind turbines would be generated at 575 V to 690 V depending on the type of wind turbine used for the project. A set of heavy gauge, armored, flexible drop cables would connect to the generator terminals in the nacelle and would pass from the nacelle into the tower where they would drop down to a cable support saddle located about 20 to 30 feet below the top tower platform. From the support saddle, the cables would be directed along the inside of the tower, along the internal ladder in cable trays, or they would be hung straight down to the base bus cabinet and breaker panel inside the base of the tower. The drop cables would terminate inside the bus cabinet. Another set of cables would run from the bus cabinet through conduits in the foundation to the pad transformer, ranging in size from 50 to 120 square feet in area; the pad transformer would step up the voltage to 34.5 kV. Some wind turbine generators, such as the Vestas V-80, have the transformer in the nacelle. For the V-80, the drop cables would be at 34.5 kV, and the base bus cabinet would be a switchgear breaker panel. Some generator models may require that the transformer be mounted on an adjacent outdoor concrete pad. (Sagebrush Power Partners LLC 2003c, Section 2.3.4; Sagebrush Power Partners LLC 2005).

From the transformer, power from the turbine would be transmitted by underground 34.5 kV electrical cables installed in a trench typically 3 to 4 feet deep, depending on the underlying soil

and rock conditions, and up to 5 feet wide. Underground collection cables would be used in most areas; overhead collectors on wood structures would be used where there are steep slopes or canyons to cross (see Addendum Figure 2-1). Approximately 23 miles of underground and 2 miles of overhead 34.5 kV electrical power lines would be used to collect power from the turbines and terminate at the main substation.

An estimated 1.2-mile section of the overhead system would be along Bettas Road parallel to two existing sets of overhead transmission lines and the access road that serves them. Another overhead section is proposed to link turbine strings B and C. In the original site layout (Addendum Figure 2-1), this connection was shown as either underground or overhead. Based on subsequent input from the Washington Department of Fish and Wildlife, the Applicant proposes to build this as part of the overhead system to minimize impacts on the riparian habitat between the two ridgetops. For these short overhead portions of the electrical collection system, wooden poles, non-reflective conductors, and non-refractive insulators would be used (Sagebrush Power Partners LLC 2003d). Overhead poles typically would be approximately 60 feet tall and positioned so that poles and electrical conductors are spaced at least 200 feet apart. The poles would be buried 8 to 10 feet deep. Pole insulators would be spaced four feet apart. Anti-perching devices would be installed on the poles to limit potential raptor use.

The electrical collection system would include junction boxes and pad-mounted switchgear panels that would be installed to connect cables coming from different directions and to allow for the isolation of particular turbine strings. In total, it is estimated that 15 junction boxes and 10 switch panels would be required for the electrical collection system (Sagebrush Power Partners LLC 2003c, Section 2.3.4).

#### **Junction Boxes**

The junction boxes would be either steel-clad or fiberglass panels mounted on pad foundations roughly 4 feet wide, 6 feet long, and 6 feet high. The pad foundation would have an underground vault about 3 feet deep where the underground cables come in. The junction boxes also would have a buried grounding ring with grounding rods tied to the collection system and a common neutral.

#### **Switch Panels**

The switch panels would be steel-clad enclosures mounted on pad foundations roughly 7 feet wide, 7 feet long, and 5 feet high. Switches would allow particular collector lines and turbine strings to be turned off or isolated. This isolation would allow maintenance and repair to take place without shutting down the entire project. The pad foundation would have an underground vault about 3 feet deep where the underground cables come in. Switch panels also would have a buried grounding ring with grounding rods tied to the collection system and a common neutral.

#### **Substations and Interconnection Facilities**

The Applicant is seeking a permit for and is designing the project so that it could interconnect with either the PSE or Bonneville electrical transmission lines traversing the site or possibly both. If connected to Bonneville's system, the project would interconnect directly with either the

Grand Coulee to Olympia 287-kV line or the Columbia to Covington 230-kV line. If connected to PSE's system, the project would interconnect directly with PSE's Rocky Reach to White River 230-kV line. There is the possibility that power would be fed to both the PSE and Bonneville systems; therefore, this analysis evaluates the need to construct two substations since the lines have different voltages.

The Applicant would build and maintain up to two fenced substation sites, each occupying approximately 3 acres. The proposed PSE substation would be in the northwest corner of the intersection of US 97 and Bettas Road, and the Bonneville substation would be approximately 2,200 feet southwest of the PSE substation, south of Bettas Road near the Bonneville transmission lines. The main function of the substations and interconnection facilities would be to step up the voltage from the collection lines (at 34.5 kV) to the transmission level (230 or 287 kV) to interconnect to the appropriate utility grid. The basic elements of the substation and interconnection facilities are a control house, two main transformers, outdoor breakers, relaying equipment, steel support structures, and overhead lightning suppression conductors. All of the elements would be installed on concrete foundations designed for site-specific soil conditions.

### **Meteorological Towers**

Meteorological towers are used to measure wind conditions, including wind speed, direction, and temperature. The Applicant proposes to erect up to nine permanent meteorological towers in the project area, although it is likely that only four would be constructed. The potential location of the nine proposed permanent meteorological towers is shown in Figure 2-1. The permanent meteorological towers installed for the project would be approximately as tall as the turbine tower hub height (i.e., 150 to 262 feet) and would consist of a central lattice structure supported by three to four sets of guy wires that extend up to 100 to 210 feet from the base of each tower, on a 16-foot-by-16-foot base. The towers may alternatively be of a free-standing design. The meteorological towers would be constructed upwind of turbine strings or groups of turbine strings to monitor wind strength and to confirm turbine performance. Meteorological towers greater than 200 feet in height would require lighting in compliance with the Federal Aviation Administrations' (FAA) aviation safety lighting requirements (see the lighting discussion below for further detail).

Meteorological towers would be installed with a grounding system that protects the meteorological sensors and loggers from electrostatic discharge and lightning. Lightning dissipaters or rods would be installed at the tops of the towers to provide an umbrella of protection for the upper sensors (Sagebrush Power Partners LLC 2003c, Section 2.3.8).

### **Access Roads**

Access to the various rows of turbines would be achieved by graveled access roads branching from US 97 and two county roads - Bettas and Hayward Roads. The project would improve some existing private roads and construct new gravel roads to provide access for construction vehicles and equipment. Up to approximately 7 miles of existing private roads would need to be improved and up to 19 miles of new roads would be constructed. Under the revised KVVPP layout, the length of new roads would be decreased from 19 miles to approximately 13 miles

(Schafer 2005f). The roads would be 24 feet wide including shoulders for small wind turbine generators (i.e., under the middle and upper end scenarios) and 34 feet wide including shoulders for larger wind turbine generators (i.e., under the lower end scenario) with a compacted gravel surface. In areas of steeper grades, a cut and fill design would be implemented to keep grades below 15% and to prevent erosion. After the project is constructed, use of the improved and new access roads on private lands would be limited to the landowner and to project maintenance staff.

### **Operation and Maintenance Facility**

A permanent O&M facility would be constructed near the northwest corner of US 97 and Bettas Road. It would consist of approximately 5,000 square feet of enclosed space, including offices, spare parts storage, kitchen, restrooms, and a shop area. Water for the bathroom and kitchen would be obtained from a new domestic well; anticipated water use would be less than 1,000 gallons a day. Wastewater from the facility would be discharged to an onsite domestic septic system. There also would be graveled outdoor parking, a turnaround area for larger vehicles, outdoor lighting, and gated access with either partial or full perimeter fencing. The overall area of the building and parking would be approximately 2 acres. Vehicle access to the O&M facility would occur from Bettas Road.

### **Information Kiosk**

An information kiosk and public viewing area near the proposed O&M facility off Bettas Road would be constructed. Signs would be provided to direct tourists to this site (Sagebrush Power Partners LLC 2003c, Section 5.3). Vehicle access to the information kiosk and public viewing area would occur from Bettas Road at the same location as the access to the O&M facility.

### **Safety Features and Control Systems**

#### Turbine Control Systems

Wind turbines would be equipped with sophisticated computer control systems that would constantly monitor variables such as wind speed and direction, air and machine temperatures, electrical voltages, currents, vibrations, blade pitch, and yaw angles. The main function of the control system would be nacelle and power operations. Generally, nacelle functions include yawing the nacelle into the wind, pitching the blades, and applying the brakes if necessary. Power operations controlled at the bus cabinet inside the base of the tower include operation of the main breakers to engage the generator with the grid as well as control of ancillary breakers and systems. The control system would always run to ensure that the machines operate efficiently and safely.

Each turbine would be connected to a central Supervisory Control and Data Acquisition (SCADA) system. The SCADA system would allow for remotely controlling and monitoring individual turbines and the wind plant as a whole from both the central host computer or from a remote personal computer. In the event of faults, the SCADA system can also send signals to a fax, pager, or cell phone to alert operations staff. The turbine towers and foundations would be designed to survive a gust of wind more than 90 miles per hour (mph) with the blades pitched in

their most vulnerable position, a speed which exceeds the 100-year expected peak gust of 73 mph in the project area and the recent maximum recorded gust of 56 mph.

### Braking Systems

The turbines would be equipped with two fully independent braking systems that can stop the rotor either acting together or independently. The braking system is designed to be fail-safe, allowing the rotor to be brought to a halt under all foreseeable conditions. The system would consist of aerodynamic braking by the rotor blades and by a separate hydraulic disc brake system. Both braking systems would operate independently such that if there is a fault with one, the other can still bring the turbine to a halt. Brake pads on the disc brake system would be spring loaded against the disc, and power would be required to keep the pads away from the disc. If power is lost, the brakes would be mechanically activated immediately. The aerodynamic braking system also would be configured such that if power is lost it would be activated immediately using back-up battery power or the nitrogen accumulators on the hydraulic system, depending on the turbine's design.

After an emergency stop is executed, remote restarting is not possible. The turbine must be inspected in person and the stop-fault must be reset manually before operation could be reactivated. The turbines also would be equipped with a parking brake used to keep the rotor stationary while maintenance or inspection is performed.

### Built-in Fire Safety

Each turbine's nacelle would be equipped with an internal fire detection system with sensors located in the nacelle as well as at the tower base. The fire detection system would be connected to the main controller and the central SCADA system. In the event of a fire, the turbine would be immediately halted and an alarm activated in the control system that can send a page or message to a cell phone of the on-call operators and/or the local fire district as required.

### Climbing Safety

Normal access to the nacelle would be accomplished with a ladder inside the tower. Standard tower hardware would include equipment for safe ladder climbing including lanyards and safety belts for service personnel. Internal ladders and maintenance areas inside the tower and nacelle would be equipped with safety provisions for securing lifelines and safety belts.

### Lightning Protection

The turbines would be equipped with an engineered lightning protection system that connects the blades, nacelle, and tower to a grounding system at the base of the tower. The grounding system would include a copper ring conductor connected to grounding rods driven down into the ground at diametrically opposed points outside the tower foundation. The system would provide a firm grounding path to divert harmful stray surge voltages away from the turbine. The blades would be constructed with an internal copper conductor and an additional lightning rod that extends

above the wind vane and anemometer at the rear of the nacelle; both would have conductive paths to the nacelle bed frame, which in turn would connect to the tower.

### **Lighting**

The Draft EIS explained that to comply with the Federal Aviation Administration's (FAA) aviation safety lighting requirements, the project turbines and met towers greater than 200 feet tall must be marked with lights. The Draft EIS anticipated that white lights would be required during the day, and red lights at night. The lights would be designed to concentrate the beam in the horizontal plane, minimizing light diffusion downward toward the ground and upward toward the sky.

Under recently released guidelines, the FAA would no longer require daytime lighting of the turbines if turbines are painted a light color. Nighttime lighting would be limited to the first and last turbine of every string, and to turbines located every 1000 to 1400 feet between the ends of the strings (Patterson 2005). As a result of these FAA changes, the KVVPP would no longer install white daytime aviation warning lights, and the number of red nighttime aviation warning lights would be significantly reduced. For example as shown in Addendum Figure 3.9-6, only 16 nighttime warning lights would be required.

The substations and O&M facility would be equipped with nighttime and motion-sensor lights for safety and security. Sensors and switches would be used to keep lights turned off when not required. Emergency lighting with back-up power is included to allow personnel to perform manual operations during an outage of normal power sources.

### **2.4 Construction Activities; Operation and Maintenance Activities; Decommissioning**

The October 2005 revision to the KVVPP layout does not affect the description given in the Draft EIS of Construction Activities (Section 2.2.4 of the Draft EIS), Operation and Maintenance Activities (Section 2.2.5 of the draft EIS), and Decommissioning (Section 2.2.6 of the Draft EIS).

### **2.5 Analysis of off-site alternatives in the Draft Supplemental EIS**

The description of the KVVPP given in the Supplemental Draft EIS was included to give context to the description of the affected environment and impacts of potential wind power projects on other hypothetical sites. Revisions to the KVVPP layout do not affect the analysis of off-site alternatives.

## **CHAPTER 3: IMPACTS TO THE ENVIRONMENT**

*In order to assist the reader to identify the project elements that have changed, text relating to changes to the project has been underlined in sections that substantially repeat information originally presented in the Draft EIS*

### **3.1 EARTH RESOURCES**

#### **3.1.1 Affected Environment**

Because the description of the affected environment is based on the geological resources of the project area as a whole, it is not influenced by the shortening, elimination and repositioning of turbine strings. Soils maps presented in the Draft EIS and in Attachment 7 of the *Responses to Initial Completeness Report* assessed the geological features of the project site in all turbine strings and locations proposed in the revised KVVPP layout (Sagebrush Power Partners 2003a; 2003c).

#### **3.1.2 Impacts of Proposed Action**

The discussion of impacts in the Draft EIS to earth resources of the Proposed Action continues to adequately capture the full range of potential impacts that may result from construction, operation and decommissioning of the KVVPP in its revised layout. Geologic hazards different from those on the remainder of the site have not been identified at the new turbine locations. The total lineal feet of turbine strings, roads and electrical collection systems will be lower overall under this revised layout, as will the acreage of earth resources impacted both temporarily and permanently. Therefore, the analysis in the Draft EIS remains conservative, and does not underestimate any of the potential impacts.

#### **3.1.3 Impacts of No Action Alternative**

Revision of the turbine layout does not affect the discussion of Impacts of the No Action Alternative Presented in the Draft EIS.

#### **3.1.4 Mitigation Measures**

Because new impacts have not been identified, additional mitigation measures are not warranted.

#### **3.1.5 Significant Unavoidable Adverse Impacts**

The Draft EIS concluded that no significant unavoidable adverse impacts on earth resources are identified. No additional unavoidable adverse impacts on earth resources as a result of the project layout revisions are identified. Project design and implementation of the mitigation measures described in the Draft EIS would continue to minimize impacts from erosion or natural hazards such as earthquakes and volcanic eruption.

## 3.2 VEGETATION, WETLANDS, WILDLIFE AND HABITAT, FISHERIES, AND THREATENED AND ENDANGERED SPECIES

### 3.2.1 Background

Section 3.2.1 of the Draft EIS contained information on the vegetation and wildlife survey methods employed, and the pertinent Federal and State Laws and Regulations regarding impacts to habitat, fish and wildlife. The surveys completed for the project included the entire project area. Therefore the information regarding the affected environment and impacts of construction, operation and decommissioning of the KVVPP is unchanged as a result of the turbine layout revision, with the exception of the discussions below regarding vegetation and the white-margined knotweed.

### 3.2.2 Affected Environment

#### Vegetation

Overall, the information in the Draft EIS continues to represent the vegetation communities in the project area, and on the revised project site. As indicated in Figure 3.2-1 of the Draft EIS, areas with new turbine locations, namely the northward extension of String I and the new String A were already surveyed and documented. Vegetation in the northward extension of String I is the same as described in Table 3.2-1. Table 3.2-1 can however be revised to include a description of the new String A, as follows, with the previous A and D strings being deleted.

**Revised Table 3.2-1: Summary of Habitats Associated with the Proposed Turbine Strings of the Project**

Facility	Habitat Description
<u>Turbine String A</u>	<u>In this string shallow-soiled lithosol alternates with deeper-soiled shrub-steppe habitat. Habitat quality is generally good: native species dominate the shallow soils, and native shrubs and forbs combine with native and non-native grasses to dominate the deeper soils.</u>
Turbine String B	The north half of this string is located on a mosaic of shallow-soiled rocky areas and deeper-soiled shrub-steppe habitat. Habitat quality is generally good: native species dominate the shallow soils, and native shrubs and forbs combine with native and non-native grasses to dominate the deeper soils. Various limited ground and vegetation disturbance has occurred here from recreational activities (gun club). One noxious weed population was observed along a jeep trail that runs along this section of the proposed string  The south half of this string contains the same mosaic of shallow and deeper soils, however, a fire within the last 10 years has removed most of the shrubs, and the habitat now consists of a mix of native and non-native grasses and forbs, with widely scattered small shrubs. Habitat quality is generally fair. Weedy species are more common in the deeper-soiled areas, and several populations of noxious weeds are present.
Turbine String C	Shallow-soiled grassland and lithosol alternates with deeper-soiled shrub-steppe habitat. Habitat quality is generally good: native species dominate the shallow soils, and native shrubs and forbs combine with native and non-native grasses to dominate the deeper soils.

**Revised Table 3.2-1 (continued): Summary of Habitats Associated with the Proposed Turbine Strings of the Project**

Facility	Habitat Description
Turbine String E	This string consists mainly of deeper-soiled shrub-steppe habitat, with inclusions of shallow-soiled lithosol in the north half, and small patches of non-native species throughout. Much of the habitat in the string is in fair to good condition (i.e., dominated by native shrubs and forbs, and a mix of native and non-native grasses), although some areas have been burned recently, and one noxious weed population is present along the jeep trail, which runs the length of the ridgetop.
Turbine String F	This string contains mainly shallow-soiled lithosols, with some areas of deeper-soiled shrub-steppe in the south half. Habitat quality is generally good: native species dominate the shallow soils, and native shrubs and forbs combine with native and non-native grasses to dominate the deeper soils. However, a large gravel pit operation at the north end of this string has completely displaced the lithosol habitat in that area. A rough jeep trail runs the length of this proposed string.
Turbine String G	This string consists almost entirely of shallow-soiled lithosol habitat, with small areas of deeper-soiled shrub-steppe and deciduous thicket habitats in the north half and at the south end. Habitat quality is generally good: native species dominate the shallow soils, and native shrubs and forbs combine with native and non-native grasses to dominate the deeper soils. Two noxious weed populations were observed, one along a road at the north end of the string, and another in a small draw near the south end of the string. A well-developed jeep trail is present along the north half of the corridor.
Turbine String H	This string also consists almost entirely of shallow-soiled lithosol habitat, with areas of deeper-soiled shrub-steppe habitat at the north end, midpoint, and the south end. Habitat quality is generally good: native species dominate the shallow soils, and native shrubs and forbs combine with native and non-native grasses to dominate the deeper soils. However, there are two areas of major soil disturbance (blading) near the midpoint of the string, where the lithosol species have been largely replaced by non-native forbs and grasses. In addition, three populations of noxious weeds were observed along this string, near roads. Finally, one portion of the lithosol in the south end shows signs of heavy livestock use, although native plants continue to dominate. A well-developed two-lane gravel access road runs the length of this ridgetop, providing access for local landowners.
Turbine String I	This string consists primarily of shallow-soiled lithosol habitat, although portions of the middle section, and the entire southern tip, contain deeper-soiled shrub-steppe habitat, as well as small inclusions of grassland. Habitat quality is generally good: native species dominate the shallow soils, and native shrubs and forbs combine with native and non-native grasses to dominate the deeper soils. However, the areas of grassland are only of fair quality, they are dominated by non-native grasses and forbs, and one noxious weed population was observed at the south end of the string.
Turbine String J	<p>The south half of the string is located mainly on deeper-soiled shrub-steppe habitat, with one area of shallow-soiled lithosol. Habitat quality is generally good: native species dominate the shallow soils, and native shrubs and forbs combine with native and non-native grasses to dominate the deeper soils. However, the south tip of the string consists of fair quality, shallow-soiled grassland dominated by non-native grasses and forbs. Two populations of noxious weeds were observed in this half of the string.</p> <p>The north half of this string contains the same general pattern of shallow and deeper soils, however, a fire within the last 5-10 years removed most of the shrubs, and the deeper-soiled habitat now consists of a mix of native and non-native grasses and forbs, with widely scattered small shrubs. Although overall habitat quality is fair, several small inclusions of generally good quality lithosol are present in this half of the string.</p>

**Revised Table 3.2-1 (continued): Summary of Habitats Associated with the Proposed Turbine Strings of the Project**

Facility	Habitat Description
Intervening Facilities (access roads, electric lines, O&M facility, etc , located between turbine strings)	<p>More than 40% of the potential project impact corridors are located off of the ridgetops, between the turbine strings. Primarily, these are connecting facilities such as access roads and electrical lines, but this percentage includes O&amp;M areas also. These non-ridgetop habitats are typically deeper-soiled, and are generally more degraded from past disturbance than the ridgetop habitats. This is especially true in the valley bottoms, where cattle grazing and road impacts have created large areas dominated by non-native invader species.</p> <p>Overall, the non-ridgetop habitats within the impact corridors are in fair condition. However, habitat quality ranges from poor in many of the valley bottoms, to good on some of the canyon slopes.</p>

Source: Sagebrush Power Partners LLC 2003a; Schafer 2005e.

### 3.2.3 Impacts of Proposed Action

With the exception of impacts to the white-margined knotweed and potential stream crossings discussed below, the discussion in the Draft EIS of impacts to Wetlands, Wildlife, Habitat, Fisheries, and other Threatened and Endangered Species is representative of the entire project area and remains applicable to the Project in its revised layout.

Impacts to fixed terrestrial species depends on disturbance of habitat. Habitats where revised turbine locations are being proposed have been analyzed, and no species has been identified that would bear a significant adverse environmental impact. The acreage disturbed under the Middle and Lower End Scenarios has not changed; therefore, no new impacts are expected to fixed terrestrial species.

Impacts to fisheries depend on direct impacts to wetlands or streams due to siting of project facilities, and potentially indirect impacts due to migration of pollutants from the project site to fish bearing waters located outside the project area. The discussion in the Draft EIS regarding indirect impacts remains applicable; with the mitigation measures proposed, fish bearing waters and streams would not be impacted by construction and project operation in the project area.

The Applicant has reviewed aerial photography and site notes from previous surveys for the "A" string (Schafer 2005h). A previous memorandum had identified a potential stream crossing in the vicinity of the "A" string. (Sagebrush Power Partners LLC 2003c; Attachment 3 to Kittitas Valley Wind Power Project Responses to Initial Completeness Report). The Applicant's proposal for mitigating the crossing was in accordance with the requirements of The U.S. Army Corps of Engineers' (Corps) applicable Nationwide Permit 12, and the Corps issued a permit allowing the crossing at this location.

The revised "A" turbine string would cross the same stream at a location approximately 0.3 miles above the location previously identified. Both the stream's characteristics and the method of crossing are substantially similar to that described in the Applicant's request for coverage under the Nationwide Permit granted by the Corps. No other wetland or potentially sensitive areas have

been identified near this new crossing. Once mitigated by the proper crossing construction methods it is unlikely that the crossing would have a significant adverse environmental impact. However, the Applicant would be required to seek amendment of the coverage received from the Corps under Nationwide Permit 12 to include this new crossing.

Impacts to avian species were a function of the total number of turbines, and turbine dimensions. The effect of turbine dimensions, and the Lower End Scenario in particular, was analyzed by the Applicant and documented in the Draft EIS. With the revised layout, it is likely that fewer turbines would be built. Therefore impacts to avian species will not increase as a result of the layout revision. Impacts for the Middle Scenario are therefore conservatively higher, and impacts for the Lower End Scenario are about the same as presented in the Draft EIS.

Although potential impacts to large wildlife (Elk and Mule Deer) were identified and discussed in the Draft EIS, these impacts were not specific to unique turbine locations. It is therefore also unlikely that the revised layout would increase impacts to these species.

### **Threatened and Endangered Species**

The location of new turbines in strings I and A is not incompatible with any use of the project area by Threatened or Endangered Species, either because no use is made, or because use by the species is sufficiently removed in distance.

### **Plant Species**

The Draft EIS indicated that one species that was recently removed from the Washington State review list was found within, or immediately adjacent to, the project area. The species, white-margined knotweed (*Polygonum polygaloides* ssp. *kelloggii*), was found in the project area in vernal moist draws and swales. However, since the original 2002 rare plant surveys were conducted, white-margined knotweed has been dropped from the Washington Natural Heritage Program list.

Based on the delineation of white-margined knotweed populations presented in the Application for Site Certification (Sagebrush Power Partners LLC 2003a, Attachment 8), the re-orientation of strings previously labeled A and D into the new A string could impact a greater proportion of the knotweed population identified in the project area. However, given that this plant has been dropped from the Washington State "review" list, and that the Application survey identified additional nearby populations (with plant numbers approximately 25 times more numerous than in the project area), a significant adverse impact to this species is neither probable nor expected.

### **3.2.4 Impacts of No Action Alternative**

Revision of the turbine layout does not affect the discussion of Impacts of the No Action Alternative Presented in the Draft EIS.

### **3.2.5 Mitigation Measures**

Because new impacts have not been identified, additional mitigation measures are not warranted.

### **3.2.6 Significant Unavoidable Adverse Impacts**

The Draft EIS concluded that with implementation of the recommended mitigation measures and avoidance, when possible, of sensitive areas such as stream and riparian corridors, no significant, unavoidable adverse impacts on wetlands, wildlife and habitat, fish, and threatened and endangered species are identified. Fish-bearing aquatic resources are not located within about 0.5 mile of the project area. Breeding and foraging habitat typically associated with federally listed threatened and endangered species would not be disturbed under the proposed project. While potential bald eagle fatalities associated with operation of the project are possible, the likelihood is considered remote because there have been no documented bald eagle fatalities at other wind power projects in the United States.

Total temporary upland vegetation habitat disturbance would range from 231 acres under the lower end scenario to 370 acres under the upper end scenario. Total permanent habitat disturbance would range from 92.5 acres under the middle scenario to 118 acres under the lower end scenario. The temporary and permanent disturbance of upland vegetation habitat would be compensated for by the mitigation proposal to purchase and protect an approximately 550-acre parcel with equal or better functional habitat characteristics as the project area.

No additional unavoidable adverse impacts on wildlife resources as a result of the KVVPP layout revisions are identified. Project design and implementation of the mitigation measures described in the Draft EIS would continue to minimize impacts to wetlands, wildlife and habitat, fish, and threatened and endangered species.

## **3.3 WATER RESOURCES**

### **3.3.1 Affected Environment**

The description of the affected environment is based on the water resources of the project area as a whole, and is not influenced by the shortening, elimination and repositioning of turbine strings. As discussed above in Section 3.2.3, the Applicant has confirmed that new turbine locations along string A would displace the crossing of an ephemeral stream (Shafer 2005h). Jurisdictional waters were also identified in the vicinity of string I, and these have been described in the Draft EIS.

### **3.3.2 Impacts of Proposed Action**

The discussion of impacts to water resources of the Proposed Action continues to adequately capture the full range of potential impacts that may result from construction, operation and decommissioning of the KVVPP in its revised layout. New turbine locations will not be sited in or near jurisdictional waters. Stream crossings will employ crossing construction methods

approvable under the U.S. Army Corps of Engineer's Nationwide Permit 12. Revision of turbine locations does not entail changes in water use or discharge either during construction or operation.

### **3.3.3 Impacts of No Action Alternative**

Revision of the turbine layout does not affect the discussion of Impacts of the No Action Alternative Presented in the Draft EIS.

### **3.3.4 Mitigation Measures**

Because new impacts have not been identified, additional mitigation measures are not warranted.

### **3.3.5 Significant Unavoidable Adverse Impacts**

The Draft EIS concluded that with implementation of the mitigation measures described in Section 3.3 of the Draft EIS, significant unavoidable adverse impacts on surface water and groundwater resources resulting from project operation are not anticipated.

No additional unavoidable adverse impacts on water resources as a result of the KVVPP layout revisions are identified.

## **3.4 HEALTH AND SAFETY**

### **3.4.1 Affected Environment**

Because the description of the affected environment is based on the resources of the project area as a whole, it is not influenced by the shortening, elimination and repositioning of turbine strings.

### **3.4.2 Impacts of Proposed Action**

Several of the health and safety impacts described in the Draft EIS are directly associated with the turbine layout in the project area. The following construction and operation impacts could occur regardless of turbine locations, and do not depend on turbine layout: risk of fire and explosion; releases or potential releases of hazardous materials to the environment; dust hazards; vandalism; electric and magnetic fields; and electrical shock hazards. The impacts and risk of such hazards would not increase as a result of the revisions to the KVVPP layout. Some of these hazards may decrease if fewer turbines, miles of interconnection facilities, and project roads are constructed.

The Draft EIS identified the following health and safety risks that could cause impacts that may depend on turbine layout: risk of ice throw from turbine blades; risk of turbine tower collapse; risk of turbine blade throw; and shadow flicker effects.

Impacts associated with ice throw, tower collapse and blade throw are mitigated both by intrinsic design of the turbine towers, blades and other components, and setbacks incorporated into the layout to separate the turbines from sensitive areas. The Draft EIS determined that the setbacks proposed in the Application for Site Certification were adequate for the protection of the public from such impacts. Furthermore, as indicated in Section 2.2 above, the Applicant proposes to increase the setback from property lines of neighboring landowners from 50 feet to 541 feet.

Impacts of shadow flicker effects depend on turbine layout. The Applicant has modeled the shadow flicker impacts of the revised turbine layout (Nielsen 2005). Addendum Appendix A contains:

- Contour maps of the expected number of hours of shadow flicker for some residences in and around the project area for the revised KVVWPP layout;
- Contour maps for the layout presented in the ASC for the Lower End and Middle scenarios. (Young, June-October 2003)

Table 3.4-2 of the Draft EIS has also been revised as shown below to compare the shadow flicker data from the revised layout and the layout presented in the Application for Site Certification (Witherspoon 2005). Review of these contour maps and the Revised Table 3.4-2 indicates the following:

- 12 of the 20 receptors evaluated in Revised Table 3.2-4 would experience the same or less time of shadow flicker with the revised KVVWPP layout;
- 8 of the 20 receptors evaluated in Table 3.2-4 would experience more shadow flicker with the revised KVVWPP layout, with receptors Zellmer, Gaskill, Taylor, Schwab and Andrew experiencing the greatest increases.

Based on comparison of shadow flicker contour maps that appeared in Appendix B of the Draft EIS, and new contour maps presented by the Applicant for the revised KVVWPP Layout (Addendum Appendix A), the distribution of shadow flicker effects from the turbine strings would change as follows:

- Turbine string A (previously strings A and D) would decrease;
- Turbine string G would have no impact in the north portion of the KVVWPP where turbines have been removed, and would remain approximately the same (west side of string) or decrease (east side of string) in the south portion;
- Turbine string H would have no impact in the north portion where turbines have been removed, and would remain approximately the same in the south portion;
- Turbine string I would increase in the northern portion where turbines have been added (Green property), and would remain the same in the southern portion;
- Turbine strings B, C, E, F, J would remain approximately the same.

However, as shown in Revised Table 3.4-2, impacts to individual receptors may differ from the more general geographical distribution of effects.

**Revised Draft EIS Table 3.4-2: Kittitas Valley Wind Power Project Wind Turbine Shadow-Flicker Analysis for Selected Receptors**

Residence	Residence Number and Primary Direction to Turbine(s) <sup>1</sup>	Expected shadow hours per year [hours minutes / year]			Maximum days per year shadow could be experienced [days / year]			Maximum shadow hours per day <sup>2</sup> [hours:minutes / day]		
		2003 Application		Revised Layout <sup>4</sup>	2003 Application		Revised Layout <sup>4</sup>	2003 Application		Revised Layout <sup>4</sup>
Project Layout		235 ft	295 ft	295 ft	235 ft	295 ft	295 ft	235 ft	295 ft	295 ft
N Andrew (Participating)	050 E 050 W	34:30 38 30	24.36 68:02		310 252	192 222		0:28 0 56	0:32 1.06	
	total for residence <sup>3</sup>	app 45:00	app 75:00	84:07	app 350	app 280	297	app 1.14	app 1.30	1:44
Archambeau	042 E 042 S	36.03 21 44	40.35 27 55		312 187	303 207		0.48 0:48	1:00 1:00	
	total for residence <sup>3</sup>	app 38 00	app 42 00	16:32	app 320	app 310	140	app 0 50	app 1.00	0 24
Anthony	043 E	44:27	36 06	29:42	335	254	247	0 48	0:50	0.40
Burt	084 SW	14 42	10 18	15:25	139	122	198	0:24	0:20	0:22
M Campbell	082 SW	17 01	11.57	22 29	178	155	233	0.30	0.26	0.42
Darrow	086 SW	16 39	12 58	16 00	118	112	183	0 26	0.22	0 22
Gaskill	044 E	16:57	16.57	28:55	137	137	247	0 28	0 28	0 38
Genson (Participating)	049 E 049 W	47 34 46:07	54 01 68 12		251 95	252 113		0:40 1 12	0:52 1.28	
	total for residence <sup>3</sup>	app 50 00	app 70:00	30:54	app 260	app 260	257	app 1:40	app 2 20	1.06
L Gerean	059 W	39 24	15 05	0 08	171	62	16	0:42	0.44	0:04

Sources: Witherspoon 2005, Schafer 2005b.

- 1 Residence number refers to labels on shadow flicker contour maps in Appendix A. A residence may experience shadow flicker from different turbines.
- 2 Maximum hours per day is most conservative estimate and does not take into account weather conditions that would decrease duration of shadow flicker.
- 3 "app" indicates approximate. Shadow flicker from different directions may be experienced by the residence at the same time, thereby reducing total time the residence experiences flicker.
- 4 Updated version of software used for assessment of revised turbine layout calculates exact duration of shadow flicker experienced by a residence from multiple turbine directions.

**Revised Draft EIS Table 3.4-2 (Continued): Kittitas Valley Wind Power Project Wind Turbine Shadow-Flicker Analysis for Selected Receptors**

Residence	Residence Number and Primary Direction to Turbine(s) <sup>1</sup>	Expected shadow hours per year [hours minutes / year]		Maximum days per year shadow could be experienced [days / year]			Maximum shadow hours per day <sup>2</sup> [hours:minutes / day]			
		2003 Application	Revised Layout <sup>4</sup>	2003 Application	Revised Layout <sup>4</sup>	2003 Application	Revised Layout <sup>4</sup>			
Project Layout		235 ft	295 ft	235 ft	295 ft	295 ft	235 ft	295 ft	295 ft	
T Gerean	058 W	82:58	83:45	0.00	295	199	0	1 08	1 20	0 00
Nelson	417 E	45 06	45:12		237	222		0:42	0 54	
	417 W	38 58	25 12		240	186		0:42	0 48	
	total for residence <sup>3</sup>	app 60:00	app 70:00	41.10	app 290	app 240	220	app 1 20	app 1 40	1 30
Pearson North	047 E	19:16	20:49	21 38	201	170	160	0 30	0:34	0:34
Pearson South	118 E	8 32	18 28	8.46	92	126	75	0:34	0 32	0 28
Price	080 N	0:00	0 00	0 00	0	0	0	0 00	0:00	0 00
Rainbow Valley Ranch	041 E	22 53	22:23		267	234		0:22	0 26	
	041 S	14.28	14:34		185	174		0:22	0 26	
	total for residence <sup>3</sup>	app 24 00	app 25:00	12 18	app 270	app 240	134	app 0 25	app 0:30	0 28
Robertson	555 E	26:06	25:38	17 06	208	144	149	0 42	0 50	0 26
Schwab	215 W	21 27	21 27	35.52	166	166	192	0 30	0:30	0 42
Bell (was Taylor)	045 E	22 38	25:41		177	202		0 30	1 00	
	045 S	10 47	6 32		90	92		0 30	1:00	
	total for residence <sup>3</sup>	app 23:00	app 28:00	39:44	app 180	app 202	240	app 0:30	app 1 00	0 40
Thompson (was Geisick)	117 E	42.31	36 46		177	128		0 48	1 00	
	117 W	12.22	11:54		63	56		0:34	0 38	
	total for residence <sup>3</sup>	app 43:00	app 47 00	56 40	app 180	app 130	162	app 1:10	app 1 40	1 30
Zellmer	048 SW	13 54	10.04	25.24	179	150	273	0.34	0 30	0:50

Sources: Witherspoo, 2005, Schafer 2005b

- 1 Residence number refers to labels on shadow flicker contour maps in Appendix A. A residence may experience shadow flicker from different turbines.
- 2 Maximum hours per day is most conservative estimate and does not take into account weather conditions that would decrease duration of shadow flicker.
- 3 "app" indicates approximate. Shadow flicker from different directions may be experienced by the residence at the same time, thereby reducing total time the residence experiences flicker.
- 4 Updated version of software used for assessment of revised turbine layout calculates exact duration of shadow flicker experienced by a residence from multiple turbine directions.

Section 3.4.2 of the Draft EIS explained that shadow-flicker effects can in some cases be annoying to local residences. However, no threshold has been identified to quantify the level of annoyance.

### **3.4.3 Impacts of No Action Alternative**

Revision of the turbine layout does not affect the discussion of Impacts of the No Action Alternative Presented in the Draft EIS.

### **3.4.4 Mitigation Measures**

Because new impacts have not been identified, additional mitigation measures are not warranted.

### **3.4.5 Significant Unavoidable Adverse Impacts**

No additional unavoidable adverse impacts on health and safety are expected as a result of the KVVWPP layout revisions. Project design, implementation of the mitigation measures described in the Draft EIS, and the greater setback from property lines of neighboring landowners would continue to minimize health and safety impacts.

## **3.5 ENERGY AND NATURAL RESOURCES**

### **3.5.1 Affected Environment**

Because the description of the affected environment is based on the energy and natural resources of the project area and Kittitas County as a whole, it is not influenced by the shortening, elimination and repositioning of turbine strings as a result of revisions to the KVVWPP layout.

### **3.5.2 Impacts of Proposed Action**

The analysis in the Draft EIS of impacts to Energy and Natural Resources of the Proposed Action continues to adequately capture the full range of potential impacts that may result from construction, operation and decommissioning of the KVVWPP in its revised layout. The total lineal feet of turbine strings, roads and electrical collection systems will be lower under this revised layout, as will the number of turbines ultimately constructed. Therefore fewer natural resources will be consumed in the construction of the project. The analysis in the EIS remains conservative, and does not underestimate any of the potential impacts.

### **3.5.3 Impacts of No Action Alternative**

Revision of the turbine layout does not affect the discussion of Impacts of the No Action Alternative Presented in the Draft EIS.

#### **3.5.4 Mitigation Measures**

Because new impacts have not been identified, additional mitigation measures are not warranted.

#### **3.5.5 Significant Unavoidable Adverse Impacts**

No additional unavoidable adverse impacts on natural and energy resources as a result of the KVVWPP layout revisions are identified. Project design and implementation of the mitigation measures described in the Draft EIS would continue to minimize impacts for energy and natural resources.

### **3.6 LAND USE AND RECREATION**

#### **3.6.1 Affected Environment**

Because the description of the affected environment is based on existing land use policies and recreational resources of the project area and Kittitas County as a whole, it is not influenced by the shortening, elimination and repositioning of turbine strings resulting from revision of the KVVWPP layout.

#### **3.6.2 Impacts of Proposed Action**

The Draft EIS Action continues to adequately capture the full range of potential impacts to Land Use and Recreation that may result from construction, operation and decommissioning of the KVVWPP in its revised layout. The total lineal feet of turbine strings, roads and electrical collection systems will be lower overall under this revised layout, as will the acreage of land impacted both temporarily and permanently. Therefore, the analysis in the EIS regarding changes to land use on the project area remains conservative, and does not underestimate any of the potential impacts. Since the project area is not being modified, nor are the number of workers associated with construction and operation of the KVVWPP, there are no new impacts to recreational resources in the County.

#### **3.6.3 Impacts of No Action Alternative**

Revision of the turbine layout does not affect the discussion of Impacts of the No Action Alternative Presented in the Draft EIS.

#### **3.6.4 Consistency with Plans and Policies**

Based on information submitted in the DAA, the two following sections warrant additions or updates to the information in the Draft EIS: Consistency Discussion regarding the Kittitas County Comprehensive Plan, and the Consistency Discussion regarding the Kittitas County Zoning Code.

## Kittitas County Comprehensive Plan

### *Consistency Discussion*

As indicated in the Draft EIS, the proposed KVVWPP remains inconsistent with the Kittitas County Comprehensive Plan until such time that Kittitas County submits to EFSEC a certificate of Land Use Consistency in accordance with EFSEC's rules. The Applicant has added to the analysis of the KVVWPP's consistency with the County Goals, Policies and Objectives (GPOs) as indicated below. The discussion for the remainder of the GPO's in the Draft EIS remains applicable and is unchanged.

- "GPO 6.8 Additions to and improvements of utilities facilities will be allowed to occur at a time and in a manner sufficient to serve growth."

As discussed with respect to GPO 6.7, the KVVWPP would be desirable to the public convenience to serve electrical power load growth of a number of regional utilities.

- "GPO 6.9. Process permits and approvals for all utility facilities in a fair and timely manner, and in accordance with development regulations that ensure predictability and project concurrency."

The proposed KVVWPP would be developed in accordance with all local, regional, and state wind power development regulations and would therefore be consistent with this policy.

- "GPO 6.18. Decisions made regarding utility facilities should be consistent with and complementary to regional demand and resources and should reinforce an interconnected regional distribution network."

This policy is similar to GPO 6.7. The above section discusses how the KVVWPP is desirable to the public convenience to serve electrical power load growth of a number of regional utilities. The proposed KVVWPP would significantly reinforce an interconnected regional power transmission and distribution network by connecting to Puget Sound Energy's (PSE) and/or Bonneville Power Administration's (BPA) electric power grid. Therefore, the KVVWPP is consistent with this policy.

- "GPO 6.34. Wind Farms may only be located in areas designated as Wind Farm Resource overlay districts in the Comprehensive Plan. Such Wind Farm Resource overlay districts need not be designated as Major Industrial Developments under Chapter 2.5 of the Comprehensive Plan."

This policy requires that the area where the KVVWPP is proposed be designated a Wind Farm Resource overlay district. Such a designation requires the Applicant to seek a sub-area comprehensive plan amendment. A docketing application for a comprehensive plan amendment was submitted on October 17, 2005 along with this request for rezone. It is anticipated that the County will process both requests concurrently, pursuant to the requirements of Kittitas County Code Chapter 17.61A.040.

- “GPO 8.5 Kittitas County recognizes and agrees with the need for continued diversity in densities and uses on Rural Lands.”

The KVVWPP will not change densities on Rural Lands. It will not change or preclude the existing open space and agricultural uses. It will, however, introduce a natural resource-based land use in a rural location. By the introduction of this use in this area of the County, the KVVWPP will help to diversify the County’s rural economy.

- “GPO 8.9 Projects or developments, which result in the significant conservation of rural lands or rural character, will be encouraged.”

The KVVWPP is compatible with traditional rural land uses and is an alternative to the development of residential subdivisions or other uses which do not preserve open space or encourage rural land conservation.

- “GPO 8.11 Existing and traditional uses should be protected and supported while allowing as much as possible for diversity, progress, experimentation, development, and choice in keeping with the retention of Rural Lands.”

Traditionally, the project area and surrounding land have been used for cattle grazing and recreation which are compatible with the KVVWPP. Generation of electricity using wind power is a relatively new, rural land use which generates revenues to landowners and the public through taxes and royalty payments to state agencies from whom lands are being leased. In an area such as the project area, this use is compatible with the traditional land uses that retain their rural character, as opposed to residential development.

#### Kittitas County Zoning Code

##### *Consistency Discussion*

Neither the Agricultural-20 nor Forest and Range zones allow for wind power projects either as a permitted or conditional use. For the project to be considered consistent with the current County Zoning Code, a site-specific rezone of the zoning map to Wind Farm Resource overlay zone pursuant to KCC 17.98 would be required (Kittitas County 2002b).

On May 1, 2003, EFSEC held a land use hearing, pursuant to Chapter RCW 80.50.090 and WAC Chapter 463-26, for the purpose of determining if the proposed project is consistent with Kittitas County or regional land use plans and zoning ordinances. At that hearing, EFSEC determined that: (1) in accordance with WAC 463-26-110, the proposed project is not consistent with nor is it in compliance with Kittitas County land use plans or zoning ordinances, and (2) the Applicant shall make all reasonable efforts to resolve the noncompliance (EFSEC 2003).

In June 2003 the Applicant submitted an application to Kittitas County to rezone the project area from Agriculture-20 and Forest and Range to Wind Farm Resource overlay zone. County approval of this rezone application would result in project consistency with the County Zoning

Code. On February 7, 2004, the Applicant filed with EFSEC a request for preemption of local zoning ordinances. The request for preemption was withdrawn by the Applicant on October 14, 2005, concurrently with the Applicant's filing of a Development Activities Application with Kittitas County.

The Kittitas County Board of County Commissioners will review the proposed Comprehensive Plan amendment and rezone and approve them if they satisfy the following criteria: (1) the proposal is essential or desirable to the public convenience; (2) the proposal is not detrimental or injurious to the public health, peace, or safety or to the character of the surrounding neighborhood; and (3) the proposed use at the proposed location(s) will not be unreasonably detrimental to the economic welfare of the County and it will not create excessive public cost for facilities and service (KCC 17.61A).

### **3.6.5 Mitigation Measures**

Because new impacts have not been identified, additional mitigation measures are not warranted.

### **3.6.6 Significant Unavoidable Adverse Impacts**

The Draft EIS concluded that the permanent conversion of approximately 93 to 118 acres of rangeland to commercial utility use (i.e., wind energy production) would be an unavoidable impact of the project. However, this reduction would have an overall negligible impact on cattle operations given the county's abundance of pasture and unimproved grazing lands. Therefore, no significant unavoidable adverse impacts are expected for land use as a result of the proposed project construction, operations and maintenance, and decommissioning.

No additional unavoidable adverse impacts on land use are expected as a result of the KVVPP layout revisions. Project design and implementation of the mitigation measures proposed by the Applicant would continue to minimize impacts to land use for the project area.

## **3.7 SOCIOECONOMICS**

### **3.7.1 Affected Environment**

Because the description of the affected environment is based on the Socioeconomics of the Kittitas County as a whole, it is not influenced by the shortening, elimination and repositioning of turbine strings resulting from revision of the KVVPP layout.

### **3.7.2 Impacts of Proposed Action**

The discussion of impacts to socioeconomics of the Proposed Action continue to adequately capture the full range of potential impacts that may result from construction, operation and decommissioning of the KVVPP in its revised layout.

### **3.7.3 Impacts of No Action Alternative**

Revision of the turbine layout does not affect the discussion of Impacts of the No Action Alternative Presented in the Draft EIS.

### **3.7.4 Mitigation Measures**

Because new impacts to socioeconomic resources have not been identified, additional mitigation measures are not warranted.

### **3.7.5 Significant Unavoidable Adverse Impacts**

The Draft EIS stated that the proposed action would have no significant unavoidable adverse impacts to the socioeconomic health of the project region. Although the specific employment, income, and tax revenue effects under the lower and upper end scenarios during construction and operations have yet to be quantified, they would likely be beneficial to the local economy. Furthermore, while the potential induced economic effects of tourism are uncertain, impacts from employment induced through a potential increase in local tourism are not considered significant or adverse.

No additional unavoidable adverse impacts on socioeconomics as a result of the KVVPP layout revisions have been identified.

## **3.8 CULTURAL RESOURCES**

### **3.8.1 Affected Environment**

Because the description of the affected environment is based on archeological and historical resources of the project area as a whole, it is not influenced by the shortening, elimination and repositioning of turbine strings.

### **3.8.2 Impacts of Proposed Action**

In November 2005 the Applicant commissioned surveys of those new areas on strings I and A to be impacted by construction and operation of the KVVPP. No new archeological resources were identified by these surveys (Flenniken and Trautman 2005). The survey did identify one potential historic resource: a narrow shallow ditch located near turbine A1. The source or reason for the ditch could not, however, be confirmed after consultation with the landowner, and the ditch is recommended not eligible for the national Register of Historic Places. No Historic properties would therefore be affected by the revised layout of the KVVPP. With this addition, the discussion of impacts in the Draft EIS remains up-to-date.

### **3.8.3 Impacts of No Action Alternative**

Revision of the turbine layout does not affect the discussion of Impacts of the No Action Alternative presented in the Draft EIS.

### **3.8.4 Mitigation Measures**

Because new impacts have not been identified, additional mitigation measures are not warranted.

### **3.8.5 Significant Unavoidable Adverse Impacts**

No additional unavoidable adverse impacts on cultural resources as a result of the KVVPP layout revisions are identified. Project design and implementation of the mitigation measures described in the Draft EIS would continue to minimize impacts to these resources.

## **3.9 VISUAL RESOURCES**

### **3.9.1 Affected Environment**

Because the description of the affected environment is based on the visual resources of the project area as a whole, it is not influenced by the shortening, elimination and repositioning of turbine strings.

### **3.9.2 Impacts of Proposed Action**

In developing the revised project layout, the Applicant specifically attempted to reduce the visual impact of the KVVPP (Priestley 2005). The Applicant used the same visual analysis methods as described in Section 3.9.2 of the Draft EIS. The Applicant analyzed the number of viewers, viewing conditions and viewer sensitivity for eleven viewpoints. Visual sensitivity for these viewpoints was then identified. These descriptions have not changed as a result of the project layout changes. The Applicant also prepared computer-generated simulations to evaluate the changes to visual impacts as a result of the KVVPP. With the revision to the project layout, some of these impacts have changed, as described below.

#### **Viewpoint 1: US 97 at Ellensburg Ranches Road Looking North**

To evaluate the changes in this viewpoint, the reader should compare the photo simulations presented in Draft EIS Figures 3.9-14, 3.9-15, and 3.9-16 to Addendum Figure 3.9-1.

From Viewpoint 1, approximately 30 turbines from strings I and J would be visible on the ridgetops at distances of 0.8 to 3 or more miles. The analysis performed in the Draft EIS showed that the visual impact would be slightly higher under the upper end scenario (moderate) than for the lower end scenario (low). At the distance depicted in the Draft EIS photos, the visual clutter of more turbines has more impact than the considerable scale of the larger turbines. Also, about half the turbines would be less noticeable where there is less contrast with the hillside

background. The remaining half, however, would be silhouetted against the sky, increasing their visual impact. The presence of the turbines would reduce the scene's degree of intactness by introducing a large number of highly visible engineered vertical elements.

The potential visual impact from Viewpoint 1 has not changed significantly from the analysis presented in the Draft EIS, and would range from low to moderate under the lower end and upper end scenarios, respectively.

#### **Viewpoint 2: US 97 North of Gravel Pit Looking North**

To evaluate the changes in this viewpoint, the reader should compare the photo simulations presented in Draft EIS Figures 3.9-17, and 3.9-18 to Addendum Figure 3.9-2.

In the original layout, nine turbines in turbine string G would have been visible from Viewpoint 2 on top of the ridge at distances ranging from 0.4 to 1 mile. The potential visual impact from Viewpoint 2 would have been moderate to high. These nine turbines have been removed in the revised KVVPP layout. The project would therefore no longer have any visual impact from this view point.

#### **Viewpoint 3: US 97 at Northern End of Bettas Road Looking South**

To evaluate the changes in this viewpoint, the reader should compare the photo simulation presented in Draft EIS Figures 3.9-19 to Addendum Figure 3.9-3.

Three turbines in turbine string G would be prominently visible from Viewpoint 3 in the driver's cone of vision along the east side of the US 97. These turbines would be located on ridgetops at distances ranging from 0.9 to 1.2 miles from this viewpoint. Because the turbines would be seen against the sky at relatively close range, they would be highly visible in this view and would reduce the visual unity to a degree that would substantially alter the scene's existing character.

Because fewer turbines would be visible from this viewpoint, and because the turbines are located further away from the Viewpoint, the potential visual impact from Viewpoint 3 has decreased to low.

#### **Viewpoint 4: Ridges East of US 97**

To evaluate the changes in this viewpoint, the reader should compare the photo simulation presented in Draft EIS Figures 3.9-20 to Addendum Figure 3.9-4.

Approximately 15 turbines would be visible from Viewpoint 4 looking south from a residence in Section 35 at the upper end of Elk Springs Road. Three strings of turbines would be visible in the middle ground, and two additional strings would be visible in the far middle ground. Because of the elevated viewing position, these turbines would be seen against the ground surface backdrop. The contrast between the light color of the turbines and the darker color of the ground would create a moderate visual contrast, increasing the visibility of the turbines. Because of the elevated position of this viewpoint and its distance from the turbines, the turbines' apparent scale would

be consistent with that of other features in the setting. The presence of the turbines would likely have a moderate effect on the vividness of this view, but would reduce its overall sense of unity and intactness.

The potential visual impact from Viewpoint 4 has not changed significantly from the analysis in the Draft EIS, and would be moderate to high.

#### **Viewpoint 5: Bettas Road**

The Draft EIS indicated that ten turbines in turbine string G would be prominently visible in the driver's cone of vision along the east side of Bettas Road. (Draft EIS Figure 3.9-21 shows the simulated view from Viewpoint 5 in the northern portion of Bettas Road, looking north.) These turbines would be located on the ridgetops at distances ranging from 0.5 to 1 mile from this viewpoint. Because the turbines would be seen against the sky at relatively close range, they would be highly visible and would reduce the visual unity to a degree that would substantially alter the scene's existing character. The wind turbines would be arrayed uniformly along the ridgeline and would not necessarily create a substantial change in the setting's moderate visual quality.

Because fewer turbines would be constructed in the revised KVVWPP layout, the potential visual impact from Viewpoint 5 would not exceed "moderate".

#### **Viewpoint 6: SR 10 Corridor**

The Draft EIS indicated that fourteen turbines in turbine strings B and C would be visible on the ridgeline located 1.5 miles or more from Viewpoint 6 along SR 10 between Morrison Canyon and Swauk Creek. (Draft EIS Figure 3.9-22 shows the simulated view from Viewpoint 6 on SR 10 between Morrison Canyon and Swauk Creek, looking east.) The turbines would be seen against the sky. The presence of the long line of turbines may create a slight increase in the vividness of this view, may have a small adverse effect on the view's unity, and would have a more substantial effect on the view's intactness.

Because fewer turbines would be constructed in the revised KVVWPP layout, the potential visual impact from Viewpoint 6 would not exceed "moderate".

#### **Viewpoint 7: John Wayne Trail**

The Draft EIS indicated that over 30 turbines in turbine strings A, B, and C and from strings on ridges farther to the north would be visible on the ridgelines located 2 miles and farther from Viewpoint 7 looking north along the Iron Horse/John Wayne Trail at Taneum Road. (Draft EIS Figure 3.9-23 shows the simulated view from Viewpoint 7 on the John Wayne Trail at Taneum Road, looking north.) The closer turbines would be seen against the sky. The more distant turbines would be seen against the slopes of distant hills, and under some lighting conditions, would contrast with the backdrop, increasing the visual impact. The visible turbines would have little effect on this view's vividness, but would reduce its unity and intactness to a slightly greater extent.

**Addendum Figure 3.9-4: Viewpoint 4 – Ridges East of US 97**



Source: Priestley 2005

Viewpoint 4: Existing view looking south from Section 35 at upper end of Elk Springs Road



Source: Priestley 2005

Viewpoint 4: Simulated view looking south from Section 35 at upper end of Elk Springs Road

**Addendum Figure 3.9-3: Viewpoint 3 –  
US 97 at Northern End of Bettas Road Looking South**



Source: Priestley 2005

Viewpoint 3: Existing view looking south from US97 at northern intersection with Bettas Road



Source: Priestley 2005

Viewpoint 3: Simulated view looking south from US97 at northern intersection with Bettas Road

**Addendum Figure 3.9-2: Viewpoint 2 – US 97 North of Gravel Pit Looking North**



Source: Priestley 2005

Viewpoint 2: Existing view from US 97 north of gravel pit, looking north. With the project layout revisions no turbines will be visible in this view.

**Addendum Figure 3.9-1: Viewpoint 1 – US 97 at Ellensburg Ranches Road Looking North**



Source: Priestley 2005

Viewpoint 1: Existing view from US 97 at Ellensburg Ranches Road looking north



Source: Priestley 2005

Viewpoint 1: Simulated view from US 97 at Ellensburg Ranches Road looking north

Because fewer turbines would be constructed in the revised KVVPP layout, the potential visual impact from Viewpoint 7 would remain low.

#### **Viewpoint 8: Thorp**

The Draft EIS indicated that over 20 turbines in turbine strings A, B, and C and from strings on ridges farther to the north would be visible on the ridgelines located 3 miles and farther from Viewpoint 8 looking north from the Thorp Highway in the center of the community of Thorp. (Draft EIS Figure 3.9-24 shows the simulated view from Viewpoint 8 on Thorp Highway, looking north.) Most of the turbines would be seen against the sky. However, at this distance, they would have a relatively low visual impact. Some of the turbines would be seen in front of the Stuart Range. However, because of their relatively small size at this viewing distance, they would not likely detract from views toward the Stuarts. The visible turbines would have little effect on this view's vividness, unity, and intactness.

Because fewer turbines would be constructed in the revised KVVPP layout, the potential visual impact from Viewpoint 8 would remain low.

#### **Viewpoint 9: I-90**

The Draft EIS provided two simulations, one with gray turbines and the other with light brown turbines, for comparison from Viewpoint 9 along I-90 looking northeast at Springwood Ranch. (Draft EIS Figures 3.9-25 and 3.9-26 show simulated views from Viewpoint 9 on I-90 at Springwood Ranch, looking northeast, with gray and brown turbines, respectively.) At this distance, the brown turbines have less contrast with the hilly background. However, as shown from Viewpoint 2 (Figure 3.9-18), the brown turbines have greater contrast with the sky when viewed at a closer distance. In addition, the brown color would have a significantly greater contrast when snow is on the ground.

The Draft EIS indicated that over 20 turbines in turbine strings A, B, C, and E and from strings on ridges farther to the north and east would be visible on the ridgelines located 2.5 miles and farther from this viewpoint. Some of the turbines would be seen against the sky although the more distant turbines would be seen against the hillsides and under some lighting conditions would contrast with their backdrop, thereby increasing their visual impact. The visible turbines would have a minor effect on the vividness of this view but would decrease the apparent unity and intactness.

Because fewer turbines would be constructed in the revised KVVPP layout, the potential visual impact from Viewpoint 9, would remain low to moderately low.

#### **Viewpoint 10: Lower Green Canyon Road**

The Draft EIS indicated that almost all of the project's turbines would be visible on the ridgelines in the background of Viewpoint 10, 5 miles or more from Lower Green Canyon Road. (Draft EIS Figure 3.9-27 shows the simulated view from Viewpoint 10 along Lower Green

Canyon Road, looking northwest.) Most of the turbines would be seen against the slopes of the ridges and more distant hills and under some lighting conditions would contrast with the background. At a distance of 5 miles or more, however, this contrast would have little effect on the overall visual impact. Consequently, because the prominence of the turbines in the view would be low, the turbines would have a minor effect on the vividness, unity, and intactness.

Because fewer turbines would be constructed in the revised KVVPP layout, the potential visual impact from this viewpoint would remain low.

### **Viewpoint 11: National Forest Lands**

To evaluate the changes in this viewpoint, the reader should compare the photo simulation presented in Draft EIS Figure 3.9-28 to Addendum Figure 3.9-5.

Viewpoint 11 illustrates views of the project area from the southern portion of the Wenatchee National Forest on Forest Route 35. As this road switches back and forth up the west slope of Table Mountain, the project site becomes increasingly visible. Because of the steep slopes, increasing elevation, and many pullouts on the forest access road, the project site is frequently visible against the broad rural landscape of the valley below. In the plateau areas to the north where recreation areas are located, trees generally screen views to the southwest toward the project site, making the project less visible to recreational visitors.

With the KVVPP layout revisions much of the project would still be seen from Reecer Creek Road and areas of the National Forest used for recreation. However, turbine spacing in the background would be less dense. Given the moderately high to high scenic quality of this view, the impacts of the project on recreational users of forestlands would remain moderately high.

### **Scenic Views of Regional Importance – The Stuart Range**

The Draft EIS described several situations where the project and the Stuart range have the potential to be seen in the same view: in the Thorp vicinity; and from residences on the tops of the ridges southwest of the turbines, and some residences along Sagebrush Road and Ellensburg Ranches Road west of US 97. In the revised KVVPP layout some turbines would remain in these lines of sight; however, fewer turbines would be visible because fewer would be constructed.

**Addendum Figure 3.9-5: Viewpoint 11 – National Forest Lands**



Source: Priestley 2005

Viewpoint 11: Existing view toward project from Forest Road 35



Source: Priestley 2005

Viewpoint 11: Simulated view toward project from Forest Road 35

## Light and Glare

### Light

The Draft EIS explained that to comply with the Federal Aviation Administration's (FAA) aviation safety lighting requirements, the project turbines must be marked with lights. The Draft EIS anticipated that white lights would be required during the day, and red lights at night. Under recently released guidelines, the FAA would no longer require daytime lighting of the turbines if turbines are painted a light color. The applicant is proposing to paint the turbines a light color. Nighttime lighting would be limited to the first and last turbine of every string, and to turbines located every 1000 to 1400 feet between the ends of the strings (Patterson 2005).

As a result of these FAA changes, the KVVPP would no longer install white daytime aviation warning lights, and the number of red nighttime aviation warning lights would be significantly reduced. For example, only 16 nighttime warning lights would be required as shown in Addendum Figure 3.9-6.

The FAA has already concluded that the project would not interfere with aviation operations (FAA 2002). After reviewing final project plans, the FAA would determine the exact number of turbines that would require lights.

The lighting of other project facilities (the Operations and Maintenance facility, and the substations) does not depend on turbine layout, and neither the lighting nor its impacts would change from the description given in the Draft EIS.

### Glare

The revisions to the KVVPP layout will not affect project glare.

#### 3.9.3 Impacts of No Action Alternative

Revision of the turbine layout does not affect the discussion of Impacts of the No Action Alternative Presented in the Draft EIS.

#### 3.9.4 Mitigation Measures

The mitigation measures presented in the Draft EIS for visual impacts remain appropriate. However, mitigation of the exterior lighting of turbines required by FAA will be revised as follows:

- The only exterior lighting on the turbines will be the nighttime aviation warning lighting required by the FAA. This lighting will conform to the FAA's new standards for marking of wind turbines, required intensity and synchronization. It is anticipated that according to the FAA's new guidance daytime lighting of the turbines will not be required.

### **3.9.5 Significant Unavoidable Adverse Impacts**

The Draft EIS concluded that for many viewers, the presence of the wind turbines represents a significant unavoidable adverse impact because it significantly alters the appearance of the rural landscape over a large area of the Kittitas Valley. However, the degree of adversity depends on the viewer's location and sensitivity and the impact on view quality.

The revised KVVPP layout will not create additional significant adverse impacts to visual resources. With the proposed layout changes, the KVVPP will have less of an impact on visual resources particularly for viewpoints located at the north and northwestern portions of the project area. In addition, impacts from FAA required lighting of the turbines will be significantly reduced.

## **3.10 TRANSPORTATION**

### **3.10.1 Affected Environment**

Because the description of the affected environment is based on the local and regional transportation resources surrounding the project area, it is not influenced by the shortening, elimination and repositioning of turbine strings.

### **3.10.2 Impacts of Proposed Action**

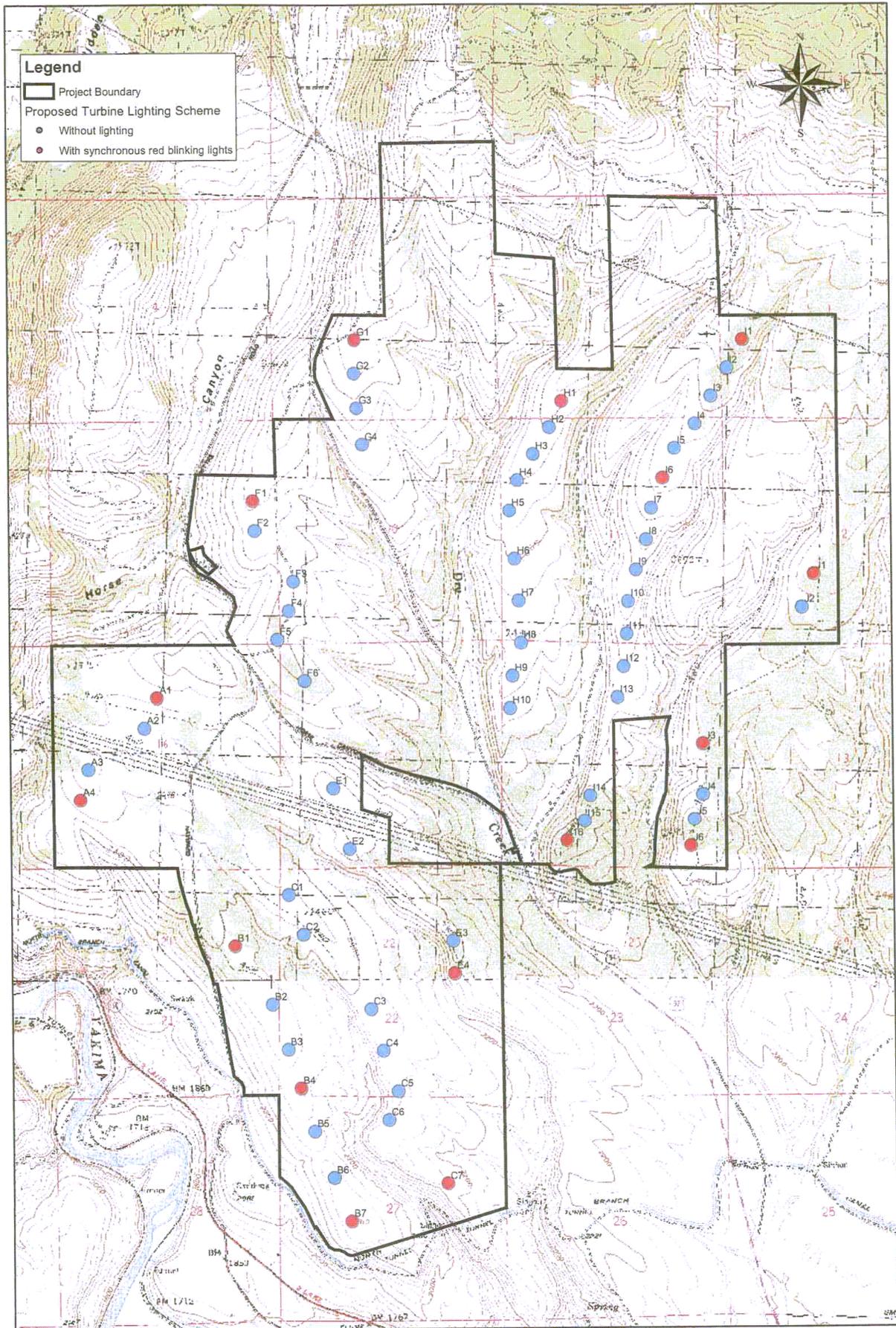
The discussion of impacts to transportation resources of the Proposed Action continues to adequately capture the full range of potential impacts that may result from construction, operation and decommissioning of the KVVPP in its revised layout. Because fewer turbines would be constructed under the Middle Scenario (up to 80 versus 121 indicated in the Draft EIS), impacts for the middle scenario are now conservative.

Addendum Figure 2-1 now accurately indicates project area accesses on the east side of US 97: construction and permanent Access to turbine string "G" will occur at milepost (MP) 145.9. Access to turbine strings H, I and J during construction will occur at MP 144.57. Once the project has been constructed, permanent access to turbine strings H, I and J will occur in the vicinity of Elk Springs Road, approximately 300 feet to the north of MP 144.57. As indicated in the Draft EIS, Washington State Department of Transportation staff have reviewed and approved these accesses. Figure 2-1 of the Draft EIS also showed access on the east side of US 97 in the vicinity of the Thomas Gravel Pit. This access point has been eliminated for safety reasons because of poor sight distance.

As a result, the KVVPP layout revisions will not cause any additional significant adverse impacts to US 97.

### **3.10.3 Impacts of No Action Alternative**

Revision of the turbine layout does not affect the discussion of Impacts of the No Action Alternative Presented in the Draft EIS.



Addendum Figure 3.9-6:  
 Kittitas Valley Wind Power Project  
 Proposed FAA Nighttime Lighting of Turbines  
 Source: Schafer 2005d



### **3.10.4 Mitigation Measures**

Because new impacts have not been identified, additional mitigation measures are not warranted.

### **3.10.5 Significant Unavoidable Adverse Impacts**

The Draft EIS found that no significant unavoidable adverse impacts are associated with the transportation element of the proposed project. The Applicant has proposed several mitigation measures to minimize traffic impacts along all project area roadways.

No additional unavoidable adverse impacts on local or regional transportation resources are expected as a result of the KVVPP layout revisions. Project design and implementation of the mitigation measures described in the Draft EIS would continue to address transportation impacts.

## **3.11 AIR QUALITY**

### **3.11.1 Affected Environment**

Because the description of the affected environment is based on the ambient air quality of the project area and Kittitas County as a whole, it is not influenced by the shortening, elimination and repositioning of turbine strings.

### **3.11.2 Impacts of Proposed Action**

The discussion of impacts to air quality of the Proposed Action continues to adequately capture the full range of potential impacts that may result from construction, operation and decommissioning of the project in its revised layout. Potential impacts were related to construction activity in general, and did not depend on the layout of the turbines specifically.

### **3.11.3 Impacts of No Action Alternative**

Revision of the turbine layout does not affect the discussion of Impacts of the No Action Alternative Presented in the Draft EIS.

### **3.11.4 Mitigation Measures**

Because new impacts have not been identified, additional mitigation measures are not warranted.

### **3.11.5 Significant Unavoidable Adverse Impacts**

As stated in the Draft EIS, no significant unavoidable adverse impacts on air quality are identified. Air quality impacts from the project include low levels of combustion pollutants and dust from vehicles during project construction, operation and maintenance, and decommissioning. Operation of the proposed wind turbine project would not emit air pollutants

into the atmosphere except from operational vehicle exhaust. Without substantial emissions from wind turbine operation, it is anticipated that there would be no observable changes in ambient air quality levels locally or within the United States.

No additional unavoidable adverse impacts on air quality as a result of the KVVPP layout revisions are identified. Project design and implementation of the mitigation measures described in the Draft EIS would continue to minimize impacts on local air quality.

## **3.12 NOISE**

### **3.12.1 Affected Environment**

Because the description of the affected environment is based on the noise environment of the project area, it is not influenced by the shortening, elimination and repositioning of turbine strings.

### **3.12.2 Impacts of Proposed Action**

The Applicant has submitted new modeling for noise impacts resulting from the revised project layout (Baker and Bastach 2005). Because some turbine strings have been shortened, distances from residences and property lines to turbines located in the northern portion of the project area have increased. Overall, as shown in Revised Table 3.12-5, distances to the closest wind turbine now range from approximately 538 to 5080 feet.

The Applicant determined the noise levels of the revised project layout using a procedure identical to that described in the Draft EIS. However, noise modeling was based on a slightly higher turbine sound pressure than presented in the Draft EIS. The sound power level used as input to the noise model for each wind turbine in the revised layout was based on the G90 – 2 MW turbine by Gamesa Eolica. Noise modeling was based on a turbine sound pressure level of approximately 105.3 dBA, and a wind turbine hub height of 67 meters was used for all turbines.

Table 3.12-5 of the Draft EIS identified properties in the project area located within 3,000 feet of a proposed turbine, the distance between structures (if any) to the closest wind turbine, the distance between property lines and the closest wind turbine, and the predicted noise level at structures and property lines. The information presented in Table 3.12-5 has been revised to reflect this new modeling. Addendum Figure 3.12-1 also illustrates the new predicted noise contours in the project area in relation to existing structures and property lines.

State noise regulations (173-60 WAC) require that daytime noise levels for residential structures (Class A EDNA) not exceed 60 dBA, while nighttime levels not exceed 50 dBA. As summarized in Revised Table 3.12-5, the Lower End Scenario is anticipated to result in noise levels ranging from less than 30 to 49 dBA. The results indicate that noise levels would be below the most restrictive nighttime regulation of 50 dBA. Therefore, no significant noise impacts to Class A properties are anticipated during the daytime or nighttime operations of the proposed project.

**Revised Draft EIS Table 3.12-5: Predicted Noise Levels in KVVWPP Area**

Parcel owner	Township-Range-Section of closest property line	Approx Distance from Structure to Turbine (feet)	Nearest Turbine to Structure	Estimated Noise Level at Structure (dBA) EDNA Class A <sup>3</sup>	Approx. Distance from Property Line to Turbine (feet)	Estimated Noise Level at Property Line (dBA) EDNA Class C <sup>4,5</sup>	Nearest Turbine to Property Line
ACKERSON	19-17-15	2489	I16	42	1959	40-45	I16
AHLES	19-17-04	2178	G1	38	2157	35-40	G1
ANDERSON	19-17-26		C7	33		<35	C7
ANDREW	19-17-11	723	H5	49			
ARONICA	19-17-01	No Structure			546	45-50	I1
ARRIOLA	19-17-09	No Structure			1273	40-45	A1
ASSESSOR #19-17-26000-0016	19-17-26	No Structure			2891	35-40	C7
BARKL	19-17-23	No Structure			1254	40-45	E4
BASTERRECHEA	19-17-27	No Structure			2179	35-40	B7
BELL	19-17-09	1740	F5	43	1079	40-45	F5
BERGMAN	20-17-35		I1	29		<35	I1
BEST	19-17-12	4946	I1	35	2469	35-40	J1
BISNETT	19-17-09	No Structure			3864	35-40	F1
BLM	19-17-20	No Structure			750	35-40	A4
BLUME	19-17-23	3673	J6	36	3230	35-40	J6
BORSVOLD	20-17-35		G1	26		<35	G1
BNSF RAILWAY	19-17-28	No Structure			2675	35-40	B5
BRINKMAN	19-17-01	4691	I1	34	2184	35-40	I1
BROWN	19-17-26	3549	C7	36	2712	35-40	C7
BURDYSHAW	19-17-02	No Structure			1437	40-45	H1

Source Baker and Bastach 2005; Schafer 2005g

- 1 Property owners in the KVVWPP area where turbines are proposed but no structure is present that have not been included in this table include L. Tritt, Pautzke Bait Co, C. Thomas, D. and M. Green, J. Majors, Cascade Field & Stream, K. Krogstad, Los Abuelos, Inc., and A. Steinman.
- 2 "No Structure" indicates that aerial photography does not show a structure on the property.
- 3 The EDNA classification for noise levels at structures is Class A. The maximum permissible daytime noise level at a Class A receptor is an Leq of 60 dBA, and the maximum permissible nighttime noise level at a Class A receptor is an Leq of 50 dBA. Approximate noise levels are presented at a predicted specific level (as opposed to a range) for those parcel owners that approach the 50 dBA nighttime noise threshold.
- 4 The EDNA classification for noise levels at property lines is Class C. The maximum permissible noise level (daytime or nighttime) at a Class C receptor is an Leq of 70 dBA.
- 5 In general, noise levels at property lines were not estimated for property owners with signed wind option agreements with the Applicant.

**Revised Draft EIS Table 3.12-5 (Continued): Predicted Noise Levels in KVVPP Area**

Parcel owner	Township-Range-Section of closest property line	Approx. Distance from Structure to Turbine (feet)	Nearest Turbine to Structure	Estimated Noise Level at Structure (dBA) EDNA Class A 3	Approx. Distance from Property Line to Turbine (feet)	Estimated Noise Level at Property Line (dBA) EDNA Class C 4, 5	Nearest Turbine to Property Line
BURT	19-17-23	3146	I16	39			
	19-17-23	3112	E4	39	2350	35-40	E4
	19-17-23	2979	E4	39			
BURKE	19-17-03	No Structure				<35	G1
	19-17-23	4485	E4	36			
CAMERON	19-17-23	4567	E4	36	3903	35-40	J6
CAMPBELL, G	19-17-09	1595	F1	40	1476	40-45	F1
CAMPBELL, J	19-17-23	No Structure			1114	40-45	E4
CAMPBELL, M	19-17-23	2244	E3	41	1114	40-45	E4
CHAR	19-17-26	No Structure			2717	35-40	C7
COE			G1	32		<35	G1
CORNWALL	19-17-01	No Structure			2331	35-40	I1
CRAMER	20-17-35		G1	32		<35	G1
DARROW	19-17-23	3138	E4	38	2762	35-40	E4
DE FACCIO	19-17-28	No Structure			2753	35-40	B5
DER YUEN	19-17-34	No Structure			2323	35-40	B7
DNR		No Structure			PARTICIPATING LANDOWNER		
DOT	19-17-09	No Structure			1275	40-45	F2
ENGELSTAD	19-17-26	3391	C7	38	2180	40-45	C7
FOTHERGILL	20-17-35		I1	29		<35	I1
FITZGERALD	19-17-04	2858	G2	37	2442	35-40	G2
FOSSETT	19-17-02	4172	H1	36	3331	35-40	H1
FRANKLIN	19-17-23	5080	E4	36	4299	35-40	J6

Source. Baker and Bastach 2005, Schafer 2005g

- Property owners in the KVVPP area where turbines are proposed but no structure is present that have not been included in this table include: L. Tritt, Pautzke Bart Co, C. Thomas, D and M Green, J. Majors, Cascade Field & Stream, K Krogstad, Los Abuelos, Inc, and A Steinman.
- "No Structure" indicates that aerial photography does not show a structure on the property
- The EDNA classification for noise levels at structures is Class A. The maximum permissible daytime noise level at a Class A receptor is an Leq of 60 dBA, and the maximum permissible nighttime noise level at a Class A receptor is an Leq of 50 dBA. Approximate noise levels are presented at a predicted specific level (as opposed to a range) for those parcel owners that approach the 50 dBA nighttime noise threshold
- The EDNA classification for noise levels at property lines is Class C. The maximum permissible noise level (daytime or nighttime) at a Class C receptor is an Leq of 70 dBA
- In general, noise levels at property lines were not estimated for property owners with signed wind option agreements with the Applicant.

**Revised Draft EIS Table 3.12-5 (Continued): Predicted Noise Levels in KVVWPP Area**

Parcel owner	Township-Range-Section of closest property line	Approx Distance from Structure to Turbine (feet)	Nearest Turbine to Structure	Estimated Noise Level at Structure (dBA) EDNA Class A 3	Approx Distance from Property Line to Turbine (feet)	Estimated Noise Level at Property Line (dBA) EDNA Class C 4, 5	Nearest Turbine to Property Line
FREEMAN	19-17-26	4680	C7	35	3727	35-40	C7
GABRIELSON	19-17-12	No Structure			631	45-50	J1
GALLAGHER	19-17-13	No Structure			1260	40-45	J2
GARRETT	19-17-13	No Structure			538	45-50	J3
GASKILL	19-17-09	1816	F2	41	1678	40-45	F2
GENSON		1026	H10	45	PARTICIPATING LANDOWNER		
GEORGE	19-17-28	No Structure			2239	35-40	B7
GEREAN, L	19-17-01	1800	I1	39	1426	40-45	I1
GEREAN, T	19-17-01	2503	I1	38	2094	40-45	I1
GORDON	19-17-23	No Structure			3539	35-40	E4
GORSKI	19-17-12	No Structure			1114	40-45	J1
HAMPTON	20-17-35		G1	32		<35	G1
HARRIGAN	20-17-35		I1	28		<35	I1
HAVENS	19-17-27	1994	B6	41	985	40-45	B7
HAWLEY	19-17-23	2386	J6	39	1824	40-45	J6
HENLEY GROUP	19-17-04	2121	G1	37	1905	35-40	G1
HENRY	19-17-12	3060	J1	36	594	45-50	J1
HENSON	19-17-27	1884	B7	39	1480	35-40	B7
HIGGINBOTHAM	19-17-23	3724	E4	37	3582	35-40	E4
HILL	19-17-23	3845	E4	37			
			G1	21		<35	G1

Source: Baker and Bastach 2005, Schafer 2005g.

- 1 Property owners in the KVVWPP area where turbines are proposed but no structure is present that have not been included in this table include L. Titt, Pautzke Bart Co., C. Thomas, D. and M. Green, J. Majors, Cascade Field & Stream, K. Krogstad, Los Abuelos, Inc., and A. Steinman
- 2 "No Structure" indicates that aerial photography does not show a structure on the property.
- 3 The EDNA classification for noise levels at structures is Class A. The maximum permissible daytime noise level at a Class A receptor is an Leq of 60 dBA, and the maximum permissible nighttime noise level at a Class A receptor is an Leq of 50 dBA. Approximate noise levels are presented at a predicted specific level (as opposed to a range) for those parcel owners that approach the 50 dBA nighttime noise threshold
- 4 The EDNA classification for noise levels at property lines is Class C. The maximum permissible noise level (daytime or nighttime) at a Class C receptor is an Leq of 70 dBA
- 5 In general, noise levels at property lines were not estimated for property owners with signed wind option agreements with the Applicant

**Revised Draft EIS Table 3.12-5 (Continued): Predicted Noise Levels in KVVPP Area**

Parcel owner	Township-Range-Section of closest property line	Approx Distance from Structure to Turbine (feet)	Nearest Turbine to Structure	Estimated Noise Level at Structure (dBA) EDNA Class A 3	Approx Distance from Property Line to Turbine (feet)	Estimated Noise Level at Property Line (dBA) EDNA Class C 4, 5	Nearest Turbine to Property Line
HINK	19-17-04	2935	F1	37	2270	35-40	F1
HOLLISTER	19-17-23	No Structure			557	45-50	J6
HOLMQUIST	19-17-21	No Structure			984	40-45	B1
HOLTZ	19-17-09	No Structure			1497	35-40	F1
JACKSON, MARK S	19-17-09	2326	A1	37	1823	35-40	A1
JARNAGIN	201-17-35		I1	31		<35	I1
JONES	19-17-26	3102	C7	38	1917	40-45	C7
JORGENSON	19-17-09	No Structure			2203	35-40	F1
KELLY	19-17-28	No Structure			2837	35-40	B7
KIRCHMAN	19-17-13	No Structure			775	45-50	J3
KITTITAS CO TAX DEED	19-17-28	No Structure			3256	35-40	B4
KITTITAS RECLAMATION DISTRICT	19-17-26	No Structure			713	40-45	B7
KUHN	19-17-13	No Structure			910	40-45	J2
LEGOWSKI	20-17-35		G1	33		<35	G1
LOS ABUELOS		No Structure			PARTICIPATING LANDOWNER		
MARTIN	19-17-04	4360	F1	35	2757	35-40	F1
MCFARLAND	19-17-28	No Structure			1462	40-45	B4
MCLEOD	19-17-28	No Structure			3150	35-40	B5
MILLETT	19-17-23	2098	E3	41	1155	40-45	E4
MEYER	19-17-01	No Structure			2740	40-45	I1

Source Baker and Bastach 2005, Schafer 2005g

- 1 Property owners in the KVVPP area where turbines are proposed but no structure is present that have not been included in this table include L. Tutt, Pautzke Bait Co, C. Thomas, D and M Green, J Majors, Cascade Field & Stream, K Krogstad, Los Abuelos, Inc., and A Steinman
- 2 "No Structure" indicates that aerial photography does not show a structure on the property
- 3 The EDNA classification for noise levels at structures is Class A. The maximum permissible daytime noise level at a Class A receptor is an Leq of 60 dBA, and the maximum permissible nighttime noise level at a Class A receptor is an Leq of 50 dBA. Approximate noise levels are presented at a predicted specific level (as opposed to a range) for those parcel owners that approach the 50 dBA nighttime noise threshold.
- 4 The EDNA classification for noise levels at property lines is Class C. The maximum permissible noise level (daytime or nighttime) at a Class C receptor is an Leq of 70 dBA.
- 5 In general, noise levels at property lines were not estimated for property owners with signed wind option agreements with the Applicant.

**Revised Draft EIS Table 3.12-5 (Continued): Predicted Noise Levels in KVVWPP Area**

Parcel owner	Township-Range-Section of closest property line	Approx Distance from Structure to Turbine (feet)	Nearest Turbine to Structure	Estimated Noise Level at Structure (dBA) EDNA Class A 3	Approx Distance from Property Line to Turbine (feet)	Estimated Noise Level at Property Line (dBA) EDNA Class C 4, 5	Nearest Turbine to Property Line
MILLER	19-17-15	No Structure			1284	40-45	I16
MORRAITIS	19-17-02	1000	H1	48	758	45-50	H1
MOERY	20-17-35		I1	33		<35	I1
MORSE	19-18-07	No Structure			3560	35-40	J1
MURPHY	19-17-23	No Structure			3271	35-40	J6
NIELSEN	20-17-35		I1	32		<35	
NELSON CREEK VISIONS	19-17-09	No Structure			3514	35-40	F2
NELSON	19-17-14	1253	J3	46	538	45-50	I13
NEUMAN	19-17-27	No Structure			2158	35-40	B7
NORTH	19-17-09	2622	A1	38	1955	35-40	A1
OBERHANSLEY	19-17-02	No Structure			2662	45-50	H1
PARKER	19-17-01	No Structure			2277	35-40	I1
PEARSON	19-17-27	No Structure			1232	35-40	B7
PENTZ	19-18-07	No Structure			3196	35-40	J1
POLLOCK	19-17-34	No Structure			2320	35-40	B7
POULIN	19-17-26	No Structure			1642	35-40	C7
PTASZYNSKI	19-17-26	2904	C7	36	2159	35-40	C7
RAINBOW VALLEY RANCH LLC	19-17-04	2352	G1		2039	35-40	G1
RANCH ON SWAUK CREEK LLC, THE	19-17-03	6322	G1	29			
	19-17-03	5959	G1	29	580	45-50	G1
	19-17-03	5583	G1	30			
RAND	19-17-09	No Structure			1412	40-45	F4

Source: Baker and Bastach 2005; Schafer 2005g

- 1 Property owners in the KVVWPP area where turbines are proposed but no structure is present that have not been included in this table include L. Tritt, Pautzke Bait Co, C Thomas, D and M Green, J Majors, Cascade Field & Stream, K Krogstad, Los Abuelos, Inc, and A. Steinman
- 2 "No Structure" indicates that aerial photography does not show a structure on the property
- 3 The EDNA classification for noise levels at structures is Class A. The maximum permissible daytime noise level at a Class A receptor is an Leq of 60 dBA, and the maximum permissible nighttime noise level at a Class A receptor is an Leq of 50 dBA. Approximate noise levels are presented at a predicted specific level (as opposed to a range) for those parcel owners that approach the 50 dBA nighttime noise threshold.
- 4 The EDNA classification for noise levels at property lines is Class C. The maximum permissible noise level (daytime or nighttime) at a Class C receptor is an Leq of 70 dBA
- 5 In general, noise levels at property lines were not estimated for property owners with signed wind option agreements with the Applicant

**Revised Draft EIS Table 3.12-5 (Continued): Predicted Noise Levels in KVVPP Area**

Parcel owner	Township-Range-Section of closest property line	Approx Distance from Structure to Turbine (feet)	Nearest Turbine to Structure	Estimated Noise Level at Structure (dBA) EDNA Class A 3	Approx Distance from Property Line to Turbine (feet)	Estimated Noise Level at Property Line (dBA) EDNA Class C 4, 5	Nearest Turbine to Property Line
REILLEY	19-17-26	No Structure			1716	40-45	C7
ROBERTSON	19-17-09	1373	A1	42	1239	40-45	A1
ROMERO	19-17-15	No Structure			1195	40-45	I16
SAFFORD	19-17-09	No Structure			4325	35-40	F2
SANDALL	20-17-35		G1	32		<35	G1
SAUNDERS	20-17-35		I1	30		<35	I1
SCHALLER	19-17-09	No Structure			2306	35-40	F1
SCHOBER		No Structure			PARTICIPATING LANDOWNER <sup>2</sup>		
SCHWAB	19-17-13	2098	J4	41	575	45-50	J4
SIEGL	20-17-35		I1	31		<35	I1
SHERMAN	19-17-13	No Structure			854	45-50	J6
SHORETT	19-17-09	No Structure			2118	35-40	A1
SHULTS	19-17-23	3359	E4	38	1262	40-45	E4
		3448	E4	38			
SIX TEN INVESTMENTS	19-17-26	No Structure			1355	40-45	C7
SLAPE	20-17-35		I1	33		<35	I1
SMITH	19-17-15	No Structure			1492	40-45	I16
SPRINGWOOD RANCH	19-17-28	No Structure			3281	35-40	B4
STEWART	20-17-35	3804	I1	35	3321	35-40	I1
STORWICK	19-17-15	No Structure			1509	40-45	E2
SWAUK VALLEY RANCH	19-17-17	No Structure			612	45-50	A4

Source Baker and Bastach 2005, Schafer 2005g

- Property owners in the KVVPP area where turbines are proposed but no structure is present that have not been included in this table include L. Tritt, Pautzke Bait Co, C. Thomas, D and M. Green, J Majors, Cascade Field & Stream, K Krogstad, Los Abuelos, Inc, and A. Steinman
- "No Structure" indicates that aerial photography does not show a structure on the property
- The EDNA classification for noise levels at structures is Class A. The maximum permissible daytime noise level at a Class A receptor is an Leq of 60 dBA, and the maximum permissible nighttime noise level at a Class A receptor is an Leq of 50 dBA. Approximate noise levels are presented at a predicted specific level (as opposed to a range) for those parcel owners that approach the 50 dBA nighttime noise threshold.
- The EDNA classification for noise levels at property lines is Class C. The maximum permissible noise level (daytime or nighttime) at a Class C receptor is an Leq of 70 dBA.
- In general, noise levels at property lines were not estimated for property owners with signed wind option agreements with the Applicant.

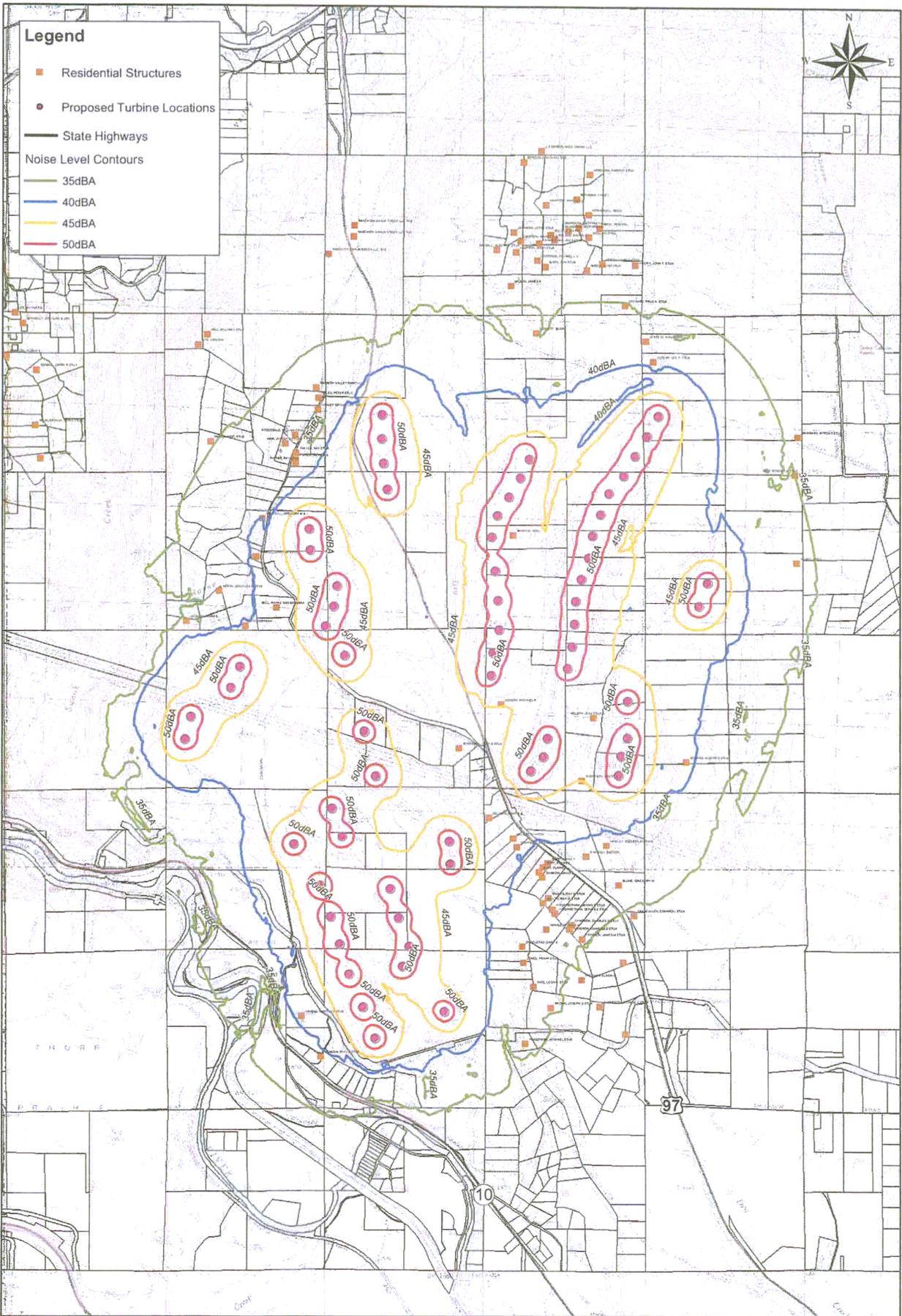
**Revised Draft EIS Table 3.12-5 (Continued): Predicted Noise Levels in KVVWPP Area**

Parcel owner	Township-Range-Section of closest property line	Approx. Distance from Structure to Turbine (feet)	Nearest Turbine to Structure	Estimated Noise Level at Structure (dBA) EDNA Class A 3	Approx. Distance from Property Line to Turbine (feet)	Estimated Noise Level at Property Line (dBA) EDNA Class C 4, 5	Nearest Turbine to Property Line
SWEEN	20-17-35		I1	23		<35	I1
SZUBA	19-18-07	No Structure			3215	35-40	J1
TAASEVIGEN	19-17-23		J6	35		<35	J6
TATE	19-17-26	3081	C7	37	2958	35-40	C7
	19-17-04	2555	F1	36			
THAYER		2339	F1	37	1880	35-40	G2
		2227	F1	37			
THOMAS		No Structure					
THOMPSON, B	19-17-14	1226	J6	45	575	45-50	I14
THOMPSON, C	19-18-07	No Structure			3156	35-40	J1
TONSETH	19-17-28	No Structure			2195	35-40	B5
US TIMBERLANDS YAKIMA LLC			G1	25			
WEILER	20-17-35	No Structure			4607	35-40	I1
WHITELEY	19-17-15	No Structure			1185	40-45	I16
WILKENS	19-17-13	No Structure			580	45-50	J4
WILSON	20-17-35	5759	H1	34	4769	35-40	H1
WINES	19-17-23	No Structure			704	45-50	I16
WINES/SNOVER	19-17-23	2921	J6	39	996	40-45	I16
WINKLE	19-17-23	3869	E4	37	3300	35-40	E4
YEAGER	19-17-04	2442	G2	36	1894	35-40	G2
ZELLMER	19-17-23	1547	E3	43	1220	40-45	I16

**PARTICIPATING LANDOWNER**

Source: Baker and Bastach 2005, Schafer 2005g.

- 1 Property owners in the KVVWPP area where turbines are proposed but no structure is present that have not been included in this table include: L. Tritt, Pautzke Bait Co, C. Thomas, D and M. Green, J. Majors, Cascade Field & Stream, K Krogstad, Los Abuelos, Inc, and A Steinman.
- 2 "No Structure" indicates that aerial photography does not show a structure on the property.
- 3 The EDNA classification for noise levels at structures is Class A. The maximum permissible daytime noise level at a Class A receptor is an Leq of 60 dBA, and the maximum permissible nighttime noise level at a Class A receptor is an Leq of 50 dBA. Approximate noise levels are presented at a predicted specific level (as opposed to a range) for those parcel owners that approach the 50 dBA nighttime noise threshold.
- 4 The EDNA classification for noise levels at property lines is Class C. The maximum permissible noise level (daytime or nighttime) at a Class C receptor is an Leq of 70 dBA.
- 5 In general, noise levels at property lines were not estimated for property owners with signed wind option agreements with the Applicant.



Addendum Figure 3.12-1:  
 Noise Contours for Revised Layout  
 Source: Schafer 2005 j

0 0.10.2 0.4 0.6 0.8 1 1.2 Miles

Regulatory thresholds might be exceeded if the sound pressure level for the turbine ultimately selected for construction is greater than the modeled scenario. The Draft EIS identified that if the sound pressure level increases by 5 dBA the shape of the sound pressure level contours shown in Addendum Figure 3.12-1 would not change. However, the value of the contours would increase by 5 dBA. A sound pressure level up to 108 dBA remains representative of the Lower End Scenario of turbine noise test data for the turbines under consideration for the proposed project (see Draft EIS, Sagebrush Power Partners LLC 2003f).

Therefore, if the turbine selected has a sound pressure level greater than 105.3 dBA used for the modeling here, noise levels at three residences (one participating in the project and two not) might exceed the regulatory threshold. Nevertheless, the project is required to comply with the most stringent state noise regulations, Class A EDNA with nighttime levels not to exceed 50 dBA. The draft EIS recommended that an acoustical analysis of the final turbine layout be prepared prior to construction, using noise level data for the final turbine type selected. If compliance with the state requirement (WAC 173-60) is not demonstrated, turbines should be relocated or removed, to the extent necessary. This recommendation remains valid, and would ensure that noise levels at residences do not exceed regulatory thresholds.

Noise levels for Class C EDNA (industrial/agricultural) are not to exceed 70 dBA at property lines. Noise levels at the property lines of Class C parcels within the project area range from a minimum of 35 dBA to a maximum of 50 dBA (see revised Table 3.12-5) for the Lower End scenario. Because the predicted noise level is below the threshold established for Class C properties by the WAC, no significant noise impacts are anticipated.

The Draft EIS also assessed the potential increase in ambient background noise levels as a result of operation of the project. Section 3.12.2, of the Draft EIS (Affected Environment – Increases in Ambient Noise Levels) discussed that ambient background noise levels were measured over several days at three locations within the project area. The measured noise levels were then assessed against the predicted noise levels for the Middle Scenario. Addendum Table 3.12-1 below performs the same assessment for the predicted noise levels for the revised KVVPP layout. The conclusions regarding whether the change in noise levels might be perceived have not changed.

**Addendum Table 3.12-1: Perception of changes in Noise Level of the Revised KVVPP Layout**

Noise measurement location and nearest property owners	Ambient average noise level $L_{eq}$ dBA	Predicted noise levels due to turbine operation (Draft EIS) dBA	Revised predicted noise levels due to turbine operation dBA	Would change in noise levels be perceived?
A - Anthony, Gaskill	Mid-40's	40-45	40-41	Would not be perceived as a noticeable increase
B - Zellmer, Genson	Low to mid-50's	40-48	43-45	Would not be perceived as a noticeable increase
C - Nelson, Thompson	Mid- to upper 30's	46-48	45-46	Could still be subjectively heard as approximately a doubling in loudness

Source: Energy Facility Site Evaluation Council 2004a.

### 3.12.3 Impacts of No Action Alternative

Revision of the turbine layout does not affect the discussion of Impacts of the No Action Alternative Presented in the Draft EIS.

### 3.12.4 Mitigation Measures

Because new impacts have not been identified, additional mitigation measures are not warranted.

### 3.12.5 Significant Unavoidable Adverse Impacts

The Draft EIS concluded that with implementation of the proposed and recommended mitigation measures outlined in the Draft EIS, no significant unavoidable adverse impacts from noise associated with constructing, operating, or decommissioning the proposed project would be anticipated.

No additional significant unavoidable adverse noise impacts are expected as a result of the project layout revisions. The revised project layout decreases noise impacts to receptors near the project area.

### **3.13 PUBLIC SERVICES AND UTILITIES**

#### **3.13.1 Affected Environment**

Because the description of the affected environment is based on the availability of public services and utilities for Kittitas County as a whole, it is not influenced by the shortening, elimination and repositioning of turbine strings.

#### **3.13.2 Impacts of Proposed Action**

The discussion of impacts to public services and utilities of the Proposed Action continues to adequately capture the full range of potential impacts that may result from construction, operation and decommissioning of the KVVPP in its revised layout.

#### **3.13.3 Impacts of No Action Alternative**

Revision of the turbine layout does not affect the discussion of Impacts of the No Action Alternative Presented in the Draft EIS.

#### **3.13.4 Mitigation Measures**

Because new impacts have not been identified, additional mitigation measures are not warranted.

#### **3.13.5 Significant Unavoidable Adverse Impacts**

The Draft EIS concluded that with implementation of the mitigation measures proposed by the Applicant and other agencies involved in the review of this project, no significant unavoidable adverse impacts to public services and utilities would be anticipated.

No additional unavoidable adverse impacts on public services and utilities would occur as a result of the KVVPP layout revisions.

### **3.14 CUMULATIVE IMPACTS**

Since issuance of the Draft EIS, the status of two other projects proposed in Kittitas County has changed. First, the Governor of Washington State approved the Wild Horse Wind Power Project in July of 2005, and the Wild Horse project has proceeded to construction (Energy Facility Site Evaluation Council 2005a.) As for enXco's Desert Claim Wind Power project, the Development Activities Application submitted to Kittitas County was denied in April 2005. However, enXco representatives have indicated on the record their intent to submit an Application for Site Certification for the Desert Claim Project to EFSEC (Energy Facility Site Evaluation Council. 2005b). Therefore, analysis of the cumulative impacts of these three projects is still merited.

As indicated in the previous sections of this Addendum, revision of the turbine layout does not create any new significant adverse environmental impacts as a result of the construction or

operation of the KVVPP. Changes in impacts have been identified in the following areas: shadow flicker, noise, and visual impacts. Changes in impacts have not been identified in other areas of the environment. Therefore a change in cumulative impacts would not be expected in areas other than shadow flicker, noise and visual impacts.

Shadow flicker impacts described in Section 3.4 above are limited to those residences in the direct vicinity of the KVVPP turbines. As explained in Section 3.14.8 of the Draft EIS the effects of shadow flicker are limited to discrete locations and this prevents cumulative impacts from shadow flicker.

Noise impacts described in Section 3.12 above are also limited to the vicinity of the KVVPP. As explained in Section 3.14.16 of the Draft EIS, the three projects are sufficiently far apart to prevent cumulative impacts from noise.

Section 3.14 of the Draft EIS identified three types of cumulative visual impacts that would be possible if all three projects were constructed and operated.

First, the Desert Claim and KVVPP projects would be visible in proximity to each other from certain viewpoints. Figures 3.14-3 through 3.14-8 of the Draft EIS described such views from Reecer Creek Road and from outside the national Forest Boundary to the north of the KVVPP sites. In both of these views the Kittitas Valley would be in the background of the view. With fewer turbines being installed, the actual impact to these views would be lessened. Therefore Figures 3.14-3 through 3.14-8 of the Draft EIS and the accompanying analysis overestimate the actual cumulative impact of the revised KVVPP layout with the Desert Claim project.

The second type of cumulative visual impact described in the Draft EIS was the overall effect of multiple wind energy projects on the regional landscape, and the experience of viewers traveling through the Kittitas Valley viewing the turbines at multiple locations and multiple times. Although the revised KVVPP layout would decrease the visual impact in the vicinity of the KVVPP, it would not impact the cumulative effect of repetitive views of multiple wind projects. The Draft EIS therefore continues to adequately describe this potential impact.

Finally, the Draft EIS also addressed the cumulative impact of the projects on nighttime lighting in the Kittitas Valley, especially that of the KVVPP and Desert Claim projects. With fewer turbines requiring nighttime lighting, this impact would be lessened, but not eliminated altogether.

In conclusion, the impacts identified from revision of the KVVPP layout that have been noted in this Addendum would not change the analysis of cumulative impacts in the Draft EIS when this project is considered jointly with the Wild Horse Wind Power Project and the Desert Claim Project.

## CHAPTER 4: NEW REFERENCES

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- Patterson J. 2005. *Getting it Right with Local Government. FAA Success in Addressing Local Obstruction Lighting Concerns* Power Point Presentation. May 17, 2005.
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- Energy Facility Site Evaluation Council. 2005a. *Wild Horse Wind Power Project Site Certification Agreement, Amendment No. 1*. October 13, 2005.
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- Young, Andrew. June-October 2003. Director of Project Development, Northwest Region, Sagebrush Power Partners LLC. Personal communications with Shapiro and Associates.

## CHAPTER 5: ADDENDUM DISTRIBUTION LIST

### Federal Agencies

Boynton, Jim	Wenatchee National Forest
Cantwell, Maria Hon.	U.S. Senate
Custer, Cindy	Bonneville Power Administration
Bogert, L. Michael	U.S. EPA Region 10
Kurz, Gregg	U.S. Fish and Wildlife Service
Miller, Mark	U.S. Fish and Wildlife Service
Murray, Patty Hon.	U.S. Senator
Peck, Nick	BPA Transmission
Rogalski, Floyd	U.S. Forest Service, Cle Elum Ranger District
Yarde, Rick	Bonneville Power Administration

### Tribal Government

Cloud, Louis Hon.	Yakama Indian Nation – Chair, Yakama Tribal Council
Meninick, Johnson	Yakama Indian Nation
Mose Jr., Harvey Hon.	Confederated Tribes of the Colville Reservation, Chair
Palmer, Caroll	Yakama Indian Nation - Administrator
Pleasants, Camille	Confederated Tribes of the Colville Reservation
Shannon, Donald	Confederated Tribes of the Colville Reservation
Spencer, Andrea	Yakama Indian Nation – Natural Resources

### State Agencies

Anderson, Mark	Washington Department of Community, Trade, and Economic Development
Bracken, Edd	Washington Department of Fish and Wildlife
Clausing, Ted	Washington Department of Fish and Wildlife
Dean, Brigid	Washington Parks and Recreation Commission
Dirkx, J. Mark	Washington Department of Ecology
Essko, Ann	Attorney General's Office
External SEPA Coordinator	Washington Department of Natural Resources
Harger, Alan	Washington State Department of Transportation
Hinkle, Bill, Rep.	Washington State House of Representatives
Holmquist, Janea Rep.	Washington State House of Representatives
Holmstrom, Rick	Washington State Department of Transportation, South Central Region
Johnston, Milt	Washington Department of Natural Resources
Kramer, Stephenie	Washington Office of Archaeology and Historic Preservation
Mulliken, Joyce Sen.	Washington State Senate
Renfrow, Brent	Washington Department of Fish and Wildlife
Sandison, Derek	Washington Department of Ecology, Regional Director

<b>Tayer, Jeff</b>	Washington Department of Fish and Wildlife
<b>Torem, Adam</b>	Office of Administrative Hearings
<b>Tribble, Michael</b>	Attorney General's Office
<b>Usibelli, Tony</b>	Washington Department of Community, Trade, and Economic Development - Energy Division
<b>Vigue, Lauri</b>	Washington Department of Fish and Wildlife
<b>Whitlam, Dr. Robert G.</b>	Washington Office of Archaeology and Historic Preservation

**EFSEC Council Members**

<b>Adelsman, Hedia</b>	Washington Department of Ecology
<b>Fryhling, Dick</b>	Washington Department of Community, Trade, and Economic Development
<b>Johnson, Patti</b>	Kittitas County Waste Management
<b>Luce, Jim</b>	EFSEC Chair
<b>Towne, Chris</b>	Washington Department of Fish and Wildlife
<b>Sweeney, Tim</b>	Washington Utilities and Transportation Commission
<b>Wilson, Judy</b>	Washington Department of Natural Resources

**Local Government**

<b>Bowen, David</b>	Kittitas County Board of Commissioners
<b>Crancovich, Alan</b>	Kittitas County Board of Commissioners
<b>Huston, Perry</b>	Kittitas County Board of Commissioners
<b>Davis, Todd</b>	Kittitas County Noxious Weed Control Board
<b>Porter, Jeri</b>	City of Roslyn, Mayor
<b>Hurson, James</b>	Kittitas County Prosecutors Office
<b>Johnson, Keith</b>	Kittitas Audubon Society
<b>Kjelland, Mark</b>	Kittitas County Public Utilities District
<b>Lael, Anna</b>	Kittitas County Conservation District
<b>Piercy, Darryl</b>	Kittitas County Community Development Services
<b>Polck, Darrell</b>	Grant County PUD
<b>White, Joe</b>	Grant County PUD

**Libraries and Educational Institutions**

**Cle Elum Library**  
**Ellensburg Public Library**  
**Washington State Library, Joel M. Pritchard Branch**  
**Central Washington University JE Brooks Library**

**Businesses and Individuals**

**Andrew, Noel**  
**Armstrong, John & Cynthia**

<b>Aronica, Fred</b>	
<b>Bala, Chad</b>	Terradesign Works, Land Use Consultants
<b>Baldi, Gloria &amp; J E</b>	
<b>Bates, Dwight Lee</b>	
<b>Belbeck, Mary D</b>	
<b>Booth, Nelson</b>	
<b>Boyle, James</b>	
<b>Burdyslaw, Emilia</b>	
<b>Carmody, James</b>	Velikanje Moore & Shore, P.S.
<b>Carter, Nina</b>	Audubon of Washington
<b>Diaz, Jennifer</b>	Horizon Wind Energy
<b>Dippmann, Jeffrey</b>	
<b>Dormyer, Kelly</b>	
<b>Draper, Roy</b>	
<b>Drummond, Susan</b>	Foster Pepper & Shefelman, PLLC
<b>Erickson, Wallace</b>	WEST Inc.
<b>Garratt, Roger</b>	Puget Sound Energy
<b>Garrett, Ed</b>	
<b>Gerson, Michael &amp; Louise</b>	
<b>Hall, Chris and William</b>	
<b>Houser, Neal</b>	
<b>Howard, Jeff</b>	
<b>Huisenga, Michael</b>	
<b>Inge, Gary</b>	
<b>Jeffrey, Jay</b>	
<b>Kiser, Jim</b>	NW Geotech
<b>Landreth, James</b>	
<b>Larsen, Eric</b>	
<b>Lathrop, F. Steven</b>	Attorney at Law
<b>Lee, David</b>	
<b>Lindstrom, Gloria and Hal</b>	
<b>Gagliano, Troy</b>	Renewable Northwest Project
<b>McMahan, Timothy L.</b>	Stoel Rives LLP
<b>Masterson, Ikuno</b>	Adolfson & Associates
<b>Moloney, Patrick</b>	
<b>Monaghan, Rosemary</b>	
<b>Nienaber, Mike</b>	
<b>Oslund, Steve and Amy</b>	
<b>Peebles, Darrel</b>	Counsel for Sagebrush Power Partners LLP
<b>Price, Earle</b>	
<b>Putnam, Rosemary</b>	
<b>Quinn, Daniel</b>	
<b>Ransom, Tim</b>	Puget Sound Water Quality Action Team
<b>Robertson, Michael H.</b>	
<b>Rogers, Beth</b>	
<b>Sanddall, Hubert &amp; Maren</b>	

<b>Saunders, Geoff</b>	
<b>Schantz, Linda &amp; Charles</b>	
<b>Silber, Andy</b>	Sierra Club, Cascade Chapter
<b>Shepard, Maria</b>	
<b>Skelly, Michael</b>	Horizon Wind Energy
<b>Slothower, Jeff</b>	Attorney at Law
<b>Steeb, David S.</b>	Desert Claim Wind Power Project
<b>Stewart, Jim</b>	
<b>Stonington, Louise</b>	Sierra Club - Cascade Chapter
<b>Strand, Debbie</b>	Phoenix Economic Development Group
<b>Taylor, Chris</b>	Horizon Wind Energy
<b>Taylor, David</b>	Taylor Angus Ranch
<b>Thuran, Gail</b>	
<b>Trautman, Pam</b>	Lithic Analysts
<b>Wearne, Kathryn</b>	
<b>White, Joe</b>	
<b>Woodcock, Woody</b>	
<b>Williams, John</b>	Rebound
<b>Zuelsdorff, Kathleen</b>	Public Service Commission of Wisconsin
<b>R.O.K.T</b>	Residents Opposed to Kittitas Turbines

# KITTITAS VALLEY WIND POWER PROJECT DEVELOPMENT ACTIVITIES APPLICATION



Submitted By:  
Sagebrush Power Partners, LLC  
October 14, 2005

Submitted To:  
Kittitas County Community Development Services

Project Developed By:



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KITTITAS COUNTY  
CDS

**Exhibit 19**

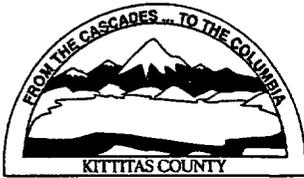
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**KITTITAS COUNTY  
COMMUNITY DEVELOPMENT SERVICES**

**REZONE APPLICATION**

*(To change from the existing zone to another zone)*

KITTITAS COUNTY ENCOURAGES THE USE OF PRE-APPLICATION MEETINGS. PLEASE CALL THE DEPARTMENT IF YOU WOULD LIKE TO SET UP A MEETING TO DISCUSS YOUR PROJECT. INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED.

PLEASE TYPE OR PRINT CLEARLY IN INK. ATTACH ADDITIONAL SHEETS AS NECESSARY. THE FOLLOWING ITEMS MUST BE ATTACHED TO THIS APPLICATION PACKET:

**REQUIRED ATTACHMENTS**

- ADDRESS LIST OF ALL LANDOWNERS WITHIN 300 FEET OF THE SITE'S TAX PARCEL. IF ADJOINING PARCELS ARE OWNED BY THE APPLICANT, THE 300 FEET EXTENDS FROM THE FARTHEST PARCEL. IF THE PARCEL IS WITHIN A SUBDIVISION WITH A HOMEOWNERS OR ROAD ASSOCIATION, PLEASE INCLUDE THE ADDRESS OF THE ASSOCIATION.

Please see Exhibit 3d, 'Adjacent Land Owners within 300 Feet'

- SITE PLAN OF THE PROPERTY WITH ALL PROPOSED: BUILDINGS; POINTS OF ACCESS, ROADS, AND PARKING AREAS; SEPTIC TANK AND DRAINFIELD AND REPLACEMENT AREA; AREAS TO BE CUT AND/OR FILLED; AND, NATURAL FEATURES SUCH AS CONTOURS, STREAMS, GULLIES, CLIFFS, ETC.

Please see Exhibit 1, 'Project Site Layout'

- SEPA CHECKLIST \*\*\*

\*\*\*NOTE: A Draft Environmental Impact Statement (DEIS) for the Kittitas Valley Wind Power Project has been prepared by the Washington Energy Facility Site Evaluation Council (EFSEC). Applicant requests that Kittitas County consider this more detailed and thorough environmental document on lieu of the SEPA checklist. It is available for download at: [http //www efsec wa.gov/kittitaswind/deis/kvdeis html#deis](http://www.efsec.wa.gov/kittitaswind/deis/kvdeis.html#deis)

**FEE:**

\$1100.00 (\$900 Rezone + \$200 SEPA) to Kittitas County Community Development Services Department

**FOR STAFF USE ONLY**

I CERTIFY THAT I RECEIVED THIS APPLICATION AND IT IS COMPLETE.

SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_

RECEIPT # \_\_\_\_\_

NOTES: \_\_\_\_\_

DATE STAMP  
HERE

1. **Name, mailing address and day phone of land owner(s) of record:**  
See Exhibit 3a, 'Legal Descriptions of Lands under Option with Applicant'.
  
2. **Name, mailing address and day phone of authorized agent, if different from landowner of record:**  
  
Chris Taylor  
Director of Development  
Sagebrush Power Partners, LLC  
222 E. Fourth Street  
Ellensburg, WA 98926  
Phone: 509-899-4609  
Email: [chris.taylor@horizonwind.com](mailto:chris.taylor@horizonwind.com)
  
3. **Contact person for application (select one):**  
 Owner of record  Authorized agent  
All verbal and written contact regarding this application will be made only with the contact person.
  
4. **Street address of property:**  
  
There is no single street address associated with this property. The Project consists of approximately 6,000 acres in township 19N Range 17E in Kittitas County, WA with the Project center being near the junction of Hwy 97 and Bettas Road (a county road).
  
5. **Legal description of property:**  
  
See Exhibit 3a, 'Legal Descriptions of Lands Under Option with Applicant'.
  
6. **Tax parcel number:**  
  
See Exhibit 3a, 'Legal Descriptions of Lands Under Option with Applicant' and Exhibit 2, 'Tax Parcels Included in Wind Resource Overlay Rezone Request'.
  
7. **Property size:**  
  
Approximately 6,000 acres.
  
8. **Narrative project description:** Please include the following information in your description: describe project size, location, water supply, sewage disposal and all qualitative features of the proposal; include every element of the proposal in the description (be specific, attach additional sheets as necessary):  
  
Overview  
Sagebrush Power Partners, LLC, a wholly owned subsidiary of Horizon Wind Energy LLC ('Applicant'- formerly known as Zilkha Renewable Energy, LLC) proposes to build and operate the Kittitas Valley Wind Power Project (the 'Project') on a site located on open ridge tops between Ellensburg and Cle Elum

about 12 miles northwest of the city of Ellensburg. The Project will feature a well documented wind resource, state-of-the-art, megawatt-class wind turbine generators and experienced development and operations teams. The Project will help supply the growing demand for electricity in Washington and the Northwest with clean, renewable energy at a stable, competitive price.

The Applicant has applied for site certification from the Washington Energy Facility Site Evaluation Council (EFSEC). The Applicant filed a formal Application for Site Certification (ASC) with EFSEC on January 13, 2003. Copies of the ASC have been provided to Kittitas County and the ASC provides detailed information on all aspects of the proposed Project. A DEIS for the Project was issued by EFSEC on December 12, 2003.

#### Location

The Project will be built on open ridge tops between Ellensburg and Cle Elum at a site located about 12 miles northwest of the city of Ellensburg. The site center is located approximately where the main Bonneville Power Administrations (BPA) and Puget Sound Energy (PSE) east-west transmission line corridors intersect with state Highway 97. Maps showing the Project location and site layout are presented in Exhibits 1 and 2. Land use in the entire study area consists primarily of privately-owned open space and livestock grazing and publicly-owned land (WDNR). The entire Project encompasses approximately 6,000 acres. A permanent footprint of approximately 90 acres of land area will be required to accommodate the proposed turbines and related support facilities. Turbines will be located on open rangeland in areas that are currently zoned as Forest and Range and Ag-20 by Kittitas County. The Project area is bisected by five Bonneville Power Administration (BPA) and one Puget Sound Energy (PSE) high-voltage transmission lines. A Project substation, which would connect the Project's output to the regional transmission grid, would be constructed near the center of the Project site, adjacent to the BPA or PSE lines.

#### Infrastructure

The Project will consist of up to 80 wind turbines for an installed nameplate capacity of up to 246 megawatts (MW). The Applicant has not made a final selection of the specific turbine model to be used for this Project. Figure 1 shows the minimum and maximum dimensions for the range of turbines being considered for the Project. If a larger turbine model is selected (i.e. over 3MW nameplate capacity), fewer turbines will be installed. For purposes of this application, the Project will utilize proven, 3-bladed, upwind, megawatt-class wind turbines on tubular steel towers.

The Kittitas Valley Wind Power Project will also include other prime elements including roads, foundations, underground and overhead electrical lines, grid interconnection facilities, feeder lines running from the on-site step-up substations to the interconnection substations, O&M center and associated supporting infrastructure and facilities. The Project turbines will be laid out in strings (also called rows), connected by a network of gravel access roads. A general site layout illustrating these key elements is contained in Exhibit 1, 'Project Site Layout'.

### Wind Turbine Generators

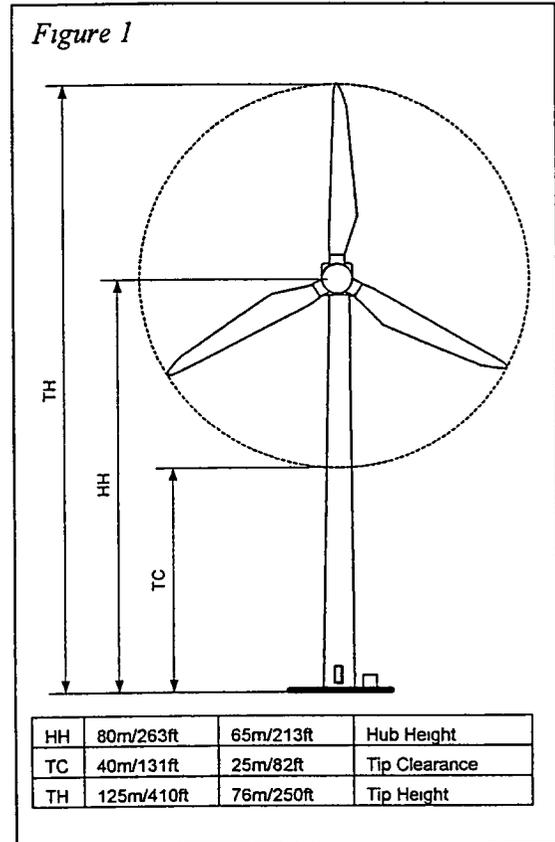
Several wind turbine generators (WTGs) are under evaluation for the Project. Based on these evaluations, a number of wind turbine vendors have been pre-qualified to supply equipment for the Project. The Project will implement 3-bladed wind turbines on tubular steel towers each ranging in size from 1.8 MW to 3 MW (generator nameplate capacity) and with dimensions as shown in Figure 1.

The pre-qualified wind turbines all have a minimum design life of 20 years under extreme high wind and high turbulence conditions. Based on the lower turbulence intensities on the Project site, it is likely that the original WTGs will operate well into their third decade before a retrofit or replacement program is implemented.

### Wind Turbine Basic Configuration

Wind turbines consist of 3 main physical components that are assembled and erected during construction: the tower, the nacelle (machine house) and the rotor (3-blades).

Figure 1



### Tower

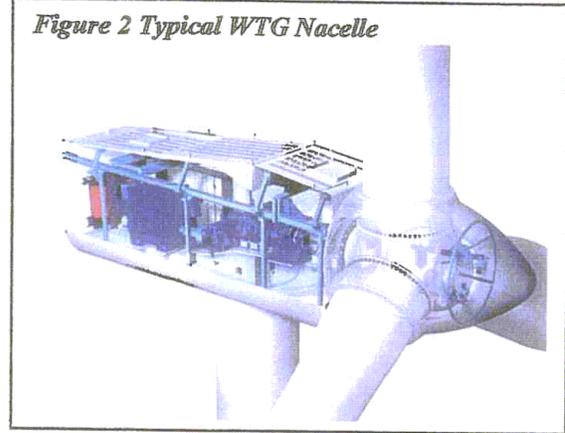
The WTG tower is a tubular conical steel structure that is manufactured in multiple sections depending on the tower height. Towers for the Project will be fabricated, delivered and erected in 2 to 4 sections. A service platform at the top of each section allows for access to the tower connecting bolts for routine inspection. An internal ladder runs to the top platform of the tower just below the nacelle. A nacelle ladder extends from the machine bed to the tower top platform allowing nacelle access independent of its orientation. The tower is equipped with interior lighting and a safety glide cable alongside the ladder.

The tower design is certified by experienced and qualified structural engineers who have designed several generations of turbine towers that have proven themselves well in some of the most aggressive wind regions of the world. The towers and foundations are designed for a survival gust wind speed of 90+ mph with the blades pitched in their most vulnerable position. For the cold-weather winter conditions on the Project site, special material specifications are set to ensure that materials do not go below the brittle transition temperature.

## Nacelle

Figure 2 shows the general arrangement of a typical nacelle that houses the main mechanical components of the WTG. The nacelle consists of a robust machine platform mounted on a roller bearing sliding yaw ring that allows it to rotate (yaw) to keep the turbine pointed into the wind to maximize energy capture. A wind vane and anemometer are mounted at the rear of the nacelle to signal the controller with wind speed and direction information.

*Figure 2 Typical WTG Nacelle*



The main components inside the nacelle are the drive train, a gearbox, and the generator. On some turbines, the step-up transformer is situated at the rear of the nacelle that eliminates the need for a pad-mounted transformer at the base of the tower.

The nacelle is housed by a fully enclosed steel reinforced fiberglass shell that protects internal machinery from the environment and dampens noise emissions. The shroud is designed to allow for adequate ventilation to cool internal machinery such as the gearbox and generator.

## Drive Train

The rotor blades are all bolted to a central hub. The hub is bolted to the main shaft on a large flange at the front of the nacelle. The main shaft is independently supported by the main bearing at the front of the nacelle. The rotor transmits torque to the main shaft that is coupled to the gearbox. The gearbox increases the rotational speed of the high speed shaft that drives the generator at 1200-1800 RPM to provide electrical power at 60 Hertz (Hz).

## Rotor Blades

Modern WTGs have 3-bladed rotors that turn quite slowly at about 17-20 RPM resulting in a graceful appearance during operation. The rotor blades are typically made from a glass-reinforced polyester composite similar to that used in the marine industry for sophisticated racing hulls. Much of the design and materials experience comes from both the marine and aerospace industries and has been developed and tuned for wind turbines over the past 25 years. The blades are non-metallic, but are equipped with a sophisticated lightning suppression system that is defined in detail in Section 2.3.6.1.11, 'Lightning Protection Systems', of the ASC.

## Turbine Control Systems

Wind turbines are equipped with sophisticated computer control systems which are constantly monitoring variables such as wind speed and direction, air and machine temperatures, electrical voltages, currents, vibrations, blade pitch and yaw angles, etc. The main functions of the control system include nacelle operations as well as power operations. Generally, nacelle functions include yawing the nacelle into the wind, pitching the blades, and applying the brakes if necessary. Power operations controlled at the bus cabinet inside the base of the tower include operations of the main breakers to engage the generator with the grid as well as control of ancillary

breakers and systems. The control system is always running and ensures that the machines are operating efficiently and safely.

### Electrical Collection System

Electrical power generated by the wind turbines will be transformed and collected through a network of underground and overhead cables that terminate at the Project interconnection substation.

Power from the wind turbines will be generated at 575-690 Volts (V), depending on the type of turbine utilized for the Project. Power from the turbines is fed through a breaker panel at the turbine base inside the tower and is interconnected to a pad-mounted step-up transformer (located either inside the tower base or on an adjacent concrete pad) that steps the voltage up to the collection system voltage (typically 34.5kV or 24.94kV). The pad transformers are interconnected on the high side to underground cables that connect all of the turbines together electrically. Where practicable, the underground cables are installed in a trench that runs beside the Project's roadways. In locations where two or more sets of underground lines converge, underground vaults and/or pad-mounted switch panels will be utilized to tie the lines together into one or more sets of larger feeder conductors.

*Typical Pad-Mount Transformer  
(shown before terminations landed)*



Short sections of overhead collector cable may be required at a few locations, such as over steep ravines or riparian areas, where trenched cable would have a greater environmental impact. For the few short runs of overhead power lines, a fused, switch-riser pole will be used to run the cables from the underground trench to the overhead conductors. The collection cables feed to a step-up/interconnection substation where the voltage is stepped up to interconnection voltage (230kV), then interconnected to the transmission grid.

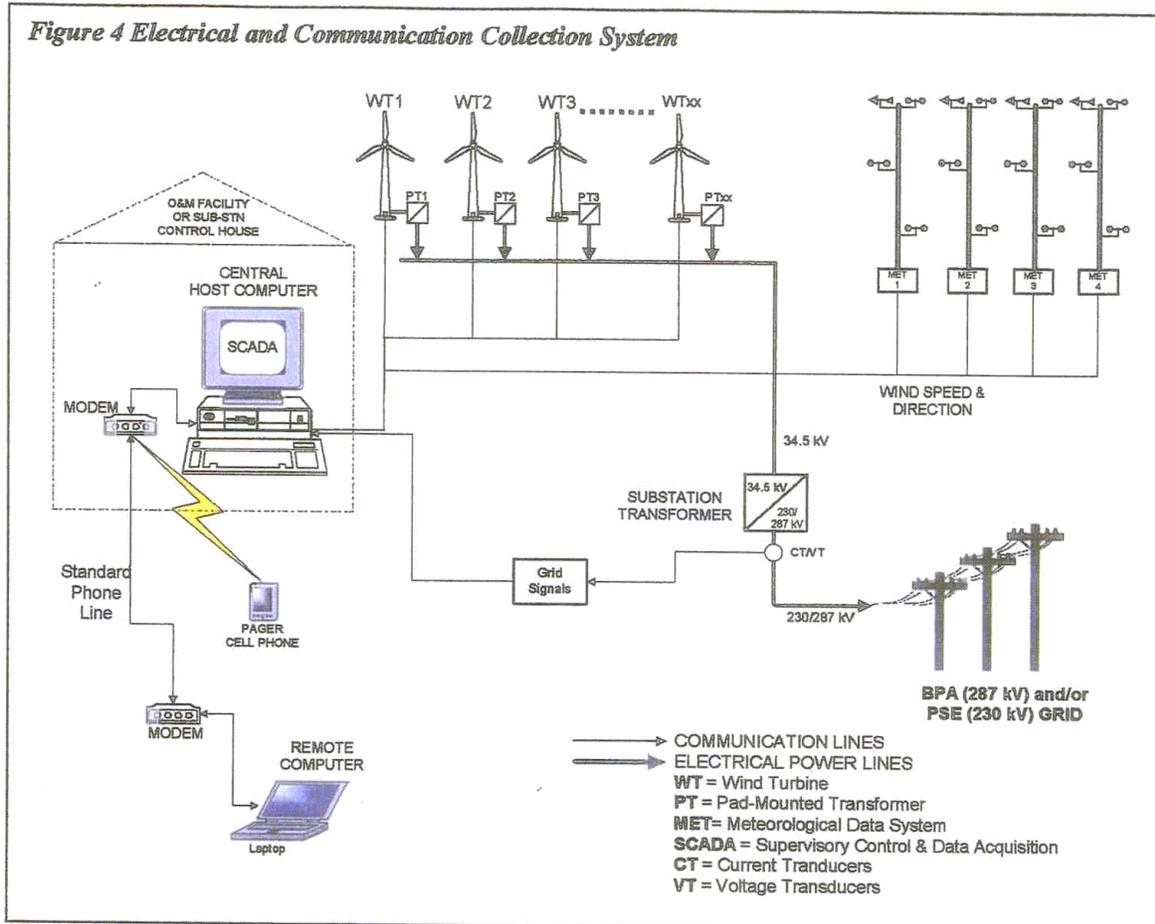
### Central SCADA System

Each turbine is connected to a central Supervisory Control and Data Acquisition (SCADA) System as shown schematically in Figure 4. The SCADA system allows for remote control and monitoring of individual turbines and the wind plant as a whole from both the central host computer or from a remote PC. In the event of faults, the SCADA system can also send signals to a fax, pager or cell phone to alert operations staff.

### Safety Systems

All turbines are designed with several levels of built-in safety and comply with the codes set-forth by European standards as well as those of OSHA and ANSI.

**Figure 4 Electrical and Communication Collection System**



### Braking Systems

The turbines are equipped with two fully independent braking systems that can stop the rotor either acting together or independently. The braking system is designed to be fail-safe, allowing the rotor to be brought to a halt under all foreseeable conditions. The system consists of aerodynamic braking by the rotor blades and by a separate hydraulic disc brake system. Both braking systems operate independently such that if there is a fault with one, the other can still bring the turbine to a halt. Brake pads on the disc brake system are spring loaded against the disc and power is required keep the pads away from the disc. If power is lost, the brakes will be mechanically activated immediately. The aerodynamic braking system is also configured such that if power is lost it will be activated immediately using back-up battery power or a hydraulic actuator, depending on the turbine's design.

After an emergency stop is executed, remote restarting is not possible. The turbine must be inspected in-person and the stop-fault must be reset manually before automatic operation will be re-activated.

The turbines are also equipped with a parking brake that is generally used to "park" the rotor while maintenance routines or inspections that require a stationary rotor are performed.

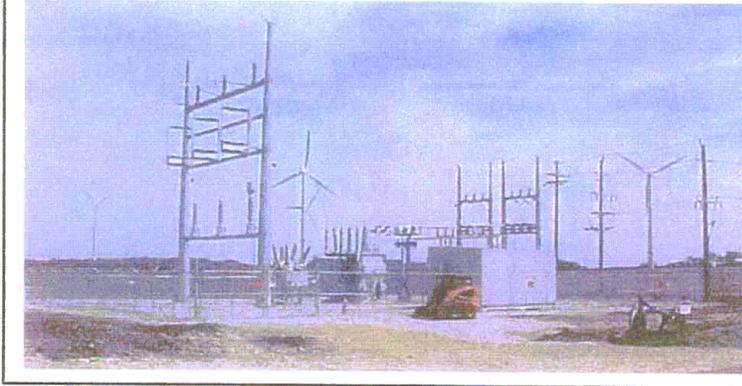
### Electrical Collection and Communication System

The electrical output of the WTGs is collected and transmitted to the Project substation via underground and overhead electric cables. Underground cables are proposed wherever feasible to minimize visual and avian impacts. At the substation, the voltage will be increased to be compatible with the transmission lines to which the Project will be interconnected. Along with the electric collector cables, fiber optic or copper communication wires also link the individual turbines to a central operations and maintenance (O&M) center allowing around-the-clock remote monitoring and control of the turbines. This electrical collection and communication system is depicted schematically in Figure 4.

### Substation and O&M Facility

Electrical power generated by the wind turbines is transformed and collected through a network of underground and overhead cables which all terminate at the Project step-up/interconnection substation. Because the BPA and PSE high voltage transmission

*Figure 5 Typical Substation*



lines directly cross the Project site, it is most likely a single combined step-up and interconnection substation will be constructed for the Project. The Project Site Layout in Exhibit 1 shows the general routing paths of the underground and overhead electrical lines as well as the proposed step-up/interconnection substation location. The main function of the substation and interconnection facilities will be to step up the voltage from the collection lines (at 34.5 kV) to the transmission level (230 kV or 287 kV), to interconnect to the utility grid and provide fault protection. The basic elements of the substation and interconnection facilities are a control house, a bank of main transformers, outdoor breakers, relaying equipment, high voltage bus work, steel support structures, and overhead lightning suppression conductors. All of these main elements will be installed on concrete foundations that are designed for the soil conditions at the substations sites. The substations and interconnection facilities each consist of a graveled footprint area of approximately 2-3 acres, a chain link perimeter fence, and an outdoor lighting system as depicted in Figure 5.

An O&M facility is planned near the center of the Project site as indicated on the Project Site Layout in Exhibit 1. The O&M Facility will include a main building with offices, spare parts storage, restrooms, a shop area, outdoor parking facilities, a turn around area for larger vehicles, outdoor lighting and a gated access with partial or full perimeter fencing. The O&M building will have a foundation footprint of approximately 50 ft. by 100 ft. The O&M facility area will be leveled and graded and will serve as a central base. The overall O&M facility area will have a footprint of approximately 2 acres. The final design and architecture of the O&M facility will comply with all required building standards and codes and be determined prior to its construction.

### Water Supply and Sewage Disposal

Construction of the Project will require water use for road construction, wetting of concrete, dust control, and other activities. Water consumed during construction activities will be purchased by the EPC Contractor from an off-site vendor with a valid water right and transported to the site in water-tanker trucks. No water will be used from the site. Estimated water use for all construction-related needs, including dust control, is approximately 2-5 million gallons depending on whether lignin or water is used for dust control.

Water needs for operation of the Project are minimal (estimated to be under 1,000 gallons per day) and are limited to bathroom and kitchen use for the O&M facility. A domestic well will be installed by a licensed installer to serve the operations and maintenance facility. A well using less than five thousand gallons of water a day exempt pursuant to RCW 90.44.040 will be installed to provide water for domestic type use to the operation and maintenance building. The well will be installed by a licensed well contractor, licensed pursuant to Chapter 173-162 WAC, and in compliance with the requirements and standards of Chapter 173-160 WAC. The well will be installed consistent with Kittitas County Environmental Health Department and Washington Department of Ecology requirements for the new domestic wells. This well will provide water for bathroom and kitchen use and is expected to consume less than 1,000 gallons per day.

During construction, sewage disposal will be via portable toilets which will be regularly serviced by a licensed firm. For Project operations, a septic system will be installed, in accordance with Kittitas County requirements, near the O&M facility for sewage disposal.

9. **What is the present zoning district?**

Forest and Range and AG-20 – See Exhibit 18, ‘Zoning Designations’, of the ASC.

10. **What is the zoning district requested?**

Wind Resource Overlay. KCC 17.61.020(D) provides that wind farms may be authorized in accordance with Chapter 17.61A in the Agricultural-20 and Forest and Range. Section 17.61A.010 states that the “purpose and intent” of the chapter “is to establish a process for recognition and designation of properties located in areas of Kittitas County suitable for the location of wind farms, and to protect the health, welfare, safety, and quality of life of the general public, and to ensure compatible land uses in the vicinity of the areas affected by wind farms.”

11. **Applicant for rezone must demonstrate that the following criteria are met (attach additional sheets as necessary):**

A. **The proposed amendment is compatible with the comprehensive plan.**

The Kittitas County Comprehensive Plan was reviewed to assess the Project’s consistency with county policies. Only the policies listed below were determined

to be potentially relevant to the proposed wind Project. The policy number is provided, followed by the policy itself in quotation marks. The analysis of the Project's consistency is indented below the policy statement.

## Chapter 2 Land Use

Development of the Project would be generally consistent with the applicable land use GPOs, and with the intent of the Comprehensive Plan. The Project would not directly change or replace existing uses of the site (open space and agriculture) or affect the general pattern of rural uses in the surrounding area. Wind farms are a relatively new and innovative type of energy (or utility) use that would support economic growth and generate revenues to Kittitas County and junior taxing districts. The Project is compatible with agricultural activities including cattle and livestock grazing, and would be generally compatible with the pattern of uses in the rural area. Kittitas County categorizes wind farms as a utility use, not as an industrial activity. (Refer to the definitions of "utilities" and "industrial uses" in the Glossary of Terms in Appendix A of the Comprehensive Plan.) Even if considered to be an industrial use, however, wind farms would not be considered "urban growth" as that term is used in the Growth Management Act.

The Project Area and much of the surrounding area is designated as Rural in the Comprehensive Plan and is zoned by the County as Forest and Range and Ag-20. The Plan identifies the importance of natural resource activities, as they contribute to the County's economic base.

The following land use GPOs apply to the development of wind resource farms:

*"GPO 2.114B. Economically productive farming should be promoted and protected. Commercial agricultural lands includes those lands that have the high probability of an adequate and dependable water supply, are economically productive, and meet the definition of "Prime Farmland" as defined under 7CFR Chapter VI Part 657.5 ..."*

The Project would be developed on non-irrigated land, most of which is used for cattle grazing. This land does not meet the definition of Prime Farmland. Removal of only approximately 90 acres of rangeland required for the overall Project footprint would not significantly affect the productivity of cattle grazing operations on this land. Therefore, the Project is consistent with this land use policy.

*"GPO 2.118. Encourage development projects whose outcome will be the significant conservation of farmlands."*

The permanent footprint of the Project will remove a total of approximately 90 acres from open space and cattle grazing uses for roads, the wind turbines and other Project facilities. This reduction poses a negligible impact to cattle operations. Therefore, development of the Project will not conflict with the above policy.

*"GPO 2.140. Land use activities within or adjacent to commercial forest land should be sited and designed to minimize conflicts with forest management and other activities on commercial forest lands."*

Although forest cover exists to the north of the Project area, there is no commercial forest land or activities immediately adjacent to the Project and there would be no effects on any forest management or other activities on commercial forest lands.

#### Chapter 5 Capital Facilities Plan

*"GPO 5.110A. Capital facilities and utilities may be sited, constructed, and operated by outside public service providers (or sited, constructed, and/or operated jointly with a Master Planned Resort (MRP) or Fully Contained Community to the extent elsewhere permitted), on property located outside of an urban growth area or an urban growth node if such facilities and utilities are located within the boundaries of such resort or community which is approved pursuant to County Comprehensive Plan policies and development regulations "*

The Project is located outside any urban growth area or urban growth node, but the policy does not apply to the Project because the policy relates to utility facilities associated with MRPs or Fully Contained Communities, rather than to utility facilities for general public service.

*"GPO 5.110B. Electric and natural gas transmission and distribution facilities may be sited within and through areas of Kittitas County both inside and outside of municipal boundaries, UGAs, UGNs, Master Planned Resorts, and Fully Contained Communities, including to and through rural areas of Kittitas County."*

To the extent that the underground collector lines associated with the Project are considered electric transmission and/or distribution facilities, this Policy allows their placement in rural areas of the County.

#### Chapter 6 Utilities

The Utilities section of the Comprehensive Plan identifies the general location and capacity of all existing and proposed utilities, including but not limited to, electrical lines, telecommunication lines, and natural gas lines. Generally, the goals, policies, and objectives seek to promote the maintenance of current information on existing and proposed facilities; plan for expansion or improvement of utility systems; encourage coordination between jurisdictions and utility providers; and ensure the proper placement and appropriateness of utility siting.

The proposed Project would connect to existing electric transmission lines; proximity to a transmission line is a key criterion for siting wind energy facilities. Electricity generated by wind turbines would be collected through cables that run above ground and underground and feed all of the power to the substation(s) in the main Project area where it would interconnect to the main utility grid at either

BPA's system or PSE's system. The Project plans are consistent with the policies that promote coordination with utility providers, and the location of electric transmission lines in rural areas away from developed urban and residential areas. The wind turbines are proposed to be located more than 1,000 feet from the nearest residence, except where Applicant has entered into an easement agreement with the affected property owner.

Because wind farms are considered to be utilities, not industrial uses, the relationship of the Project to industrial land use policies in the Comprehensive Plan is not addressed.

*"GPO 6 7. Decisions made by Kittitas County regarding utility facilities will be made in a manner consistent with and complementary to regional demands and resources "*

The Project would be located within the Rural Area, which is consistent with the Plan's policies, and would produce electricity to meet regional energy demands. Washington and the Northwest region face a growing medium and long term demand for power. Many regional utilities are currently seeking to acquire new generating resources to meet their loads. The Western Electricity Coordinating Council (WECC) forecasts electricity demand in the western United States. According to WECC's most recent coordination plan, the 2001-2011 summer peak demand requirement is predicted to increase at a compound rate of 2.5% per year (WECC 2002).

Based on data published by the Northwest Power and Conservation Council (NWPCC), electricity demand for the Council's four-state Pacific Northwest planning region (Washington, Oregon, Idaho, and Montana) was 20,080 average MW in 2000 (NWPCC 2003).

The Council's recently revised 20-year demand forecast projects that electricity demand in the region will grow from 20,080 average MW in 2000 to 25,423 average MW by 2025 (medium forecast), an average annual growth rate of just less than 1% per year.

In fact, the majority of northwest investor-owned utilities (IOUs) are currently seeking to acquire new generating resources to meet their loads. More specifically, several regional utilities, including Avista, Puget Sound Energy (PSE), and PacifiCorp (doing business as Pacific Power in Washington) have all completed detailed studies and demand forecasts of their own systems as part of their Integrated Resource Plans (IRP) or Least Cost Plans (LCP) process with oversight from the WUTC (Washington Utilities and Transportation Commission) and all have identified wind power as a desirable addition to their generating portfolios.

There is a regional demand for wind generated energy that greatly exceeds the existing regional supply. The proposed Kittitas Valley Wind Power Project is intended to help meet this growing regional demand for renewable, wind-generated electricity and is therefore desirable for the

public convenience and would be consistent with, and complementary to, regional utility demands and local resources.

*"GPO 6.8 Additions to and improvements of utilities facilities will be allowed to occur at a time and in a manner sufficient to serve growth."*

As discussed above, the Project is desirable to the public convenience to serve electrical power load growth of a number of regional utilities.

*"GPO 6.9. Process permits and approvals for all utility facilities in a fair and timely manner, and in accordance with development regulations that ensure predictability and project concurrency."*

The proposed Project would be developed in accordance with all local, regional, and state wind power development regulations and would therefore be consistent with this policy.

*"GPO 6.10. Community input should be solicited prior to county approval of utility facilities which may significantly impact the surrounding community "*

The County, EFSEC and the Project developer have solicited extensive community input on the proposed Project over the past three years.

*"GPO 6.18. Decisions made regarding utility facilities should be consistent with and complementary to regional demand and resources and should reinforce an interconnected regional distribution network. "*

This policy is similar to GPO 6.7. The above section discusses how the Project is desirable to the public convenience to serve electrical power load growth of a number of regional utilities.

The proposed Project would significantly reinforce an interconnected regional power transmission and distribution network by connecting to Puget Sound Energy's (PSE) and/or Bonneville Power Administration's (BPA) electric power grid. Therefore, the Project is consistent with this policy.

*"GPO 6.21. Avoid, where possible, routing major electric transmission lines above 55 kV through urban areas. "*

The Project will connect directly to existing BPA and/or PSE high voltage transmission lines which run through the Project site. The collector cables that connect each wind turbine and strings of turbines will be located underground. The entire Project will not be developed in an urban area; therefore, it is consistent with this policy.

*"GPO 6.32. Electric and natural gas transmission and distribution facilities may*

*be sited within and through areas of Kittitas County both inside and outside of municipal boundaries, UGAs, UGNs, Master Planned Resorts, and Fully Contained Communities, including to and through rural areas of Kittitas County."*

This policy is identical to Policy GPO 5.11B and has been addressed previously.

*"GPO 6.34 Wind Farms may only be located in areas designated as Wind Farm Resource overlay districts in the Comprehensive Plan. Such Wind Farm Resource overlay districts need not be designated as Major Industrial Developments under Chapter 2.5 of the Comprehensive Plan."*

This policy requires that the area where the Project is proposed be designated a Wind Farm Resource overlay district. Such a designation requires the Applicant to seek a sub-area comprehensive plan amendment. A docketing application for a comprehensive plan amendment has been submitted along with this request for rezone. It is anticipated that the County will process both requests concurrently, pursuant to the requirements of Kittitas County Code Chapter 17.61A.040.

#### Chapter 8 Rural Lands

Chapter 8, Section 8.5, of the Comprehensive Plan states, "Rural lands in Kittitas County are now, and have historically been, a mix of resource lands, rural neighborhoods, and varied developments scattered throughout the county." The Plan's goals, policies, and objectives (GPOs) for land uses on rural lands are "established in an attempt to prevent sprawl, direct growth toward the Urban Growth Areas and Nodes, provide for a variety of densities and uses, respect private property rights, provide for residences, recreation, and economic development opportunities, support farming, forestry and mining activities, show concern for shorelines, critical areas, habitat, scenic areas, and open space while keeping with good governance and the wishes of the people of Kittitas County and to comply with the GMA and other planning mandates." As documented below, by showing consistency with the specific GPOs implementing this general policy statement, the Project meets these policy objectives.

The proposed Project would be consistent with rural lands policies that promote continued diversity in rural uses and densities, conservation of rural lands, and development of resource-based industries and processing.

The following GPOs apply to the development of wind resource farms:

*"GPO 8.5 Kittitas County recognizes and agrees with the need for continued diversity in densities and uses on Rural Lands."*

The Project will not change densities on Rural Lands. It will not change or preclude the existing open space and agricultural uses. It will, however, introduce a clean, capital-intensive, natural resource-based land use in a

rural location. By the introduction of this use in this area of the County, the Kittitas Valley Project will help to diversify the County's rural economy.

*"GPO 8.7. Private owners should not be expected to provide public benefits without just compensation. If the citizens desire open space, or habitat, or scenic vistas that would require a sacrifice by the landowner or homeowner, all citizens should be prepared to shoulder their share in the sacrifice."*

The Project will be located primarily on private land. Parts of the Project are proposed on land owned by the Washington Department of Natural Resources (DNR). Exhibits 3c contain Landowner "Consent to Application" forms signed and executed by all landowners involved with proposed Project facilities on their property. This comprehensive plan policy suggests that landowners should not be expected to forgo the opportunity to develop their properties and benefit from the significant revenue opportunity associated with such development because of potential subjective visual effects for public benefit.

*"GPO 8.9 Projects or developments, which result in the significant conservation of rural lands or rural character, will be encouraged."*

The Project is compatible with traditional rural land uses and is an alternative to the development of residential subdivisions or other uses which do not preserve open space or encourage rural land conservation.

*"GPO 8.11 Existing and traditional uses should be protected and supported while allowing as much as possible for diversity, progress, experimentation, development, and choice in keeping with the retention of Rural Lands."*

Traditionally, the Project area and surrounding land have been used for cattle grazing and recreation which are compatible with the Project. Generation of electricity using wind power is a relatively new, rural land use which generates revenues to landowners and the public through taxes and royalty payments to state agencies (WDNR). In an area such as the Project site, this use is compatible with the traditional land uses that retain their rural character, as opposed to residential development.

*"GPO 8.24 Resource activities performed in accordance with county, state and federal laws should not be subject to legal actions as public nuisances."*

The proposed Project, to the extent it is a "resource activity" because it uses the area's wind resource, would be constructed and operated in accordance with all county, state, and federal laws, and thus is consistent with this policy.

*"GPO 8.42. The development of resource based industries and processing should be encouraged."*

Wind energy production is a type of resource-based industry in that it uses

a local natural renewable resource, the wind. The proposed Project could thus be considered to be consistent with this policy encouraging such industries.

*“GPO 8.62. Habitat and scenic areas are public benefits that must be provided and financed by the public at large, not at the expense of individual landowners and homeowners.”*

This policy is similar to GPO 8.7, and implies that landowners should not be expected to forgo the opportunity to develop wind generation on their properties simply because of potential subjective visual effects.

The Comprehensive Plan states that utilities using natural resources may be appropriate in rural areas:

*The economy of our rural community has traditionally been based on natural resource activities and Kittitas County encourages and supports their continuation in Rural Lands.... Economically viable farming and logging may occur with or beyond the state designated areas but more and more it is necessary to supplement income from outside sources in order to support natural resource operations. Other businesses and economic growth can be realized without sacrificing our rural character*

The proposed Project is an economically viable facility which converts a local renewable natural resource, the wind, into much needed and desired electrical power while preserving the rural character of a large land area consisting of approximately 6,000 acres. For this reason, the Project is consistent with these provisions in the County Comprehensive Plan.

**B. The proposed amendment bears a substantial relation to the public health, safety or welfare.**

The Project bears a substantial relation to public health, safety, and welfare. The Project will develop one of Kittitas County's renewable resources, wind. It will provide a clean source of power while helping to reduce the region's dependence on polluting, non-renewable and often volatile energy sources.

Additionally, the Project will provide significant added tax revenue while not increasing the demand for local public services, such as public safety, schools and infrastructure. An analysis of these economic impacts is presented in the November 2002 report: “Economic Impacts of Wind Power in Kittitas County- A Report for the Phoenix Economic Development Group” by ECONorthwest (ASC Exhibit 23, ‘ECONorthwest Economic Impact Analysis’). Tax revenues generated by the Project can be used to finance public services that improve public, health, safety and welfare and/or to reduce the current tax burden on existing taxpayers. New jobs will be created during both construction and operation of the Project and local purchases of supplies and services will provide a further boost to the local economy.

- C. The proposed amendment has merit and value for Kittitas County or a sub-area of the county.

The Project has merit and value for Kittitas County. As stated in (b) above, the Project will provide a significant long term increase in local tax revenues without increasing demand on local services and will create new jobs in the county. The Project will also help diversify the regional energy portfolio and reduce the region's dependence on non-renewable energy sources that are subject to price volatility and generate significant pollution. In the immediate Project area, participating landowners will realize substantial increases in income in the form of royalty payments for wind turbines on their land. This additional income will help promote the conservation of the area's rural character by reducing pressure on landowners to subdivide their land and convert from open space and grazing to residential development. Development of wind energy facilities in the Project area will result in far less demand for public services than would be the case for residential development.

- D. The proposed amendment is appropriate because of changed circumstances or because of a need for additional property in the proposed zone or because the proposed zone is appropriate for reasonable development of the subject property.

In Chapter 17.61A (establishing new wind farm development rules), the County established that wind farms "are a permitted use in a Wind Farm Resource Overlay Zoning District." (Section 17.61A.030). However, under Chapter 17.61A, sub-area plan and zoning amendments are required, as well as a development agreement and development permit. Consequently, under the relevant code provisions, the "changed circumstances" test is not readily applicable to the proposed plan and zoning amendments.

There is a "need for additional property" in Kittitas County acquiring the Wind Farm Resource overlay designation, in that while the County has determined that wind farm uses are a permitted use within the overlay district, only one other site having this designation currently exists in Kittitas County.

Additionally, and in the alternative, for the reasons described below, the proposed sub-area district and zoning overlay designations are "appropriate for reasonable development of the subject property."

Fundamentally, setting aside site-specific issues addressed in the site-specific permitting process, properties are suitable for wind energy facility development (and consequently are generally suitable for the sub-area plan and zoning overlay designations) if they have the appropriate underlying zoning (Ag-20 and Forest & Range), AND because they have substantial, steady, reliable, commercially-viable winds, AND because they are situated in close proximity to electric transmission facilities. Therefore, only a limited number of properties could be eligible for such development. Because of the very limited range of properties suitable in Kittitas County for this property use, the proposed project site is an appropriate area to be assigned the sub-area plan and zoning overlay designation due to need for additional property, and because wind energy facility use is appropriate for the reasonable development of the property.

The proposed sub-area plan designation and rezone are appropriate because the Project area is suitable for Wind Farm development. The Project area is appropriate for Wind Farm development for several key reasons.

- The wind resource in the Project area is vigorous, well-documented and commercially viable;
- The development of a Wind Farm in the Project area is consistent with current land uses in the area (grazing, open space, scattered rural homesites);
- Extensive environmental, cultural resource, noise and visual studies have shown the impacts from the Project will be minimal and can be mitigated successfully through the site-specific permits.

**E. The subject property is suitable for development in general conformance with zoning standards for the proposed zone.**

The Wind Farm Resource overlay district, as defined in Ch. 17.61A, does not contain zoning standards, but instead relies upon the site-specific development permit to implement appropriate development standards. The subject property will be developed in compliance with a Wind Resource Overlay zone and in conformance with the zoning standards contained in that zone, as well as any additional standards or conditions imposed by EFSEC as part of a Site Certification Agreement.

**F. The proposed amendment will not be materially detrimental to the use of properties in the immediate vicinity of the subject property.**

The Project will not be materially detrimental to the use of properties in the immediate vicinity of the Project Area because all existing land uses within the Project Area - including grazing, open space, and rural residential, would continue, with no limitations or restrictions on the use of neighboring properties in the immediate vicinity as a consequence of the proposed property use.

**G. The proposed changes in use of the subject property shall not adversely impact irrigation water deliveries to other properties.**

There will be no impact to irrigation water deliveries. The area requested for rezoning is not currently irrigated.

12. Application is hereby made for permit(s) to authorize the activities described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities. I hereby grant to the agencies to which this application is made, the right to enter the above-described location to inspect the proposed and or completed work.

13. Are there any other pending applications associated with the property associated with this application?

No

Signature of Authorized Agent:



Date:

September 30, 2005

Signature of Land Owner of Record  
(Required for application submittal):

X \_\_\_\_\_

Date:

\_\_\_\_\_

\*\*\*See Exhibit 3d, 'Land Owner Consent to Application'.

# APPLICATION FOR DEVELOPMENT AGREEMENT

## SECTION I - INTRODUCTION

Kittitas County may enter into development agreements with a person having ownership interest or control of real property within the County's jurisdiction, pursuant to RCW 36.70B.170-210. A decision to enter into a development agreement shall be made on a case by case basis.

A development agreement may be appropriate for large, complex or phased projects, or projects which were not contemplated by existing development regulations or existing application procedures. Projects which may be suitable for development agreements contain the following types of components:

- phased development over a five year period or longer;
- the project site is over twenty-five acres;
- a mixed-use project containing two-hundred or more residential units; or
- commercial or industrial development over one-hundred thousand (100,000) square feet.

Kittitas County Board of Commissioners shall only approve a development agreement by ordinance or resolution after a public hearing held by the County Planning Commission. If the development agreement relates to a project permit application, the provisions of Ch. 36.70C RCW shall apply to the appeal of the decision on the development agreement.

A development agreement shall be recorded with the real property documents of Kittitas County. During the term of the development agreement, the agreement is binding on the parties, their successors and assigns, including any city that assumes jurisdiction through incorporation or annexation of the area covering the property subject to the development agreement.

Unless amended or terminated, a development agreement is enforceable during its term by a party to the agreement. A development agreement and the development standards in the agreement govern during the term of the agreement, or for all or that part of the built-out period specified in the agreement, and may not be subject to an amendment to a zoning ordinance or development standard or regulation adopted after the effective date of the agreement. A permit or approval issued by Kittitas County after the execution of the development agreement must be consistent with the development agreement.

Nothing in RCW 36.70B 170 - 36.70B 200 and Section 501, Ch. 374, Laws of 1995 or this chapter is intended to authorize the County to impose impact fees, inspection fees, or dedications or to require any other financial contributions or mitigation measures except as expressly authorized by other applicable provisions of state law and a development agreement agreed to by both the applicant and Kittitas County.

SECTION II - GENERAL REQUIREMENTS.

Application for development agreement must include the following items in complete form; please type or print clearly in ink.

- 1) a) Site plan, with surrounding vicinity, including but not limited to all: existing buildings, points of access, roads, and parking areas; and, natural features such as contours, bodies of water etc.

***Applicant's Development Activities Application, Exhibit 1, for the Kittitas Valley Wind Power Project submitted to Kittitas County contains the above-requested site plan.***

- b) Address list of all landowners within three-hundred feet of site.

***Applicant's Development Activities Application, Exhibit 3d, for the Kittitas Valley Wind Power Project submitted to Kittitas County contains the above-requested list.***

- c) A description of the project.

***Applicant's Request for Rezone contained in Section 1 of Horizon Wind Energy's Development Activities Application for the Kittitas Valley Wind Power Project submitted to Kittitas County and Application for Site Certification (ASC) for the Kittitas Valley Wind Power Project submitted to EFSEC contain detailed information on the above-requested items.***

- d) The specific reasons why the project is suitable for a development agreement.

***The reason the project is suitable for a development agreement is that KCC 17.61 requires a development agreement for approval of a wind farm resource overlay.***

- e) Any other reasonable information requested by the County

- 2) Set forth proposed development standards and other provisions that shall apply to and govern and vest the development, use and mitigation of the development of the real property for the duration specified in the agreement. These standards shall be consistent with applicable County development regulations, except as such development regulations have been modified by the development standards contained in the agreement. Development standards include but are not limited to the following:

- a) Project elements such as permitted uses, residential densities, and non-residential densities and intensities or building sizes.
- b) The amount and payment of impact fees imposed or agreed to in accordance with any applicable provisions of state law, any reimbursement provisions, other financial contributions by the property owner, inspection fees, or dedications.
- c) Mitigation measures, development conditions, and other requirements under Ch. 43.21C RCW
- d) Design standards such as maximum heights, setbacks, drainage and water quality requirements, landscaping, and other development features.

- e) Road and sidewalk standards.
- f) Affordable housing.
- g) Water, sewer, storm drainage and other infrastructure requirements.
- h) Parks and open space preservation.
- i) Phasing.
- j) Development review processes, procedures and standards for implementing decisions, including methods of reimbursement to the County for review processes.
- k) A build-out or vesting period for applicable development standards.
- l) Process for amending the development agreement.
- m) Any other appropriate development requirement or procedure

***Applicant's Request for Rezone contained in Section 1 of Horizon Wind Energy's Development Activities Application for the Kittitas Valley Wind Power Project, submitted to Kittitas County, and Application for Site Certification (ASC) for the Kittitas Valley Wind Power Project, submitted to EFSEC, contain detailed information on the above-requested items.***

***Concerning item d), the criteria in the County ordinance dealing with densities, number, size, setbacks, locations of turbines, and other mitigation measures to protect the best interests of the surrounding property or neighborhood, and other traditional development standards are not defined by the ordinance, but appear to be left to a case-by-case determination. The design proposed for the Kittitas Valley Wind Power Project addresses these considerations.***

***In the absence of defined criteria, Applicant is proposing to incorporate setbacks from property lines and houses which are well in excess of the setback requirements set out under current County zoning. The wind turbine generators (WTGs) are proposed to be located at locations a minimum of 1,000 feet from residences of non-participating landowners and 541 feet from all property lines, except where Applicant has entered into an easement agreement with the affected property owner particularly to address facility siting. In the event that Applicant wishes to install wind turbines closer than 541 feet to the Project boundary, Applicant shall obtain an easement or covenant that restricts the construction of any new residences within 541 feet of any turbine as measured from the nearest turbine tower center point to any such new residence.***

***The required construction set-back distances under current County zoning for the Project area are as follows:***

<b><i>AG20:</i></b>	<b><i>Forest and Range:</i></b>
<b><i>Front – 25ft</i></b>	<b><i>Front – 25ft</i></b>
<b><i>Side – 5ft</i></b>	<b><i>Side – 10ft</i></b>
<b><i>Rear – 25ft</i></b>	<b><i>Rear – 10ft</i></b>

***All Project facilities will have controlled access thereby restricting access to the facility to project personnel and persons familiarized with safety setbacks and potential risks. The minimum setback distances designed into the proposed Project layout are based on several factors, including Kittitas County standards adopted for the Wild Horse Wind Power Project***

**(Development Agreement between Kittitas County and Wind Ridge Wind Power Partners dated March 4, 2005) which were cooperatively developed based on noise and safety concerns, industry standards and Applicant's own experience operating wind power projects.**

**The setbacks that are proposed are as follows:**

- Setback from residences of neighboring landowners (who have not signed agreements with the Applicant): 1,000 feet**
- Setback from property lines of neighboring landowners (who have not signed agreements with the Applicant): 541 feet**
- Setbacks from residences with signed agreements with Applicant: At least tip height of the proposed turbine. Some landowners have expressed a desire to have turbines sited closer than 1,000 feet to their residence in exchange for more turbines on their land and the revenue generated by them.**
- Setback from property lines of landowners with signed agreements with Applicant: None. All property owners with signed agreements with the Applicant have agreed to a zero setback from property lines, as this allows for a continuous, efficient and the lowest impact placement of wind turbines across the Project area.**
- Setback from BPA/PSE transmission lines: tip height**

3) Name, mailing address and day phone of land owner(s) of record:

**Applicant's Development Activities Application for the Kittitas Valley Wind Power Project submitted to Kittitas County contains the requested information as Exhibit 3a: 'Legal Descriptions of Lands under Option with Applicant'. Exhibit 3c of the same document contains Consents to Development signed by all land owners of record.**

4) Name, mailing address and day phone of authorized agent, if different from land owner of record:

**Christopher Taylor  
Development Director  
Sagebrush Power Partners, LLC  
222 E. Fourth Street  
Ellensburg, WA 98926  
Tel: 509-899-4609  
E-mail: [chris.taylor@horizonwind.com](mailto:chris.taylor@horizonwind.com)**

5) Contact person for application (select one):     Owner of record     Authorized agent  
All verbal and written contact regarding this application will be made only with the contact person.

6) Legal description of property and acreage (attach additional sheets as necessary):

***Please refer to Applicant's Request Development Activities Application for the Kittitas Valley Wind Power Project submitted to Kittitas County, Exhibit 3a: 'Legal Descriptions of Lands under Option with Applicant'.***

7) Tax parcel number(s):

***Please refer to Applicant's Request Development Activities Application for the Kittitas Valley Wind Power Project submitted to Kittitas County, Exhibit 3a: 'Legal Descriptions of Lands under Option with Applicant'.***

Application is hereby made for development agreement. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities. I hereby grant to the agencies to which this application is made, the right to enter the above-described location to inspect the proposed and or completed work. This development agreement may obligate a party to fund or provide services, infrastructure, or other facilities. This development agreement shall reserve authority to impose new or different regulations to the extent required by a serious threat to public health and safety. This development agreement may include provisions which are different (but not less than) or in addition to other County development regulations

Signature of Authorized Agent



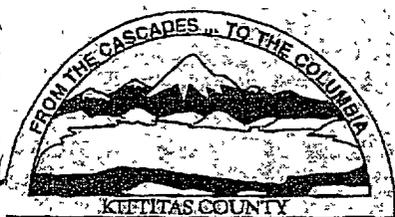
Date

September 30, 2005

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Signature of Land Owner of Record (required for application submittal)    Date

***Please refer to the attached landowner authorization letters in Exhibit 3c of the Applicants Development Activities Application submitted to Kittitas County.***



# Kittitas County Community Development Services

411 N. Ruby STE 2  
FAX: (509) 962-7697

Ellensburg, WA 98926  
(509) 962-7506

## COMPREHENSIVE PLAN AMENDMENT DOCKETING FORM

### I. CHECK THE APPROPRIATE BOXES

COMP PLAN MAP

COMP PLAN TEXT

NOTICE. If the amendment you are applying for is within an URBAN GROWTH AREA or you are proposing a UGA expansion of the Ellensburg, Cle Elum, or Roslyn UGA you are required to docket your item with that City as well. You must contact the appropriate City for filing deadlines, fees, application, and costs

### II. GENERAL INFORMATION

A. APPLICANT'S NAME: Sagebrush Power Partners, LLC  
MAILING ADDRESS: c/o Chris Taylor, Horizon Wind Energy LLC  
222 East Fourth Ave.  
Ellensburg, WA 98926  
E-MAIL ADDRESS: chris.taylor@horizonwind.com  
BUSINESS PHONE: 509-899-4609 HOME PHONE \_\_\_\_\_

B. AGENT'S NAME: \_\_\_\_\_  
MAILING ADDRESS: \_\_\_\_\_  
\_\_\_\_\_  
E-MAIL ADDRESS: \_\_\_\_\_  
BUSINESS PHONE: \_\_\_\_\_

### III. FOR MAP AMENDMENTS

A. TAX PARCEL NUMBER(S): \* Please see Exhibit 3a, 'Legal Descriptions  
ACREAGE: of Land Under Option with Applicant'  
SITE ADDRESS: \_\_\_\_\_  
OWNER(S): \_\_\_\_\_  
MAILING ADDRESS: \_\_\_\_\_  
\_\_\_\_\_  
HOME PHONE: \_\_\_\_\_

(Additional sheets may be attached if more than one parcel is involved)

B. EXISTING COMPREHENSIVE PLAN DESIGNATION:

**This property is within the Rural and Commercial Agriculture planning designation.**

C. EXISTING ZONING:

**Agriculture 20 (AG-20) and Forest and Range (FR).**

D. PROPOSED COMPREHENSIVE PLAN DESIGNATION:

**Wind Resource Overlay District**

E. PROPOSED ZONING DESIGNATION:

**Wind Farm Resource Overlay Zoning District**

F. THE PRESENT USE OF THE PROPERTY IS:

**The current land use consists of livestock grazing, open space with some scattered rural home sites, and publicly-owned land (WDNR). None of the land in the project area is irrigated and no crops are grown.**

G. SURROUNDING LAND USE:

**Surrounding land uses in the general area include:**

- **A commercial gravel quarry on US 97 just south of the northern junction with Bettas Road operated by Ellensburg Cement Products;**

- An inactive gravel quarry on Bettas Road north of the junction with Hayward Road owned by the Washington State Department of Transportation;
- Five Bonneville electric transmission lines traversing east to west across the project area, divided into one group of four near the middle of the project and one to the north;
- One PSE electric transmission line traversing east to west across the project area just north of the southern set of Bonneville lines;
- Three communications towers;
- Two state highways: US 97, running through the middle of the project area, and SR 10 south of the project area;
- Two county roads: Bettas Road, a paved, two-lane road near the western edge of the project area, and Hayward Road, an unpaved road in the southern portion of the project area;
- Five parcels of land totaling approximately 2,075 acres owned by DNR, located in Township 19 North, Range 17 East, Sections 2, 10, 16, and 22, which are currently lease for grazing;
- An approximate 550-parcel of private land in the Swauk Creek drainage currently under a conservation easement with the Nature Conservancy of Washington; and
- Agricultural land south of SR 10 along the Yakima River.

H. SERVICES

Please provide the following information regarding the availability of services.

The site is currently served by sewer \_\_\_\_; septic \_\_\_\_ (check one)  
 Sewer purveyor (if on public sewer system): \_\_\_\_\_

The site is currently served by a public water system \_\_\_\_; well \_\_\_\_  
 Water purveyor (if on public water system): \_\_\_\_\_

The site is located on a public road  private road  (check one)

Name of road: US 97, running through the middle of the project area, and SR 10 south of the project area. Bettas Road, a paved, two-lane road near the western edge of the project area, and Hayward Road, an unpaved road in the

**southern portion of the project area. Elk Spring Road, a private unpaved road located just east of US 97.**

**Fire District #: 01 and Department of Natural Resources Wildland Fire Protection**

#### IV. FOR TEXT AMENDMENTS

Identify the sections of the Comprehensive Plan and Zoning Ordinance that you are proposing to change and provide the proposed wording (attach additional pages if necessary)

#### V. FOR ALL AMENDMENTS

A. Why is the amendment needed and being proposed?

**The comprehensive plan map amendment is needed because pursuant to Kittitas County Code Chapter 17.61A.040 a wind farm shall require the following approval from the County: (1) a site-specific amendment of the Comprehensive Plan land use designation map to Wind Farm Resource Overlay District.**

B. How does the proposed amendment consistent with the County Wide Planning Policies for Kittitas County?

**This proposal has little or no bearing upon the County's CWPPs. The Applicant seeks a sub-area plan overlay within general planning and zoning districts designated as available for such land use in accordance with the County's zoning code. The process and planning provision for the designation is provided in the Comprehensive Plan. Consequently, the proposal is considered fully enabled by the Plan. The CWPPs are intended to ensure consistency between comprehensive plans in Kittitas County. The CWPPs provide for the distribution of economic development opportunities throughout the County, and are principally applicable to jurisdictions conducting GMA planning activities. The proposal will not impact UGAs in the County, and will not have any other ramifications upon other planning provisions set forth in the CWPPs, including, without limitation, housing, transportation planning, environmental planning and compliance, and other considerations more appropriately considered at a general community-wide comprehensive planning level, versus sub-area planning applicable to a specific development proposal. Consequently, the proposal is considered consistent with the CWPPs.**

C. How is the proposed amendment consistent with the Kittitas County Comprehensive Plan?

**Land use in Kittitas County is guided by the Kittitas County Comprehensive Plan (Kittitas County, 2003) that implements the planning requirements and goals of the 1990 Washington State Growth Management Act. The Comprehensive Plan is implemented through the adoption of ordinances and codes designed to achieve the objectives and policies outlined in the Plan. It does not contain policies specifically**

related to wind power projects.

On December 3, 2002, the Kittitas County BOCC changed the zoning ordinance pertaining to wind farm development, to shift responsibility for reviewing and permitting wind farms from the Board of Adjustment to the BOCC (Kittitas County Code Chapter 17.61 A). Wind farms are a permitted use in a Wind Farm Resource Overlay Zoning District and require a "sub-area" amendment to the Comprehensive Plan.

Wind farms are considered desirable to public convenience because they use a renewable resource to provide clean, safe, quiet, non-polluting energy to help the region meet its energy needs. They are generally located on private and publicly owned property, and no public access to the wind turbines is allowed. Wind farms are not detrimental or injurious to the public health, peace, or safety.

Wind farms are generally considered compatible with agricultural and grazing uses. Land use impacts associated with construction and operation of a wind farm and associated transmission feeder lines will be negligible because they will not impair or impact current land uses, change land use patterns, or be incompatible with existing uses or zoning ordinances.

As part of the Wind Farm Resource Overlay Ordinance, the BOCC adopted the following new Planning Policies, intended to implement the Ordinance and to guide sub-area plan decisions.

GPO 6.32 *Electric and natural gas transmission and distribution facilities may be sited within and through areas of Kittitas County both inside and outside municipal boundaries, UGA's, UGN's, Master Planned Resorts, and Fully Contained Communities, including to and through rural areas of Kittitas County.*

The proposed electric collection facilities would be located in rural areas of Kittitas County, between existing high-voltage transmission corridors, which is consistent with the Plan's policies.

GPO 6.34 *Wind Farms may only be located in areas designated as Wind Farm Resource Overlay Districts in the Comprehensive Plan. Such Wind Farms Resource Overlay Districts need not be designated as Major Industrial Developments under Chapter 2.5 of the Comprehensive Plan.*

This sub-area plan map amendment is proposed in accordance with this GPO. The Applicant seeks a Wind Farm Resource Overlay District designation by way of a plan map amendment.

Additionally, the following policies listed below are relevant to the proposed amendment. The analysis of the amendment's consistency is indented below the policy statement.

Chapter 5 - Capital Facilities Plan

*GPO 5.110B. Electric and natural gas transmission and distribution facilities may be sited within and through areas of Kittitas County both inside and outside of municipal boundaries, UGAs, UGNs, Master Planned Resorts, and Fully Contained Communities, including to and through rural areas of Kittitas County.*

**This policy is identical to GPO 6.32 and addressed above.**

Chapter 6 - Utilities

*GPO 6.7. Decisions made by Kittitas County regarding utility facilities will be made in a manner consistent with and complementary to regional demands and resources.*

**Wind farms will draw upon a County resource (wind) to provide energy to meet regional power demands. Therefore, development of wind farms will be consistent with, and complementary to, regional utility demands and local resources.**

*GPO 6.9. Process permits and approvals for all utility facilities in a fair and timely manner, and in accordance with development regulations that ensure predictability and project concurrency.*

**This application is made under the Wind Resource Overlay Ordinance to implement this policy for the Kittitas Valley Wind Power Project.**

*GPO 6.18. Decisions made regarding utility facilities should be consistent with and complementary to regional demand and resources and should reinforce an interconnected regional distribution network.*

**Because Kittitas County is well located near an interconnected regional power transmission and distribution network that connects to Puget Sound Energy's (PSE) and/or Bonneville Power Administration's (BPA) electric power grid, proper wind farm development will reinforce this network. Therefore, this amendment is consistent with the above policy.**

Chapter 8 - Rural Lands

*GPO 8.24. Resource activities performed in accordance with county, state and federal laws should not be subject to legal actions as public nuisances.*

**Wind farms, to the extent they are a "resource activity" and use the area's wind resource, will be constructed and operated in accordance with all county, state, and federal laws, and thus is consistent with this policy.**

*GPO 8.42. The development of resource based industries and processing should be encouraged.*

Wind energy production is a type of resource-based industry in that it uses a natural renewable resource, the wind. This amendment will facilitate development of wind farms, and can be considered to be consistent with this policy as it encourages such industries.

*GPO 8.62. Habitat and scenic areas are public benefits that must be provided and financed by the public at large, not at the expense of individual landowners and homeowners.*

This policy implies that landowners should be compensated if denied the opportunity to develop wind generation on their properties.

D. How have conditions changed that warrant a comprehensive plan amendment?

On December 3, 2002, the Kittitas County BOCC changed the zoning ordinance pertaining to wind farm development, to shift responsibility for reviewing and permitting wind farms from the Board of Adjustment to the BOCC (Kittitas County Code Chapter 17.61 A). Wind farms are a permitted use in a Wind Farm Resource Overlay Zoning District, subject to approval of a sub-area plan amendment. A wind farm may be authorized by the BOCC through approval of a Wind Farm Resource Development Permit, in conjunction with approval of a development agreement, rezone to Wind Farm Resource Overlay Zoning District and a site-specific sub-area comprehensive plan amendment.

VI. SUPPORTING INFORMATION (ATTACH THE FOLLOWING)

- A. SITE PLAN OF THE PROPERTY WITH THE FOLLOWING FEATURES:  
BUILDINGS; POINTS OF ACCESS, ABUTTING ROADS, AND PARKING  
AREAS; SEPTIC TANK AND DRAINFIELD AND REPLACEMENT AREA.

**Applicant's Development Activities Application, Exhibit 1, for the Kittitas Valley Wind Power Project submitted to Kittitas County contains the above-requested site plan.**

- B. APPLICATION IS THEREBY MADE FOR A COMPREHENSIVE PLAN AMENDMENT TO AUTHORIZE THE ACTIVITIES DESCRIBED HEREIN. I CERTIFY THAT I AM FAMILIAR WITH THE INFORMATION CONTAINED IN THIS APPLICATION, AND THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF SUCH INFORMATION IS TRUE, COMPLETE, AND ACCURATE. I FURTHER CERTIFY THAT I POSSESS THE AUTHORITY TO UNDERTAKE THE PROPOSED ACTIVITIES. I HEREBY GRANT TO THE AGENCIES TO WHICH THIS APPLICATION IS MADE, THE RIGHT TO ENTER THE ABOVE-DESCRIBED LOCATION TO INSPECT THE PROPOSED AND OR COMPLETED WORK.

Signature of Authorized Agent

Date

September 30, 2005



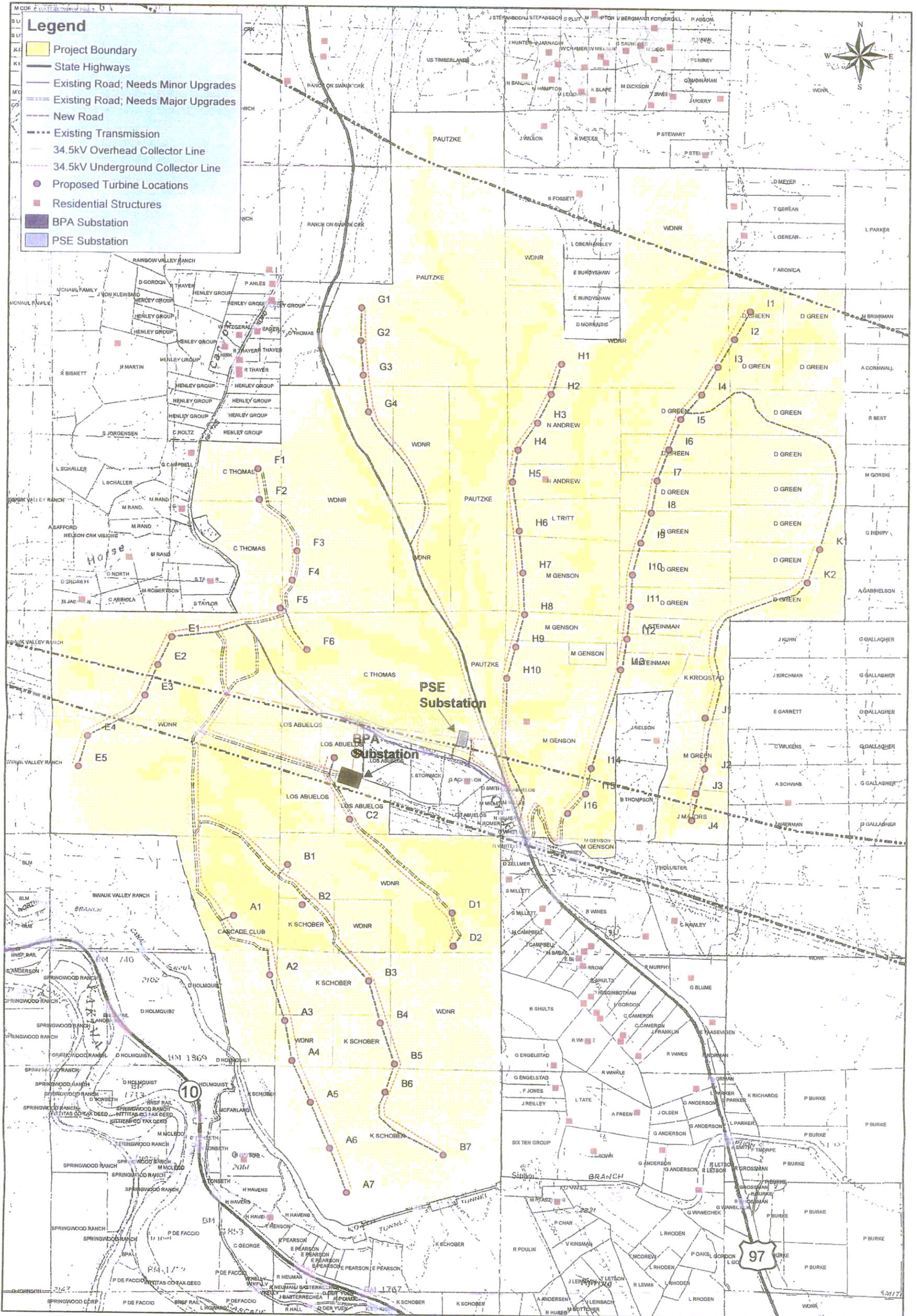
Signature of Land Owner of Record (required for application submittal)

Date

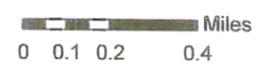
**Please refer to the attached landowner authorization letters in Exhibit 3c of the Applicants Development Activities Application submitted to Kittitas County.**

**Exhibit 1**

**Project Site Layout**

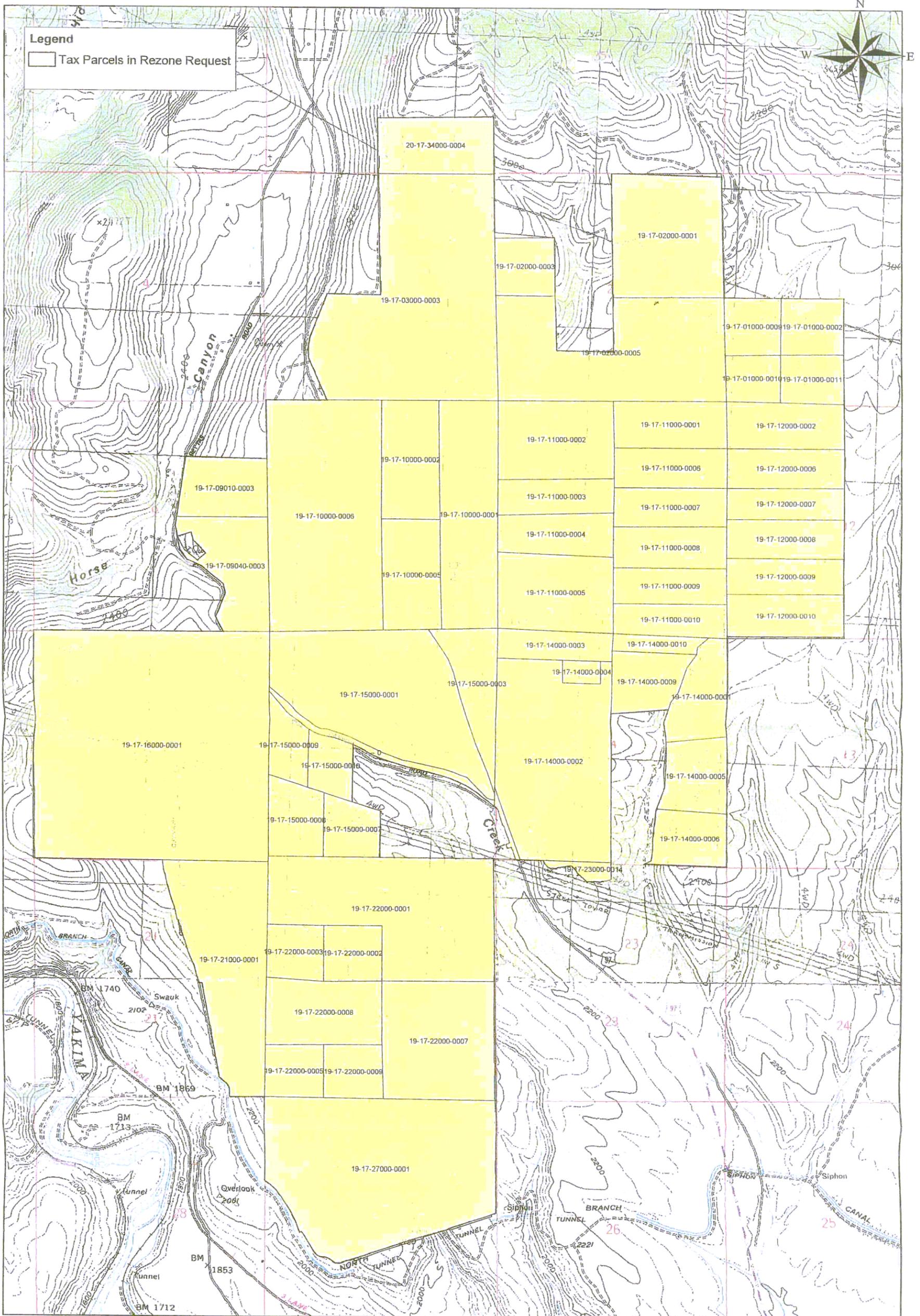


Kittitas Valley Wind Power Project  
 Kittitas County Development Activities Application  
 Preliminary Site Layout  
 Map Created October 17, 2005



## **Exhibit 2**

# **Tax Parcels Included in Wind Resource Overlay Rezone Request**



Kittitas Valley Wind Power Project  
 Tax Parcels in Rezone Request  
 Map Created October 17, 2005



**Exhibit 3**

**Legal Descriptions and  
Landownership Interests**

**Exhibit 3a**

**Legal Descriptions of Lands under  
Option with Applicant**

KITTITAS VALLEY WIND POWER PROJECT  
 DEVELOPMENT ACTIVITIES APPLICATION EXHIBT 03a  
 PROJECT AREA LEGAL DESCRIPTION UNDERLYING LANDOWNER CONTACT INFORMATION

ASSESSOR NO.	LEGAL Detailed legal in Exhibit 3c Landowner Consents to Development	OWNER NAME	OWNER ADDRESS	ADDRESS 2	CITY	ST	ZIP	PHONE
19-17-11000-0002	ACRES 100 32, CD 7487-1, SEC 11, TWP 19, RGE 17, PTN NW1/4 (TRACTS 1 & 2, SURV #501915)	ANDREW, NOEL	2701 ELK SPRINGS RD		ELLENSBURG	WA	98926	509-306-5348
19-17-11000-0003	ACRES 50 13, CD #7487-1-1, SEC 11, TWP 19, RGE 17 PTN NW1/4 (TRACT 3, SURVEY #501915)	ANDREW, NOEL	2701 ELK SPRINGS RD		ELLENSBURG	WA	98926	509-306-5348
19-17-21000-0001	ACRES 182 38, CD 7514, SEC 21, TWP 19, RGE 17, E1/2 OF SEC E OF HAYWARD RD & NORTH OF KR D, LESS 3 00 STATE	CASCADE FIELD & STREAM CLUB	PO BOX 424		CLE ELUM	WA	98922	509-674-9278
19-17-14000-0002	ACRES 260 84, CD 7492-1, SEC 14, TWP 19, RGE 17, PTN W1/2 LY N STATE HWY 131 (SURVEY, B21/P197)	GENSON, MICHAEL K	101 ELK SPRINGS RD		ELLENSBURG	WA	98926	509-964-9082
19-17-14000-0003	ACRES 39 44, CD 7492-1-1, SEC 14, TWP 19, RGE 17, PTN N1/2 NW1/4 (SURVEY B21/P197)	GENSON, MICHAEL K	101 ELK SPRINGS RD		ELLENSBURG	WA	98926	509-964-9082
19-17-14000-0004	ACRES 9 83, CD 7492-1-2, SEC 14, TWP 19, RGE 17, PTN NW1/4 (SURVEY, B21/P197)	GENSON, MICHAEL K	101 ELK SPRINGS RD		ELLENSBURG	WA	98926	509-964-9082
19-17-11000-0005	ACRES 106 04, CD #7487-1-3, SEC 11, TWP 19, RGE 17 PTN SW1/4 (TRACTS 5 & 6, SURVEY #501915)	GENSON, MICHAEL K ETUX	101 ELK SPRINGS RD		ELLENSBURG	WA	98926	509-964-9082
19-17-23000-0014	ACRES 10 00, CD 7535-1, SEC 23, TWP 19, RGE 17, PTN W1/2 LYING NLY OF BPA POWER LINE ROAD (SURVEY, B21/P197)	GENSON, MICHAEL K	101 ELK SPRINGS RD		ELLENSBURG	WA	98926	509-964-9082
19-17-01000-0002	ACRES 40 00, CD 7452, SEC 1, TWP 19, RGE 17, NE1/4 SW1/4	GREEN, DANIEL A ETUX	715 CARP LAKE RD		CAMANO ISLAND	WA	98282	360-387-3495
19-17-01000-0009	ACRES 40 00, CD #7452-2, SEC 1, TWP 19, RGE 17, NW1/4 SW1/4,	GREEN, DANIEL A ETUX	715 CARP LAKE RD		CAMANO ISLAND	WA	98282	360-387-3495
19-17-01000-0010	ACRES 40 00, CD #7452-3, SEC 1, TWP 19, RGE 17, SW1/4 SW1/4,	GREEN, DANIEL A ETUX	715 CARP LAKE RD		CAMANO ISLAND	WA	98282	360-387-3495
19-17-01000-0011	ACRES 40 00, CD #7452-4, SEC 1, TWP 19, RGE 17, SE1/4 SW1/4,	GREEN, DANIEL A ETUX	715 CARP LAKE RD		CAMANO ISLAND	WA	98282	360-387-3495
19-17-11000-0001	ACRES 70 00, CD 7487, SEC 11, TWP 19, RGE 17, N1/2 N1/2 NE1/4, N1/2 S1/2 N1/2 NE1/4, N1/2 S1/2 S1/2 N1/2 NE1/4,	GREEN, DANIEL A ETUX	715 CARP LAKE RD		CAMANO ISLAND	WA	98282	360-387-3495
19-17-11000-0006	ACRES 50 00, CD #7487-2, SEC 11, TWP 19, RGE 17, S1/2 S1/2 S1/2 N1/2 NE1/4, N1/2 S1/2 NE1/4,	GREEN, DANIEL A ETUX	715 CARP LAKE RD		CAMANO ISLAND	WA	98282	360-387-3495
19-17-11000-0007	ACRES 50 00, CD #7487-3, SEC 11, TWP 19, RGE 17, S1/2 S1/2 NE1/4, N1/2 N1/2 N1/2 N1/2 SE1/4,	GREEN, DANIEL A ETUX	715 CARP LAKE RD		CAMANO ISLAND	WA	98282	360-387-3495
19-17-11000-0008	ACRES 50 00, CD #7487-4, SEC 11, TWP 19, RGE 17, S1/2 N1/2 N1/2 N1/2 SE1/4, S1/2 N1/2 N1/2 SE1/4, N1/2 S1/2 N1/2 SE1/4,	GREEN, DANIEL A ETUX	715 CARP LAKE RD		CAMANO ISLAND	WA	98282	360-387-3495
19-17-11000-0009	ACRES 50 00, CD #7487-5, SEC 11, TWP 19, RGE 17, S1/2 S1/2 N1/2 SE1/4, N1/2 N1/2 S1/2 SE1/4, N1/2 S1/2 N1/2 S1/2 SE1/4,	GREEN, DANIEL A ETUX	715 CARP LAKE RD		CAMANO ISLAND	WA	98282	360-387-3495

KITTITAS VALLEY WIND POWER PROJECT  
 DEVELOPMENT ACTIVITIES APPLICATION EXHIBIT 03a  
 PROJECT AREA LEGAL DESCRIPTION UNDERLYING LANDOWNER CONTACT INFORMATION

ASSESSOR NO.	LEGAL *Detailed Legals in Exhibit 3c Landowner Consents to Development	OWNER NAME	OWNER ADDRESS	ADDRESS 2	CITY	ST	ZIP	PHONE
19-17-11000-0010	ACRES 50 00, CD #7487-6, SEC 11, TWP 19, RGE 17, S1/2 S1/2 N1/2 S1/2 SE1/4, S1/2 S1/2 SE1/4,	GREEN, DANIEL A ETUX	715 CARP LAKE RD		CAMANO ISLAND	WA	98282	360-387-3495
19-17-12000-0002	ACRES 70 00, CD 7489, SEC 12, TWP 19, RGE 17, N1/2 N1/2 NW1/4, N1/2 S1/2 N 1/2NW1/4, N1/2 S1/2 S1/2 N1/2 NW1/4,	GREEN, DANIEL A ETUX	715 CARP LAKE RD		CAMANO ISLAND	WA	98282	360-387-3495
19-17-12000-0006	ACRES 50 00, CD #7489-1, SEC 12, TWP 19, RGE 17, S1/2 S1/2 S1/2 N1/2 NW1/4, N1/2 S1/2 NW1/4,	GREEN, DANIEL A ETUX	715 CARP LAKE RD		CAMANO ISLAND	WA	98282	360-387-3495
19-17-12000-0007	ACRES 50 00, CD #7489-2, SEC 12, TWP 19, RGE 17, S1/2 S1/2 NW1/4, N1/2 N1/2 N1/2 N1/2 SW1/4,	GREEN, DANIEL A ETUX	715 CARP LAKE RD		CAMANO ISLAND	WA	98282	360-387-3495
19-17-12000-0008	ACRES 50 00, CD #7489-3, SEC 12, TWP 19, RGE 17, S1/2 N1/2 N1/2 N1/2 SW1/4, S1/2 N1/2 N1/2 SW1/4, N1/2 S1/2 N1/2 SW1/4,	GREEN, DANIEL A ETUX	715 CARP LAKE RD		CAMANO ISLAND	WA	98282	360-387-3495
19-17-12000-0009	ACRES 50 00, CD #7489-4, SEC 12, TWP 19, RGE 17, S1/2 S1/2 N1/2 SW1/4, N1/2 N1/2 S1/2 SW1/4, N1/2 S1/2 N1/2 S1/2 SW1/4,	GREEN, DANIEL A ETUX	715 CARP LAKE RD		CAMANO ISLAND	WA	98282	360-387-3495
19-17-12000-0010	ACRES 50 00, CD #7489-5, SEC 12, TWP 19, RGE 17, S1/2 S1/2 N1/2 S1/2 SW1/4, S1/2 S1/2 SW1/4,	GREEN, DANIEL A ETUX	715 CARP LAKE RD		CAMANO ISLAND	WA	98282	360-387-3495
19-17-14000-0005	ACRES 50 00, CD #7492-2, SEC 14, TWP 19, RGE 17, PTN E1/2 (LOT 2, SURVEY #505298 ROLLING ACRES)	GREEN, MARVIN ETUX	519 GOBBLER LN		HOLLADAY	TN	38341	217-553-2130
19-17-14000-0001	ACRES 54 53, CD 7492, SEC 14, TWP 19, RGE 17, PTN E1/2 (LOT 1, SURVEY #505298 ROLLING ACRES), LESS 39 STATE, 2 63 SR 135,	KROGSTAD, KARL ETUX	PO BOX 95260		SEATTLE	WA	98145	206-323-6472
19-17-15000-0007	ACRES 69 06, CD 7495-4, SEC 15, TWP 19, RGE 17, PTN S1/2 (PARCEL F, B29/P242-244)	LOS ABUELOS INC	361 CEDAR COVE RD		ELLENSBURG	WA	98926	509-925-3902
19-17-15000-0008	ACRES 51 49, CD 7495-5, SEC 15, TWP 19, RGE 17, PTN SW1/4 (PARCEL G, B29/P242-244)	LOS ABUELOS INC	361 CEDAR COVE RD		ELLENSBURG	WA	98926	509-925-3902
19-17-15000-0009	ACRES 32 42, CD 7495-6, SEC 15, TWP 19, RGE 17, PTN W1/2 W1/2 (PARCEL H, B29/P242-244)	LOS ABUELOS INC	361 CEDAR COVE RD		REDMOND	WA	98926	509-925-3902
19-17-15000-0010	ACRES 32 39, CD 7495-7, SEC 15, TWP 19, RGE 17, PTN NW1/4, PTN SW1/4 (PARCEL J, B29/P242-244)	LOS ABUELOS INC	361 CEDAR COVE RD		ELLENSBURG	WA	98926	509-925-3902
19-17-14000-0006	ACRES 50 00, CD #7492-3, SEC 14, TWP 19, RGE 17, PTN E1/2 (LOT 3, SURVEY #505298 ROLLING ACRES)	MAJORS, JAMES L ETUX	521 RUSTIC RD		ELLENSBURG	WA	98926	509-962-4059
19-17-03000-0003	ACRES 400 00, CD 7456-1, SEC 3, TWP 19, RGE 17, NE 1/4 & PTN S 1/2 E SR131	PAUTZKE BAIT CO INC	PO BOX 36		ELLENSBURG	WA	98926	509-925-9365
19-17-10000-0001	ACRES 160 00, CD 7483, SEC 10, TWP 19, RGE 17, E1/2 E1/2	PAUTZKE BAIT CO INC	PO BOX 36		ELLENSBURG	WA	98926	509-925-9365
19-17-15000-0003	ACRES 60 00, SEC 15, TWP 19, RGE 17, THAT PTN OF NE1/4 LYING E SR 131 ROAD	PAUTZKE BAIT CO INC	PO BOX 36		ELLENSBURG	WA	98926	509-925-9365
20-17-34000-0004	ACRES 80 00, CD 7766, SEC 34, TWP 20, RGE 17, S 1/2 SE 1/4	PAUTZKE BAIT CO INC	PO BOX 36		ELLENSBURG	WA	98926	509-925-9365

KITTITAS VALLEY WIND POWER PROJECT  
 DEVELOPMENT ACTIVITIES APPLICATION EXHIBIT 03a  
 PROJECT AREA LEGAL DESCRIPTION UNDERLYING LANDOWNER CONTACT INFORMATION

ASSESSOR NO.	LEGAL (Detailed legals in Exhibit 3c, Landowner Consents to Development)	OWNER NAME	OWNER ADDRESS	ADDRESS 2	CITY	ST	ZIP	PHONE
19-17-22000-0003	ACRES 40 00, CD 7532, SEC 22, TWP 19, RGE 17, SW1/4 NW1/4	SCHOBER, KEITH W ETUX	PO BOX 72		CLE ELUM	WA	98922	509-674-2217
19-17-22000-0008	ACRES 80 00, CD 7532-1, SEC 22, TWP 19, RGE 17, N1/2 SW1/4	SCHOBER, KEITH W ETUX	PO BOX 72		CLE ELUM	WA	98922	509-674-2217
19-17-22000-0009	ACRES 40 00, CD 7532-2, SEC 22, TWP 19, RGE 17, SE1/4 SW1/4	SCHOBER, KEITH W ETUX	PO BOX 72		CLE ELUM	WA	98922	509-674-2217
19-17-27000-0001	ACRES 506 50, CD 7563, SEC 27, TWP 19, RGE 17 TAX NO 1	SCHOBER, KEITH W ETUX	PO BOX 72		CLE ELUM	WA	98922	509-674-2217
19-17-02000-0001	ACRES 155 33, SEC 2, TWP 19, RGE 17 NE 1/4 LOTS 1 & 2	STATE OF WASH (DNR)	1111 WASHINGTON ST SE	PO BOX 47016	OLYMPIA	WA	98504-7016	509-925-8510
19-17-02000-0003	ACRES 40 00, SEC 2, TWP 19, RGE 17 SW 1/4 NW 1/4	STATE OF WASH (DNR)	1111 WASHINGTON ST SE	PO BOX 47016	OLYMPIA	WA	98504-7016	509-925-8510
19-17-02000-0005	ACRES 280 00, SEC 2, TWP 19, RGE 17 ALL S 1/2 EXCEPT NE 1/4 SW 1/4	STATE OF WASH (DNR)	1111 WASHINGTON ST SE	PO BOX 47016	OLYMPIA	WA	98504-7016	509-925-8510
19-17-10000-0002	ACRES 80 00, SEC 10, TWP 19, RGE 17 W 1/2 NE 1/4	STATE OF WASH (DNR)	1111 WASHINGTON ST SE	PO BOX 47016	OLYMPIA	WA	98504-7016	509-925-8510
19-17-10000-0005	ACRES 80 00, SEC 10, TWP 19, RGE 17 W 1/2 SE 1/4	STATE OF WASH (DNR)	1111 WASHINGTON ST SE	PO BOX 47016	OLYMPIA	WA	98504-7016	509-925-8510
19-17-10000-0006	ACRES 320 00, SEC 10, TWP 19, RGE 17 ALL W 1/2	STATE OF WASH (DNR)	1111 WASHINGTON ST SE	PO BOX 47016	OLYMPIA	WA	98504-7016	509-925-8510
19-17-16000-0001	ACRES 640 00, SEC 16, TWP 19, RGE 17 ALL SECTION	STATE OF WASH (DNR)	1111 WASHINGTON ST SE	PO BOX 47016	OLYMPIA	WA	98504-7016	509-925-8510
19-17-22000-0001	ACRES 240 00, SEC 22, TWP 19, RGE 17 ALL NE 1/4, N 1/2 NW 1/4	STATE OF WASH (DNR)	1111 WASHINGTON ST SE	PO BOX 47016	OLYMPIA	WA	98504-7016	509-925-8510
19-17-22000-0002	ACRES 40 00, SEC 22, TWP 19, RGE 17 SE 1/4 NW 1/4	STATE OF WASH (DNR)	1111 WASHINGTON ST SE	PO BOX 47016	OLYMPIA	WA	98504-7016	509-925-8510
19-17-22000-0005	ACRES 40 00, SEC 22, TWP 19, RGE 17 SW 1/4 SW 1/4	STATE OF WASH (DNR)	1111 WASHINGTON ST SE	PO BOX 47016	OLYMPIA	WA	98504-7016	509-925-8510
19-17-22000-0007	ACRES 160 00, SEC 22, TWP 19, RGE 17 ALL SE 1/4	STATE OF WASH (DNR)	1111 WASHINGTON ST SE	PO BOX 47016	OLYMPIA	WA	98504-7016	509-925-8510
19-17-14000-0010	ACRES 20 20, CD #7492-7, SEC 14, TWP 19, RGE 17, PTN E1/2 (LOT 7, SURVEY #505298 ROLLING ACRES)	STEINMAN, ANDREA A	19822 28TH AVE W		LYNNWOOD	WA	98036	425-774-0790
19-17-14000-0009	ACRES 50 08, CD #7492-6, SEC 14, TWP 19, RGE 17, PTN E1/2 (LOT 6, SURVEY #505298 ROLLING ACRES)	STEINMAN, MERLE JR	19822 28TH AVE W		LYNNWOOD	WA	98036	425-774-0790
19-17-09010-0003	ACRES 60 00, CD 7480, SEC 9, TWP 19, RGE 17, S1/2 NE1/4 E OF CO RD	THOMAS, CARLA L	911 ROBBINS RD		ELLENSBURG	WA	98926	509-962-8572
19-17-09040-0003	ACRES 105 00, CD 7480-1, SEC 09, TWP 19, RGE 17, SE1/4 E OF CO RD	THOMAS, CARLA L	911 ROBBINS RD		ELLENSBURG	WA	98926	509-962-8572
19-17-15000-0001	ACRES 268 00, CD 7494, SEC 15, TWP 19, RGE 17, ALL NO CO RD EX PTN LYING E SR 131 ROAD @ 24 07	THOMAS, CARLA L	911 ROBBINS RD		ELLENSBURG	WA	98926	509-962-8572
19-17-11000-0004	ACRES 50 18, CD #7487-1-2, SEC 11, TWP 19, RGE 17 PTN W1/2 (TRACT 4, SURVEY #501915)	TRITT, LARRY L ETUX	PO BOX 725		ROSLYN	WA	98941	509-649-3611

**Exhibit 3b**

**WA DNR Land  
Lease Signature Pages**

14.15 Memorandum of Lease. Lessee shall be entitled to record in the real property records of the county in which the Premises is located a Memorandum of Lease in the form attached as Exhibit D. Lessee shall provide State with a true copy of the recorded document, showing the date of recordation and file number. Within thirty days of termination of the Lease, Lessee shall execute and acknowledge a Notice of Lease Termination and Surrender Agreement, Substantially In Form as set forth in Exhibit E, which shall be delivered to State for recording.

14.16 Exhibits. This agreement is subject to the terms and conditions of exhibits referenced herein, which are attached hereto and by this reference made a part hereof.

- Exhibits: Exhibit A: Legal Description of Premises and Encumbrances
- Exhibit B: Reclamation Plan Requirements
- Exhibit C HCP requirements
- Exhibit D: Memorandum of Lease
- Exhibit E Lease Termination and Surrender Agreement

SAGEBRUSH POWER PARTNERS, LLC  
UBI 602 154 679  
By Zilkha Renewable Energy, LLC, a member

Dated: May 9th, 2003.

[Signature]  
Name and Title

1001 McKinney, Suite 1740  
Houston, TX 77002

Local Phone (509) 962-1122

STATE OF WASHINGTON  
DEPARTMENT OF NATURAL RESOURCES

Dated: 6/30/3, 20

[Signature]  
DOUG SUTHERLAND  
Commissioner of Public Lands



Approved as to form this  
13<sup>th</sup> day of March, 2003  
Jim Schwartz, Assistant Attorney General

[Signature]

NOTARIAL CERTIFICATE  
ACKNOWLEDGMENT IN A REPRESENTATIVE CAPACITY

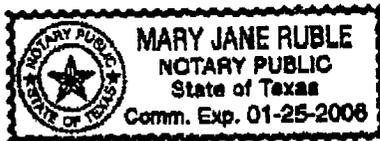
STATE OF Texas )  
COUNTY OF Harris ) ss.

I certify that I know or have satisfactory evidence that Michael P. Skelly [name(s)] (is / are) the person(s) who appeared before me, and said person(s) acknowledged that (he / she / they) signed this instrument, on oath stated that (he / she / they) (was / were) authorized to execute the instrument, and acknowledged it as the Authorized Representative [office(s) or title(s)] of Sagebrush Power Partners, L.P. (business name of the Lessee) to be the free and voluntary act of such party(ies) for the uses and purposes mentioned in the instrument.

DATED: May 9th, 2003

(Seal or Stamp)

Mary Jane Ruble  
NOTARY PUBLIC in and for the  
State of Texas  
My appointment  
expires 1-25-2006



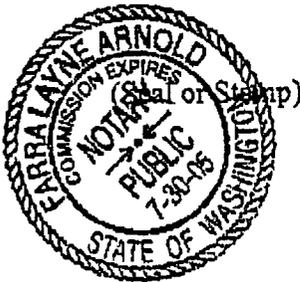
NOTARIAL CERTIFICATE  
ACKNOWLEDGMENT IN A REPRESENTATIVE CAPACITY

STATE OF WASHINGTON )  
 )ss  
County of Thurston )

On this 20th day of June, 2003, personally appeared before me Doug Sutherland, to me known to be the Commissioner of Public Lands of the Department of Natural Resources, State of Washington, who executed the within and foregoing instrument on behalf of the State of Washington, and acknowledged said instrument to be the free and voluntary act and deed of the State of Washington for the uses and purposes therein mentioned, and on oath stated that [he/she] was authorized to execute said instrument and that the seal affixed is the official seal of the Commissioner of Public Lands for the State of Washington.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year first above written.

DATED: June 20, 2003



Larra Layne Arnold  
NOTARY PUBLIC in and for the  
State of Washington  
My appointment expires 7.30.05

**Exhibit 3c**

**Land Owner  
Consent to Application**

**KITTITAS VALLEY WIND POWER PROJECT**

**Landowner Consent to Application for Sub-Area Comprehensive Plan Amendment, Rezone, Development Agreement and Wind Farm Permit**

**Andrea Steinman  
19822 28<sup>th</sup> Ave. W.  
Lynnwood, WA 98008**

\_\_\_\_\_  
Name and Address of Landowner

**19-17-14000-0010**

\_\_\_\_\_  
County Assessor Tax Parcel Number(s)  
(Legal Description Attached)

I am the landowner shown above. Sagebrush Power Partners, LLC ("Applicant") is applying for a sub-area comprehensive plan amendment, rezone, development agreement and wind farm development permit from Kittitas County for the Kittitas Valley Wind Power Project ("Project"). The property identified above and on the attached page ("Property") is included in the Project.

Landowner consents to, and joins in the application(s) filed with Kittitas County and Washington Energy Facility Site Evaluation Council ("EFSEC") for a land use change that allows wind power development. I certify that I possess the authority to join in the application for and on behalf of Landowner.

Andrea Q. Steinman  
(Signature of Landowner)

Andrea Steinman  
Printed Name of Landowner

8-30-05  
Date

**Legal Description of the Property**

The Property consists of approximately 20 Acres of land located in Kittitas County, Washington State, and more particularly described as follows: Lot 7, of that certain Survey as recorded June 22, 1987 in Book 15 of Surveys at pages 62 and 63 under Auditor's File No. 505298, records of Kittitas County, Township 19 North, Range 17 East, W.M., Kittitas County, State of Washington.

**KITTITAS VALLEY WIND POWER PROJECT**

**Landowner Consent to Application for Sub-Area Comprehensive Plan Amendment, Rezone, Development Agreement and Wind Farm Permit**

**Carla Thomas  
911 Robbins Road  
Ellensburg, WA 98926**

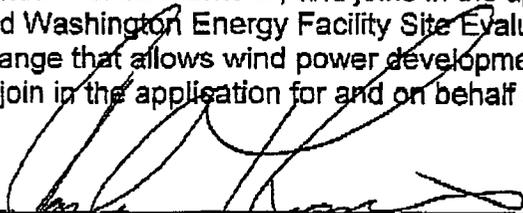
\_\_\_\_\_  
Name and Address of Landowner

**19-17-09010-0003, 19-17-15000-0001, 19-17-09040-0003**

\_\_\_\_\_  
County Assessor Tax Parcel Number(s)  
(Legal Description Attached)

I am the landowner shown above. Sagebrush Power Partners, LLC ("Applicant") is applying for a sub-area comprehensive plan amendment, rezone, development agreement and wind farm development permit from Kittitas County for the Kittitas Valley Wind Power Project ("Project"). The property identified above and on the attached page ("Property") is included in the Project.

Landowner consents to, and joins in the application(s) filed with Kittitas County and Washington Energy Facility Site Evaluation Council ("EFSEC") for a land use change that allows wind power development. I certify that I possess the authority to join in the application for and on behalf of Landowner.

  
\_\_\_\_\_  
(Signature of Landowner)

**Carla Thomas**  
\_\_\_\_\_  
Printed Name of Landowner

**9/2/05**  
\_\_\_\_\_  
Date

## Legal Description of the Property

### LEGAL DESCRIPTION CARLA THOMAS PROPERTY

That portion of the South one-half (S1/2) of the Northeast one-quarter (NE1/4) and of the Southeast one-quarter (SE1/4) of Section 9, which lies East of the East boundary line of the right of way of the County Road (formerly SSH 2-I) as it existed December 1, 1966; EXCEPT that portion of the Northwest one-quarter (NW1/4) of the Southeast one-quarter (SE1/4) of Section 9 which is described as follows: Beginning at the Southeast corner of said Section 9; thence North 50°35'52" West 2368.16 feet to a point on the center line survey of Secondary State Highway No. 2-I, and in the Northwest one-quarter (NW1/4) of the Southeast one-quarter (SE1/4) of said Section and the point of beginning; thence North 47°00' East 254.15 feet; thence North 43°00' West 418.36; thence North 13°34' West 200.25 feet; thence South 73°26' West 345.91 feet; thence South 27°50' East 335.17 feet; thence South 49°03' East 425.62 feet to the point of beginning;

Also known as Kittitas County tax parcels no. 19-17-09010-0003 and no. 19-17-09040-0003

AND

That portion of Section 15 which lies North and East of the right of way of the County Road (formerly SSH-2-I) as it existed December 28, 1968, and West of the right of way of SR 131 (now known as 97) as acquired by the State of Washington in Decree of Appropriation entered July 7, 1970 in Kittitas County Superior Court Cause No. 17205.

All of the above is located within Township 19 North, Range 17 East, W.M., County of Kittitas, State of Washington.

Also known as Kittitas County tax parcel no. 19-17-15000-0001

**KITTITAS VALLEY WIND POWER PROJECT**

**Landowner Consent to Application for Sub-Area Comprehensive Plan Amendment, Rezone, Development Agreement and Wind Farm Permit**

**Keith Schober  
P.O. Box 72  
Cle Elum, WA 98922**

\_\_\_\_\_  
Name and Address of Landowner

**19-17-22000-0003, 19-17-22000-0008, 19-17-22000-0009, 19-17-27000-0001**

\_\_\_\_\_  
County Assessor Tax Parcel Number(s)  
(Legal Description Attached)

I am the landowner shown above. Sagebrush Power Partners, LLC ("Applicant") is applying for a sub-area comprehensive plan amendment, rezone, development agreement and wind farm development permit from Kittitas County for the Kittitas Valley Wind Power Project ("Project"). The property identified above and on the attached page ("Property") is included in the Project.

Landowner consents to, and joins in the application(s) filed with Kittitas County and Washington Energy Facility Site Evaluation Council ("EFSEC") for a land use change that allows wind power development. I certify that I possess the authority to join in the application for and on behalf of Landowner.

*Keith Schober*  
(Signature of Landowner)

Keith Schober  
Printed Name of Landowner

8-24-05  
Date

**Legal Description of the Property**

The Southwest one-quarter (SW1/4) of the Northwest one-quarter (NW1/4) and the Northwest one-quarter (NW1/4) of the Southwest one-quarter (SW1/4), and the East one-half (E1/2) of the Southwest one-quarter (SW1/4), Section 22 Also, all of that portion lying Easterly and Northeasterly of Hayward Road, Section 27, Township 19 North, Range 17 East, W.M.

Kittitas County Tax Parcel No's 19-17-22000-0003, 19-17-22000-0008 & 19-17-22000-0009, and 19-17-27000-0001.

**KITTITAS VALLEY WIND POWER PROJECT**

**Landowner Consent to Application for Sub-Area Comprehensive Plan Amendment, Rezone, Development Agreement and Wind Farm Permit**

**Gerry and Paula Williams  
P.O. Box 36  
Ellensburg, WA 98926**

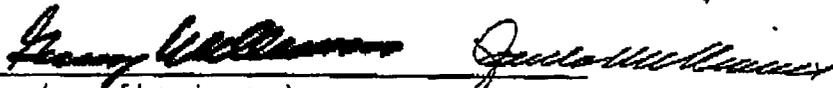
\_\_\_\_\_  
Name and Address of Landowner

**19-17-03000-0003, 19-17-10000-0001, 19-17-15000-0003, 20-17-34000-0004**

\_\_\_\_\_  
County Assessor Tax Parcel Number(s)  
(Legal Description Attached)

I am the landowner shown above. Sagebrush Power Partners, LLC ("Applicant") is applying for a sub-area comprehensive plan amendment, rezone, development agreement and wind farm development permit from Kittitas County for the Kittitas Valley Wind Power Project ("Project"). The property identified above and on the attached page ("Property") is included in the Project.

Landowner consents to, and joins in the application(s) filed with Kittitas County and Washington Energy Facility Site Evaluation Council ("EFSEC") for a land use change that allows wind power development. I certify that I possess the authority to join in the application for and on behalf of Landowner.

  
\_\_\_\_\_  
(Signature of Landowner)

**Gerry and Paula Williams**  
\_\_\_\_\_  
Printed Name of Landowner

**8-22-05**  
\_\_\_\_\_  
Date

### Legal Description of the Property

The Property consists of approximately 700 Acres of land located in Kittitas County, Washington State, and more particularly described as follows: The Northeast one-quarter (NE1/4), and the South one-half (S1/2) of Section 3, excepting there from that portion lying Westerly of the State Highway, and the East one-half (E1/2) of the East one-half (E1/2) of Section 10, and that portion lying Easterly of the State Highway within the Northeast one-quarter (NE1/4) of Section 15. All of the above is located within Township 19 North, Range 17 East, W.M. And together with the South one-half (S1/2) of the Southeast one-quarter (SE1/4) of Section 34, Township 20 North, Range 17 East, W.M.

Kittitas County Tax Parcel No's 19-17-03000-0003, 19-17-10000-0001, 19-17-15000-0003 & 20-17-34000-0004.

**KITTITAS VALLEY WIND POWER PROJECT**

**Landowner Consent to Application for Sub-Area Comprehensive Plan Amendment, Rezone, Development Agreement and Wind Farm Permit**

Noel Andrew  
2701 Elk Springs Road  
Ellensburg, WA 98926

\_\_\_\_\_  
Name and Address of Landowner

19-17-11000-0002, 19-17-11000-0003.

\_\_\_\_\_  
County Assessor Tax Parcel Number(s)  
(Legal Description Attached)

I am the landowner shown above. Sagebrush Power Partners, LLC ("Applicant") is applying for a sub-area comprehensive plan amendment, rezone, development agreement and wind farm development permit from Kittitas County for the Kittitas Valley Wind Power Project ("Project"). The property identified above and on the attached page ("Property") is included in the Project.

Landowner consents to, and joins in the application(s) filed with Kittitas County and Washington Energy Facility Site Evaluation Council ("EFSEC") for a land use change that allows wind power development. I certify that I possess the authority to join in the application for and on behalf of Landowner.

  
\_\_\_\_\_  
(Signature of Landowner)

Noel Andrew  
\_\_\_\_\_  
Printed Name of Landowner

2-19-05  
\_\_\_\_\_  
Date

### **Legal Description of the Property**

The Property consists of approximately 150 Acres of land located in Kittitas County, Washington State, and more specifically described as follows:  
Tracts 1, 2 & 3 of Survey No. 501915, (located in the West one-half (W1/2)), Section 11, Township 19 North, Range 17 East, W.M.

Kittitas County Tax Parcel No's 19-17-11000-0002, 19-17-11000-0003

**KITTITAS VALLEY WIND POWER PROJECT**

**Landowner Consent to Application for Sub-Area Comprehensive Plan Amendment, Rezone, Development Agreement and Wind Farm Permit**

**Marvin Green  
P.O. Box 205  
Holladay, TN 38341**

\_\_\_\_\_  
Name and Address of Landowner

**19-17-14000-0005**

\_\_\_\_\_  
County Assessor Tax Parcel Number(s)  
(Legal Description Attached)

I am the landowner shown above. Sagebrush Power Partners, LLC ("Applicant") is applying for a sub-area comprehensive plan amendment, rezone, development agreement and wind farm development permit from Kittitas County for the Kittitas Valley Wind Power Project ("Project"). The property identified above and on the attached page ("Property") is included in the Project.

Landowner consents to, and joins in the application(s) filed with Kittitas County and Washington Energy Facility Site Evaluation Council ("EFSEC") for a land use change that allows wind power development. I certify that I possess the authority to join in the application for and on behalf of Landowner.

*Marvin Green*  
(Signature of Landowner)

Marvin Green  
Printed Name of Landowner

08-24-05  
Date

**Legal Description of the Property**

The Property consists of approximately 50 acres of land located in Kittitas County, Washington State, and more specifically described as follows: Lot 2, of that certain Survey recorded on June 22, 1987, in Book 15 of Surveys, at pages 62 and 63, under Auditor's File No. 605298, records of Kittitas County, Washington, being a portion of the East one-half (E1/2), Section 14, Township 19 North, Range 17 East, W.M., Kittitas County, State of Washington.

Kittitas County Tax Parcel No. 19-17-14000-0005

**KITTITAS VALLEY WIND POWER PROJECT**

**Landowner Consent to Application for Sub-Area Comprehensive Plan Amendment, Rezone, Development Agreement and Wind Farm Permit**

**James and Cindy Majors  
411 Rustic Road  
Ellensburg, WA 98926**

\_\_\_\_\_  
Name and Address of Landowner

**19-17-14000-0006**

\_\_\_\_\_  
County Assessor Tax Parcel Number(s)  
(Legal Description Attached)

I am the landowner shown above. Sagebrush Power Partners, LLC ("Applicant") is applying for a sub-area comprehensive plan amendment, rezone, development agreement and wind farm development permit from Kittitas County for the Kittitas Valley Wind Power Project ("Project"). The property identified above and on the attached page ("Property") is included in the Project.

Landowner consents to, and joins in the application(s) filed with Kittitas County and Washington Energy Facility Site Evaluation Council ("EFSEC") for a land use change that allows wind power development. I certify that I possess the authority to join in the application for and on behalf of Landowner.

*James and Cindy Majors*  
\_\_\_\_\_  
(Signature of Landowner)

**James and Cindy Majors**  
\_\_\_\_\_  
Printed Name of Landowner

**8-20-05**  
\_\_\_\_\_  
Date

**Legal Description of the Property**

The Property consists of approximately 50 Acres of land located in Kittitas County, Washington State, and more specifically described as follows: Lot 3, of Survey No. 505298, (located in the East one-half (E1/2)), Section 14, Township 19 North, Range 17 East, W.M.

Kittitas County Tax Parcel No. 19-17-14000-0006.

**KITTITAS VALLEY WIND POWER PROJECT**

**Landowner Consent to Application for Sub-Area Comprehensive Plan Amendment, Rezone, Development Agreement and Wind Farm Permit**

**Merle Steinman**  
19822 28<sup>th</sup> Ave. W.  
Lynnwood, WA 98008

\_\_\_\_\_  
Name and Address of Landowner

**19-17-14000-0009**

\_\_\_\_\_  
County Assessor Tax Parcel Number(s)  
(Legal Description Attached)

I am the landowner shown above. Sagebrush Power Partners, LLC ("Applicant") is applying for a sub-area comprehensive plan amendment, rezone, development agreement and wind farm development permit from Kittitas County for the Kittitas Valley Wind Power Project ("Project"). The property identified above and on the attached page ("Property") is included in the Project.

Landowner consents to, and joins in the application(s) filed with Kittitas County and Washington Energy Facility Site Evaluation Council ("EFSEC") for a land use change that allows wind power development. I certify that I possess the authority to join in the application for and on behalf of Landowner.

  
\_\_\_\_\_  
(Signature of Landowner)

**Merle Steinman**  
\_\_\_\_\_  
Printed Name of Landowner

**AUG 30, 2005**  
\_\_\_\_\_  
Date

**Legal Description of the Property**

The Property consists of approximately 50 Acres of land located in Kittitas County, Washington State, and more particularly described as follows: Lot 6, of that certain Survey as recorded June 22, 1987 in Book 15 of Surveys at pages 62 and 63 under Auditor's File No. 505298, records of Kittitas County, Township 19 North, Range 17 East, W.M., Kittitas County, State of Washington.

**KITTITAS VALLEY WIND POWER PROJECT**

**Landowner Consent to Application for Sub-Area Comprehensive Plan Amendment, Rezone, Development Agreement and Wind Farm Permit**

**Pete Bugni  
Los Abuelos  
361 Cedar Cove Road  
Ellensburg, WA 98926**

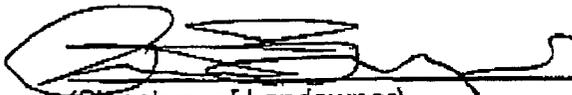
\_\_\_\_\_  
Name and Address of Landowner

**19-17-15000-0009, 19-17-15000-0008, 19-17-15000-0010, 19-17-15000-0007**

\_\_\_\_\_  
County Assessor Tax Parcel Number(s)  
(Legal Description Attached)

I am the landowner shown above. Sagebrush Power Partners, LLC ("Applicant") is applying for a sub-area comprehensive plan amendment, rezone, development agreement and wind farm development permit from Kittitas County for the Kittitas Valley Wind Power Project ("Project"). The property identified above and on the attached page ("Property") is included in the Project.

Landowner consents to, and joins in the application(s) filed with Kittitas County and Washington Energy Facility Site Evaluation Council ("EFSEC") for a land use change that allows wind power development. I certify that I possess the authority to join in the application for and on behalf of Landowner.

  
\_\_\_\_\_  
(Signature of Landowner)

Pete Bugni  
Printed Name of Landowner

8-25-05  
Date

### Legal Description of the Property

#### Parcel G

Parcel G of that certain survey as recorded February 4, 2004 in Book 29 of Surveys at pages 242 through 244 under Auditor's File No. 200402040026, Records of Kittitas County, Washington; being a portion of the Southwest Quarter of Section 15, Township 19 North, Range 17 East, W.M., in the County of Kittitas, State of Washington.

#### Parcel H

Parcel H of that certain survey as recorded February 4, 2004 in Book 29 of Surveys at pages 242 through 244 under Auditor's File No. 200402040026, Records of Kittitas County, Washington; being a portion of the Northwest and Southwest Quarters of Section 15, Township 19 North, Range 17 East, W.M., in the County of Kittitas, State of Washington.

#### Parcel J

Parcel J of that certain survey as recorded February 4, 2004 in Book 29 of Surveys at pages 242 through 244, under Auditor's File No. 200402040026, Records of Kittitas County, Washington; being a portion of the Northwest and Southwest Quarter of Section 15, Township 19 North, Range 17 East, W.M., in the County of Kittitas, State of Washington;

AND that portion of Parcel F of said survey which lies west of the following described line: Beginning at the southwest corner of said Parcel F; thence S 89°35'51" E, along the south boundary of said Parcel F, and the south boundary of said Section 15, 1299.64 feet to the 5/8" rebar with aluminum cap which marks the south quarter corner of said section, and the true point of beginning for said described line; thence N 01°00'26" E, 1095.60 feet to the north boundary of said Parcel F and the terminus for said described line; being a portion of the Southwest and Southeast Quarters of said Section 15.

### KITTITAS VALLEY WIND POWER PROJECT

#### Landowner Consent to Application for Sub-Area Comprehensive Plan Amendment, Rezone, Development Agreement and Wind Farm Permit

Karl Krogstad  
P.O. Box 95260  
Seattle, WA 98145

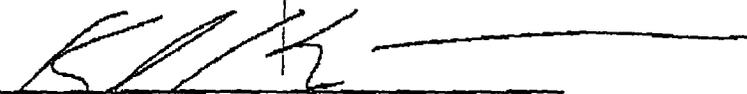
Name and Address of Landowner

19-17-14000-0001

County Assessor Tax Parcel Number(s)  
(Legal Description Attached)

I am the landowner shown above. Sagebrush Power Partners, LLC ("Applicant") is applying for a sub-area comprehensive plan amendment, rezone, development agreement and wind farm development permit from Kittitas County for the Kittitas Valley Wind Power Project ("Project"). The property identified above and on the attached page ("Property") is included in the Project.

Landowner consents to, and joins in the application(s) filed with Kittitas County and Washington Energy Facility Site Evaluation Council ("EFSEC") for a land use change that allows wind power development. I certify that I possess the authority to join in the application for and on behalf of Landowner.

  
(Signature of Landowner)

Karl Krogstad  
Printed Name of Landowner

August 25, 2005  
Date

**Legal Description of the Property**

The Property consists of approximately 54 Acres of land located in Kittitas County, Washington State, and more particularly described as follows: Lot 1, Survey No. 505298, (located within the East one-half (E1/2)), Section 14, Township 19 North, Range 17 East, W.M.

Kittitas County Tax Parcel No. 19-17-14000-0001.

**KITTITAS VALLEY WIND POWER PROJECT**

**Landowner Consent to Application for Sub-Area Comprehensive Plan Amendment, Rezone, Development Agreement and Wind Farm Permit**

**Michael and Louise Genson  
101 Elk Spring Road  
Ellensburg, WA 98926**

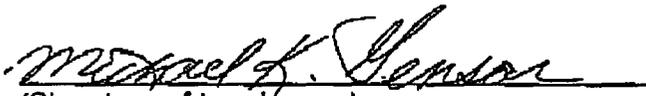
\_\_\_\_\_  
Name and Address of Landowner

**19-17-11000-0005, 19-17-14000-0002, 19-17-14000-0003, 19-17-14000-0004,  
19-17-23000-0014**

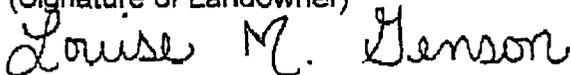
\_\_\_\_\_  
County Assessor Tax Parcel Number(s)  
(Legal Description Attached)

I am the landowner shown above. Sagebrush Power Partners, LLC ("Applicant") is applying for a sub-area comprehensive plan amendment, rezone, development agreement and wind farm development permit from Kittitas County for the Kittitas Valley Wind Power Project ("Project"). The property identified above and on the attached page ("Property") is included in the Project.

Landowner consents to, and joins in the application(s) filed with Kittitas County and Washington Energy Facility Site Evaluation Council ("EFSEC") for a land use change that allows wind power development. I certify that I possess the authority to join in the application for and on behalf of Landowner.

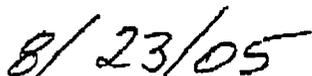


(Signature of Landowner)



**Michael and Louise Genson**

\_\_\_\_\_  
Printed Name of Landowner



\_\_\_\_\_  
Date

### Legal Description of the Property

The Property consists of approximately 425 Acres of land located in Kittitas County, Washington State, and more specifically described as follows: Tracts 5 and 6 of Survey No. 501915, located in the Southwest one-quarter (SW1/4), Section 11; and the West one-half (W1/2) of Section 14, Excepting there from that portion lying Southwesterly of the State Highway, and that portion of the West one-half (W1/2), Section 23, lying Northerly of the B.P.A. power line road and being a portion of Tract B of Survey No. 504472.

Kittitas County Tax Parcel No's, 19-17-11000-0005, 19-17-14000-0002, 19-17-14000-0003, 19-17-14000-0004 & 19-17-23000-0014.

**KITTITAS VALLEY WIND POWER PROJECT**

**Landowner Consent to Application for Sub-Area Comprehensive Plan Amendment, Rezone, Development Agreement and Wind Farm Permit**

Department of Natural Resources  
Attn: Milt Johnston  
713 Bowers Road  
Ellensburg, WA 98926

\_\_\_\_\_  
Name and Address of Landowner

19-17-02000-0001, 19-17-02000-0003, 19-17-02000-0005, 19-17-10000-0006,  
19-17-16000-0001, 19-17-22000-0001, 19-17-22000-0002, 19-17-22000-0005,  
19-17-22000-0007, 19-17-10000-0602, 19-17-10000-0005

\_\_\_\_\_  
County Assessor Tax Parcel Number(s)

Washington State Department of Resources (DNR) is the landowner shown above. Sagebrush Power Partners, LLC ("Applicant") is applying for a sub-area comprehensive plan amendment, rezone, development agreement and wind farm development permit from Kittitas County for the Kittitas Valley Wind Power Project ("Project"). State land managed by the DNR, identified above and on the attached page ("Property"), is included in the Project.

DNR representatives consent to, and join in the application(s) filed with Kittitas County and Washington Energy Facility Site Evaluation Council ("EFSEC") for a land use change that allows wind power development. DNR certifies that William O. Boyum is authorized to represent DNR in this action to join in this application.

William O. Boyum  
(Signature)

William O. Boyum  
Printed Name and Title at DNR  
Region Manager

8/29/05  
Date

61 mg

### Legal Description of the Property

The Property consists of approximately 2,080 Acres of land located in Kittitas County, Washington State, and more specifically described as follows: The East one-half (E1/2), the West one-half of the Southwest one-quarter (W1/2SW1/4), the Southeast one-quarter of the Southwest one-quarter (SE1/4SW1/4), and the Southwest one quarter of the Northwest one-quarter (SW1/4NW1/4), Section 2; The West one-half of the East one-half (W1/2E1/2), and the West one-half (W1/2), Section 10; All of Section 16. The East one-half (E1/2), and the Southwest one-quarter of the Southwest one-quarter (SW1/4SW1/4), and the North one-half of the Northwest one-quarter (N1/2NW1/4), and the Southeast one-quarter of the Northwest one-quarter (SE1/4NW1/4), Section 22; All of the above is located within Township 19 North, Range 17 East, W.M. All of section 36, Township 20 North, Range 17 East, W.M.

Kittitas County Tax Parcel No's 19-17-02000-0001, 19-17-02000-0003 & 19-17-02000-0005; 19-17-10000-0008; 19-17-16000-0001; 19-17-22000-0001, 19-17-22000-0002, 19-17-22000-0005 & 19-17-22000-0007, 19-17-10000-0002, 19-17-10000-0005

**KITTITAS VALLEY WIND POWER PROJECT**

**Landowner Consent to Application for Sub-Area Comprehensive Plan Amendment, Rezone, Development Agreement and Wind Farm Permit**

Daniel and Marcia Green  
715 Carplake Rd.  
Camano Island, WA 98282

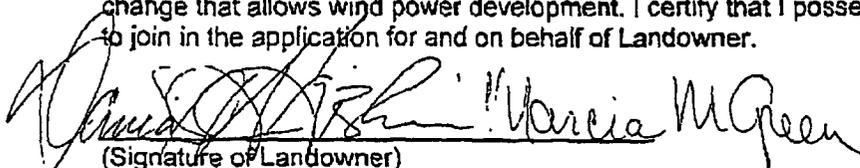
\_\_\_\_\_  
Name of Landowner

19-17-01000-0002, 19-17-01000-0009, 19-17-01000-0010, 19-17-01000-0011,  
19-17-11000-0001, 19-17-11000-0006, 19-17-11000-0007, 19-17-11000-0008,  
19-17-11000-0009, 19-17-11000-0010, 19-17-12000-0002, 19-17-12000-0006,  
19-17-12000-0007, 19-17-12000-0008, 19-17-12000-0009, 19-17-12000-0010

\_\_\_\_\_  
County Assessor Tax Parcel Number(s)

I am the landowner shown above. Sagebrush Power Partners, LLC ("Applicant") is applying for a sub-area comprehensive plan amendment, rezone, development agreement and wind farm development permit from Kittitas County for the Kittitas Valley Wind Power Project ("Project"). The property identified above and on the attached page ("Property") is included in the Project.

Landowner consents to, and joins in the application(s) filed with Kittitas County and Washington Energy Facility Site Evaluation Council ("EFSEC") for a land use change that allows wind power development. I certify that I possess the authority to join in the application for and on behalf of Landowner.

  
(Signature of Landowner)

Daniel and Marcia Green  
Printed Name of Landowner

9-8-05  
Date

**Legal Description of the Property**

The Property consists of approximately 800 acres of land located in Kittitas County, Washington State, and more specifically described as follows:

The Southwest one-quarter (SW1/4) of Section 1, Township 19 North, Range 17 East, W.M., Kittitas County, State of Washington.

The East one-half (E1/2) of Section 11, Township 19 North, Range 17 East, W.M., Kittitas County, State of Washington.

And

The West one-half (W1/2) of Section 12, Township 19 North, Range 17 East, W.M., Kittitas County, State of Washington.

Kittitas County Tax Parcel Numbers:

19-17-01000-0002, 19-17-01000-0009, 19-17-01000-0010, 19-17-01000-0011,  
19-17-11000-0001, 19-17-11000-0006, 19-17-11000-0007, 19-17-11000-0008,  
19-17-11000-0009, 19-17-11000-0010, 19-17-12000-0002, 19-17-12000-0006,  
19-17-12000-0007, 19-17-12000-0008, 19-17-12000-0009, 19-17-12000-0010

**KITTITAS VALLEY WIND POWER PROJECT**

**Landowner Consent to Application for Sub-Area Comprehensive Plan Amendment, Rezone, Development Agreement and Wind Farm Permit**

~~Paul Horish~~ *MONTY MILLER*  
Cascadia Field and Stream Club  
730 Teanaway Heights  
Cle Elum, WA 98922

\_\_\_\_\_  
Name and Address of Landowner

19-17-21000-0001

\_\_\_\_\_  
County Assessor Tax Parcel Number(s)  
(Legal Description Attached)

I am the landowner shown above. Sagebrush Power Partners, LLC ("Applicant") is applying for a sub-area comprehensive plan amendment, rezone, development agreement and wind farm development permit from Kittitas County for the Kittitas Valley Wind Power Project ("Project"). The property identified above and on the attached page ("Property") is included in the Project.

Landowner consents to, and joins in the application(s) filed with Kittitas County and Washington Energy Facility Site Evaluation Council ("EFSEC") for a land use change that allows wind power development. I certify that I possess the authority to join in the application for and on behalf of Landowner.

*Monty Miller*  
\_\_\_\_\_  
(Signature of Landowner)

~~Paul Horish, President~~ *Monty D. Miller, President*  
Printed Name of Landowner

*9-1-05*  
\_\_\_\_\_  
Date

### Legal Description of the Property

The property consists of approximately 182 Acres of land located in Kittitas County, Washington State, and more specifically described as follows: All of that portion of Section 21, lying east of the County road and lying East of the Easterly boundary of the Kittitas Reclamation District Canal, Township 19 North, Range 17 East, W.M.

Kittitas County Tax Parcel No. 19-17-21000-0001.

### KITTITAS VALLEY WIND POWER PROJECT

#### Landowner Consent to Application for Sub-Area Comprehensive Plan Amendment, Rezone, Development Agreement and Wind Farm Permit

Larry and Sue Tritt  
P.O. Box 725  
Roslyn, WA 98941

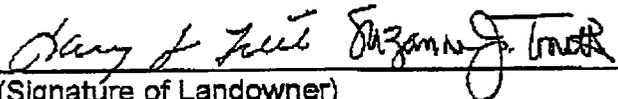
\_\_\_\_\_  
Name and Address of Landowner

19-17-11000-0004

\_\_\_\_\_  
County Assessor Tax Parcel Number(s)  
(Legal Description Attached)

I am the landowner shown above. Sagebrush Power Partners, LLC ("Applicant") is applying for a sub-area comprehensive plan amendment, rezone, development agreement and wind farm development permit from Kittitas County for the Kittitas Valley Wind Power Project ("Project"). The property identified above and on the attached page ("Property") is included in the Project.

Landowner consents to, and joins in the application(s) filed with Kittitas County and Washington Energy Facility Site Evaluation Council ("EFSEC") for a land use change that allows wind power development. I certify that I possess the authority to join in the application for and on behalf of Landowner.

  
\_\_\_\_\_  
(Signature of Landowner)

Larry and Sue Tritt  
\_\_\_\_\_  
Printed Name of Landowner

8/22/05  
\_\_\_\_\_  
Date

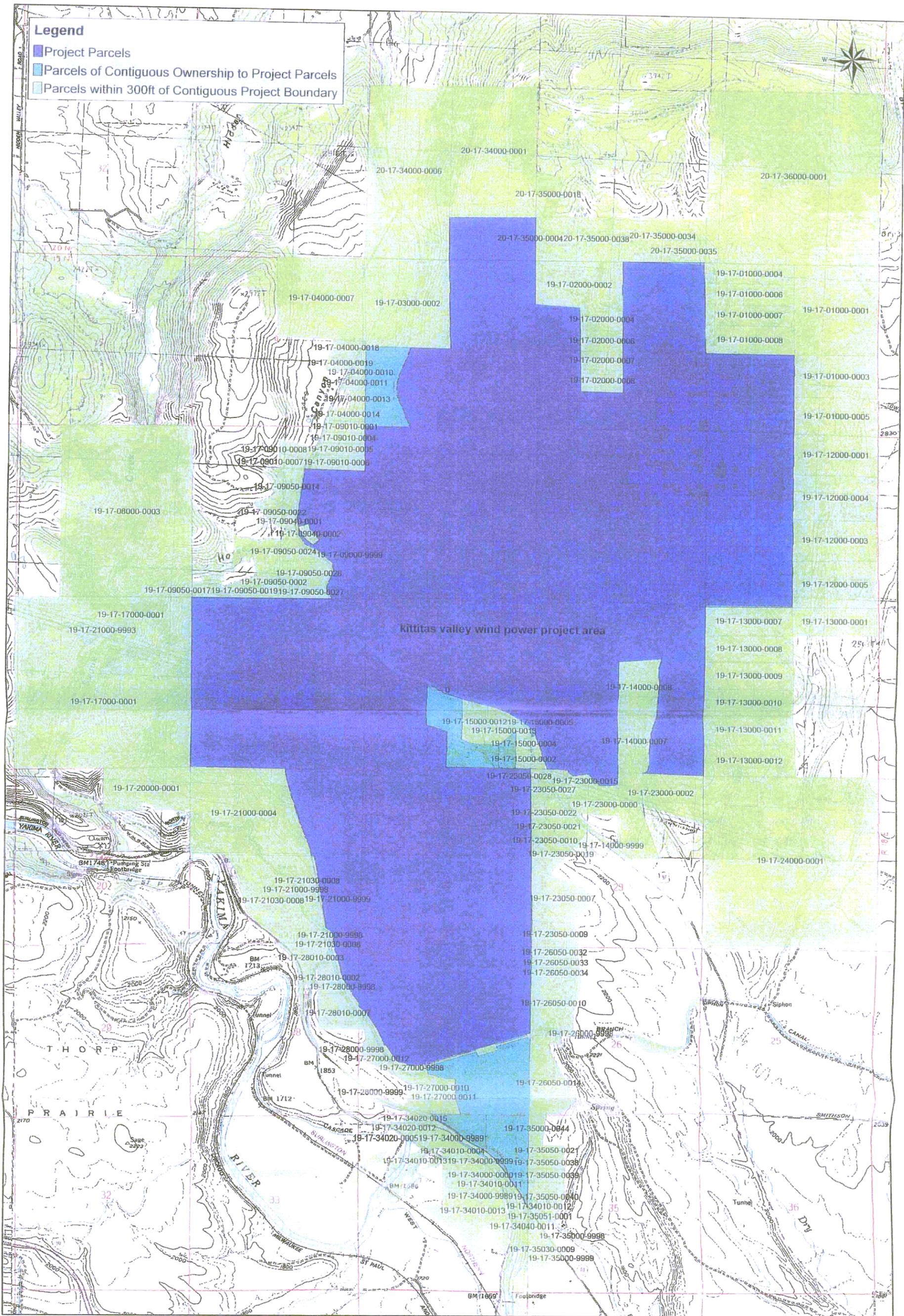
**Legal Description of the Property**

The Property consists of approximately 50 Acres of land located in Kittitas County, Washington, State, and more specifically described as follows: Tract 4, of Survey No. 501915, (located in the West one-half (W1/2)), Section 11, Township 19 North, Range 17 East, W.M.

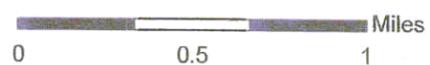
Kittitas County Tax Parcel No. 19-17-11000-0004

**Exhibit 3d**

**Adjacent Land Owners  
within 300 Feet**



Kittitas Valley Wind Power Project  
 Tax Parcels within 300ft of Participating Landowners  
 Map Created September 8, 2005



KITTITAS VALLEY WIND POWER PROJECT  
 DEVELOPMENT ACTIVITIES APPLICATION - EXHIBIT 3d  
 LANDOWNERS ADJACENT TO PROJECT SITE WITHIN 300FT

ASSESSOR NO.	ACRES	LEGAL	OWNER NAME	OWNER ADDRESS	ADDRESS 1	ADDRESS 2	CITY	ST	ZIP	BLVD/STREET	CITY
19-17-01000-0001	164 15	NE1/4 LOTS 1 & 2 ACRES 158 20 CD 7451, SEC 1, TWP 19, RGE 17,	PARKER, LUTHER G ETUX	PO BOX 13			SNOQUALMIE	WA	98065	UNKNOWN	ELLENSBURG
19-17-01000-0003	76 54	SE1/4 ACRES 80 00, CD 7453, SEC 1, TWP 19, RGE 17, N1/2	BRINKMAN MYRON T ETUX	347 ROSS LN SW			PUYALLUP	WA	98371	UNKNOWN	ELLENSBURG
19-17-01000-0004	39 13	PTN NW1/4 (TRACT 1, SURVEY #501914) ACRES 80 00, CD #7453-1, SEC 1, TWP 19, RGE 17,	MEYER, DAVID ETUX	2652 FIRESIDE CIRCLE			LEXINGTON	KY	40513-1468	ELK SPRINGS RD	ELLENSBURG
19-17-01000-0005	87 69	S1/2 SE1/4 ACRES 35 03, CD #7452-1, SEC 1, TWP 19, RGE 17,	CORNWALL, AMOS D &	ENGLISH, SHIRLEY A	11027 SE 280TH ST		AUBURN	WA	98092	TOMAHAWK LN	ELLENSBURG
19-17-01000-0006	40 38	PTN NW1/4 (TRACT 2, SURVEY #501914) ACRES 35 05, CD #7452-1-2, SEC 1, TWP 19, RGE 17	GEREAN, TODD J	6100 ELK SPRINGS ROAD			ELLENSBURG	WA	98928	ELK SPRINGS RD	ELLENSBURG
19-17-01000-0007	41 28	PTN NW1/4 (TRACT 3, SURVEY #501914) ACRES 47 79, CD #7452-1-3, SEC 1, TWP 19, RGE 17,	GEREAN, LEE R ETUX	4884 ELK SPRINGS ROAD			ELLENSBURG	WA	98928	ELK SPRINGS RD	ELLENSBURG
19-17-01000-0008	55 34	PTN NW1/4 (TRACT 4, SURVEY #501914) ACRES 78 83, CD 7454, SEC 2, TWP 19, RGE 17, N 1/2	ARONICA, FRED ETUX	31220 NE 110TH			CARNATION	WA	98014	ELK SPRINGS RD	ELLENSBURG
19-17-02000-0002	89 69	NW1/4 LOTS 3 & 4 ACRES 19 85, CD 7455, SEC 2, TWP 19, RGE 17, N1/2	FOSSETT, SUSAN	4651 ELK SPRINGS RD			ELLENSBURG	WA	98928	UNKNOWN	ELLENSBURG
19-17-02000-0004	20 28	SE1/4 NW1/4 (LOT 1, SURVEY #501913) ACRES 19 86, CD #7455-1, SEC 2, TWP 19, RGE 17,	OBERHANSLEY, LUCAS C	PO BOX 854			ROY	WA	98580	ELK SPRINGS RD	ELLENSBURG
19-17-02000-0006	20 29	S1/2 SE1/4 NW1/4 (LOT 2, SURVEY #501913) ACRES 19 85, CD #7455-2, SEC 2, TWP 19, RGE 17,	BURDYSHAW, EMILIA C	2806 SW ADAMS			SEATTLE	WA	98126	ELK SPRINGS RD	ELLENSBURG
19-17-02000-0007	16 64	N1/2 NE1/4 SW1/4 (LOT 3, SURVEY #501913) ACRES 19 85, CD #7455-3, SEC 2, TWP 19, RGE 17,	BURDYSHAW, EMILIA C	2806 SW ADAMS			SEATTLE	WA	98126	ELK SPRINGS RD	ELLENSBURG
19-17-02000-0008	20 78	S1/2 NE1/4 SW1/4 (LOT 4, SURVEY #501913) ACRES 132 44, CD 7457, SEC 3, TWP 19, RGE 17,	MORRAITIS, DAVID J	31075 KENT-BLACK DIAMONT RD			AUBURN	WA	98092	ELK SPRINGS RD	ELLENSBURG
19-17-03000-0002	183 92	131 ACRES 133 13, CD 7459-1, SEC 4, TWP 19, RGE 17, PTN NE1/4 LOTS 1 & 2 (MUST BE SOLD WITH PARCELS 19-17-04000-0001 CD 7459 & 19-17-04000-0014 CD	RANCH ON SWAUK CREEK LLC, THE	1880 NELSON SIDING RD			CLE ELUM	WA	98922	BETTAS RD	CLE ELUM
19-17-04000-0007	154 91	TEANAWAY HEIGHTS PTN LOTS 8C & 8D) ACRES 5 00, CD 7462-1, SEC 4, TWP 19, RGE 17, PTN	RAINBOW VALLEY RANCH LLC	1209 EAST THIRD AVE			ELLENSBURG	WA	98928	BETTAS RD	CLE ELUM
19-17-04000-0010	5 00	SE1/4 (PARCEL 1A, B28/P241) ACRES 7 04, CD 7462-2, SEC 4, TWP 19, RGE 17, PTN	HENLEY GROUP, LTD THE	10036 VALMAY AVE NW			SEATTLE	WA	98177	BETTAS RD	CLE ELUM
19-17-04000-0011	7 04	SE1/4 (PARCEL 2A, B28/P241) ACRES 5 93, CD 7462-4, SEC 4, TWP 19, RGE 17, PTN	YEAGER, THOMAS F &	WHITISH, LINDA	808 S 7TH AVE		YAKIMA	WA	98902	BETTAS RD	CLE ELUM
19-17-04000-0013	5 97	SE1/4 (PARCEL 4, B28/P221-225) ACRES 10 32, CD 7462-5, SEC 4, TWP 19, RGE 17,	THAYER, RAY ETUX	PO BOX 991			ELLENSBURG	WA	98928	BETTAS RD	CLE ELUM
19-17-04000-0014	10 32	PTN SE1/4 (PARCEL 5, B28/P221-225) ACRES 10 33, CD 7462-9, SEC 4, TWP 19, RGE 17,	THAYER, RAY ETUX	PO BOX 991			ELLENSBURG	WA	98928	BETTAS RD	CLE ELUM
19-17-04000-0018	10 44	PTN NE1/4, PTN SE1/4 (PARCEL 22, B28/P221-225) ACRES 10 00, CD 7462-10, SEC 4, TWP 19, RGE 17,	AHLES, PETER ETUX	PO BOX 898			CLE ELUM	WA	98922	BETTAS RD	CLE ELUM
19-17-04000-0019	9 64	PTN SE1/4 (PARCEL 23, B28/P221-225) ACRES 356 00, CD 7473, SEC 8, TWP 19, RGE 17, ALL NE 1/4, NE 1/4 NW 1/4, SE 1/4 NW 1/4, NE 1/4 SW 1/4, SE	HENLEY GROUP, LTD THE	10036 VALMAY AVE NW			SEATTLE	WA	98177	BETTAS RD	CLE ELUM
19-17-06000-0003	483 27	1/4 SW1/4, ALL SE 1/4, 12 09 ACRES 10 00, CD 7476, PTN SE1/4 OF SEC 4, PTN NE1/4 OF SEC 9 ALL OF TWP 19 RGE 17 (PARCEL 6A, 10 02 B28/P241), LESS 1 40@ CO RD	SWAUK VALLEY RANCH LLC	ATTN MARY WHITTLE	PO BOX 24567		SEATTLE	WA	98124	UNKNOWN	CLE ELUM
19-17-06000-9999	12 09	ACRES 10 00, CD 7476, PTN SE1/4 OF SEC 4, PTN NE1/4 OF SEC 9 ALL OF TWP 19 RGE 17 (PARCEL 6A, 10 02 B28/P241), LESS 1 40@ CO RD	BETTAS ROAD				SEATTLE	WA	98124	UNKNOWN	CLE ELUM
19-17-09010-0001	10 02	B28/P241), LESS 1 40@ CO RD ACRES 10 00, CD 7478-1, PTN NE1/4 (PARCEL 7A, 10 25 B28/P241)	HENLEY GROUP, LTD THE	10036 VALMAY AVE NW			SEATTLE	WA	98177	BETTAS RD	CLE ELUM
19-17-09010-0004	10 25	B28/P241) ACRES 12 75, CD 7478-2, SEC 9, TWP 19, RGE 17,	HENLEY GROUP, LTD THE	10036 VALMAY AVE NW			SEATTLE	WA	98177	BETTAS RD	CLE ELUM
19-17-09010-0005	12 81	PTN NE1/4 (PARCEL 8A, B28/P241) ACRES 16 45, CD 7478-3, SEC 9, TWP 19, RGE 17,	HENLEY GROUP, LTD THE	10036 VALMAY AVE NW			SEATTLE	WA	98177	BETTAS RD	CLE ELUM
19-17-09010-0006	17 60	PTN NE1/4 (PARCEL 9A, B28/P241) ACRES 7 15, CD 7478-4, SEC 9, TWP 19, RGE 17, PTN	HENLEY GROUP, LTD THE	10036 VALMAY AVE NW			SEATTLE	WA	98177	BETTAS RD	CLE ELUM
19-17-09010-0007	7 28	NE1/4 (PARCEL 10 B28/P221-225) ACRES 8 87, CD 7478-5, SEC 9, TWP 19, RGE 17, PTN	HOLTZ, CHARLES J ETUX	907 E 72ND DR SE			EVERETT	WA	98205	BETTAS RD	CLE ELUM
19-17-09010-0008	9 04	NE1/4 (PARCEL 11, B28/P221-225) ACRES 3 10, CD 7481-A, SEC 9, TWP 19, RGE 17,	HENLEY GROUP, LTD THE	10036 VALMAY AVE NW			SEATTLE	WA	98177	BETTAS RD	CLE ELUM
19-17-09040-0001	2 89	NW1/4 SE1/4 TAX 3 ACRES 5 00, SEC 9, TWP 19, RGE 17, SE1/4 E OF CO	GASKILL, JENNIFER ETVR	3201 BETTAS RD			CLE ELUM	WA	98922	BETTAS RD	CLE ELUM
19-17-09040-0002	4 38	RD TAX 11, ICA# 5-19-00035 ACRES 20 23, TEANAWAY HEIGHTS (UNRECORDED) PTN LOT 2 (PARCEL 2, SURVEY #478311), SEC 9, TWP 19,	STATE OF WASH (DOT)	REAL ESTATE SERVICES	PO BOX 12560		YAKIMA	WA	98909		CLE ELUM
19-17-09050-0002	19 77	RGE 17 ACRES 18 86, TEANAWAY HEIGHTS (UNRECORDED),	ROBERTSON, MICHAEL H ETUX	4101 BETTAS RD			CLE ELUM	WA	98922	BETTAS RD	CLE ELUM
19-17-09050-0014	19 47	PTN LOT 13 (PTN A & B), SEC 9, TWP 19, RGE 17 ACRES 10 96 TEANAWAY HEIGHTS (UNRECORDED), LOT	CAMPBELL, GREGORY M &	COGAN, SHANNON A	4970 AIRPORT RD		CLE ELUM	WA	98922	BETTAS RD	CLE ELUM
19-17-09050-0017	10 61	3, TRACT D, SEC 9, TWP 19, RGE 17 ACRES 12 39 TEANAWAY HEIGHTS (UNRECORDED) LOT	JACKSON, MARK S	4205 AUBURN WAY S #54			AUBURN	WA	98092	BETTAS RD	CLE ELUM
19-17-09050-0019	12 44	3 TRACT C, SEC 9, TWP 19, RGE 17	ARRIOLA, CARLOS R ETUX	100 LAKE WASHINGTON BLVD			SEATTLE	WA	98122	BETTAS RD	CLE ELUM

KITTITAS VALLEY WIND POWER PROJECT  
 DEVELOPMENT ACTIVITIES APPLICATION - EXHIBIT 3d  
 LANDOWNERS ADJACENT TO PROJECT SITE WITHIN 300FT

ASSessor No	ACRES	LEGAL	OWNER NAME	OWNER ADDRESS	ADDRESS 1	ADDRESS 2	CITY	ST	ZIP	STREET	CITY
19-17-09050-0022	15 02	LOT 13, SEC 9, TWP 19, RGE 17 ACRES 19 82 TEANAWAY HEIGHTS (UNRECORDED) PTN	RAND, MARTIN L &	SCHALLER, ROBERT T ETUX	2009 166TH PL NE		BELLEVUE	WA	98008	BETTAS RD	CLE ELUM
19-17-09050-0024	44 78	LOT 1, SEC 9, TWP 19, RGE 17 ACRES 44 98, TEANAWAY HEIGHTS (UNRECORDED) PTN	RAND, MARTIN L &	SCHALLER, ROBERT T ETUX	2009 166TH PL NE		BELLEVUE	WA	98008	BETTAS RD	CLE ELUM
19-17-09050-0028	20 29	RGE 18, ACRES 10 44, TEANAWAY HEIGHTS (UNRECORDED), PTN LOT 2 (PARCEL A, SURVEY #488895) SEC 9, TWP 17,	TAYLOR, SEAN		PO BOX 482		ELLENSBURG	WA	98926	BETTAS RD	CLE ELUM
19-17-09050-0027	10 58	18, RGE 17, ACRES 80 00, CD 7488, SEC 12, TWP 19, RGE 17, N1/2	TAYLOR, SEAN		PO BOX 482		ELLENSBURG	WA	98926	BETTAS RD	CLE ELUM
19-17-12000-0001	71 38	NE1/4 ACRES 80 00, CD 7490, SEC 12, TWP 19, RGE 17, N1/2	BEST, ROBERT H ETUX		210 TOMAHAWK LN		ELLENSBURG	WA	98926	TOMAHAWK LN	ELLENSBURG
19-17-12000-0003	74 95	SE1/4 ACRES 80 00, CD #7488-1, SEC 12, TWP 19, RGE 17,	HENRY, GREG		PO BOX 891		CARNATION	WA	98014	UNKNOWN	ELLENSBURG
19-17-12000-0004	82 54	S1/2 NE1/4 ACRES 80 00, CD #7490-1, SEC 12, TWP 19, RGE 17,	GORSKI MARK C ETUX		105 290TH AVE NE		CARNATION	WA	98014	UNKNOWN	ELLENSBURG
19-17-12000-0005	85 85	S1/2 SE1/4 ACRES 70 00, CD 7491, SEC 13, TWP 19, RGE 17, N1/2	GABRIELSON, ANN L ETVIR &	KOHLER, DORIS M ETVIR	18518 NE 1ST ST		BELLEVUE	WA	98008	UNKNOWN	ELLENSBURG
19-17-13000-0001	50 42	NE1/4, ACRES 70 00, CD #7491-8, SEC 13, TWP 19, RGE 17,	GALLAGHER, GORDON A		18528 53RD AVE NE		SEATTLE	WA	98155	UNKNOWN	ELLENSBURG
19-17-13000-0007	52 95	N1/2 NW1/4, ACRES 50 00, CD #7491-7, SEC 13, TWP 19, RGE 17,	KUHN, JILL D		14732 SE EASTGATE DR		BELLEVUE	WA	98008	CRICKLEWOOD LN	ELLENSBURG
19-17-13000-0008	51 09	S1/2 S1/2 S1/2 N1/2 NW1/4, N1/2 S1/2 NW1/4, ACRES 50 00, CD #7491-8, SEC 13, TWP 19, RGE 17,	KIRCHMAN, JAMES R		1901 WILLIAMS AVE		SUMNER	WA	98390	UNKNOWN	ELLENSBURG
19-17-13000-0009	51 92	S1/2 NW1/4, N1/2 N1/2 N1/2 SW1/4, ACRES 50 00, CD #7491-9, SEC 13, TWP 19, RGE 17,	GARRETT, EDWIN W JR ETUX		19205 67TH AVE SE		SNOHOMISH	WA	98298	CRICKLEWOOD LN	ELLENSBURG
19-17-13000-0010	52 63	S1/2 N1/2 SW1/4, ACRES 50 00, CD #7491-10, SEC 13, TWP 19, RGE 17,	WILKENS, CARL W		18314 FRANK WATERS RD		STANWOOD	WA	98292	UNKNOWN	ELLENSBURG
19-17-13000-0011	59 53	N1/2 S1/2 SW1/4, ACRES 50 00, CD #7491-11, SEC 13, TWP 19, RGE 17,	SCHWAB, ALBERT D ETUX		P O BOX 290		MAPLE VALLEY	WA	98038	UNKNOWN	ELLENSBURG
19-17-13000-0012	62 47	S1/2 S1/2 N1/2 S1/2 SW1/4, S1/2 S1/2 SW1/4, ACRES 50 00, CD #7492-4, SEC 14, TWP 19, RGE 17,	SHERMAN, JAMES		4648 SUNNYSIDE AVE N STE 508		SEATTLE	WA	98103	UNKNOWN	ELLENSBURG
19-17-14000-0007	43 25	PTN E1/2 (LOT 4, SURVEY #505298- ROLLING ACRES) ACRES 50 00, CD #7492-5, SEC 14, TWP 19, RGE 17,	THOMPSON, BRETT S		PO BOX 415		CLE ELUM	WA	98922	CRICKLEWOOD LN	ELLENSBURG
19-17-14000-0008	46 80	PTN E1/2 (LOT 5 SURVEY #505298- ROLLING ACRES)	NELSON, JESS ETUX &	NELSON, RAYMOND	835 167TH AVE NE		BELLEVUE	WA	98008	CRICKLEWOOD LN	ELLENSBURG
19-17-14000-9899	29 82	HIGHWAY 97									
19-17-14050-0001	1 81	WITH 19-17-23050-0028), SEC 14, TWP 19, RGE 17 ACRES 3 81, ELLENSBURG RANCHES (UNREC ) PTN TRACT 1 (PTN PARCEL B, B29/P242-244) (MUST BE SOLD	WHITELEY, GARETH W		820 SW 118TH ST		SEATTLE	WA	98146	HWY 97	ELLENSBURG
19-17-14050-0002	3 59	TWP 19, RGE 17 ACRES 1 80, ELLENSBURG RANCHES (UNREC ) PTN TRACT 1 (PTN PARCEL C, B29/P242-244) (MUST BE SOLD	ROMERO, NICKI		25111 REITH RD		KENT	WA	98032	HWY 97	ELLENSBURG
19-17-14050-0003	1 78	14, TWP 19, RGE 17 ACRES 44, ELLENSBURG RANCHES (UNREC ) PTN TRACT 1 (PTN PARCEL D, B29/P242-244) (MUST BE SOLD	MILLER, MARK T		25111 S REITH RD		KENT	WA	98032	HWY 97	ELLENSBURG
19-17-14050-0004	0 45	14, TWP 19, RGE 17 ACRES 6 17, CD 7495, SEC 15, TWP 19, RGE 17, PTN SE1/4 (PTN PARCEL B, B29/P242-244) (MUST BE SOLD	LOS ABUELOS INC		323 N MAIN		ELLENSBURG	WA	98926	HWY 97	ELLENSBURG
19-17-15000-0002	6 18	WITH 19-17-14050-0002), 5 43 RD ACRES ACRES 4 01, CD 7495-1, SEC 15, TWP 19, RGE 17, PTN SE1/4 (PTN PARCEL C, B29/P242-244) (MUST BE	ROMERO, NICKI		25111 REITH RD		KENT	WA	98032	BETTAS RD	ELLENSBURG
19-17-15000-0004	4 01	SOLD WITH 19-17-14050-0003) ACRES 3 88, CD 7495-2, SEC 15, TWP 19, RGE 17, PTN SE1/4 (PTN PARCEL D, B29/P242-244) (MUST BE	MILLER, MARK T		25111 S REITH RD		KENT	WA	98032	BETTAS RD	ELLENSBURG
19-17-15000-0005	3 88	SOLD WITH 19-17-14050-0004) ACRES 21 44, CD 7495-9, SEC 15, TWP 19, RGE 17, PTN SE1/4 (PARCEL L, B29/P242-244)	SMITH, DOUGLAS C		8806 NE DAY RD		BAINBRIDGE	WA	98110	BETTAS RD	ELLENSBURG
19-17-15000-0012	21 98	PTN SE1/4 (PARCEL L, B29/P242-244) ACRES 21 45, CD 7495-10, SEC 15, TWP 19, RGE 17,	STORWICK, LANE K		1810 W BASIN ST		MOSES LAKE	WA	98837-2794	BETTAS RD	ELLENSBURG
19-17-15000-0013	21 45	PTN SE1/4 (PARCEL M, B29/P242-244) ACRES 838 00, CD 7498, SEC 17; TWP 19, RGE 17, ALL	ACKERSON, GARY S ETUX		12009-241ST AVE CT E		BUCKLEY	WA	98321	BETTAS RD	ELLENSBURG
19-17-17000-0001	800 58	SEC EXCEPT CASCADE RW	SWAUK VALLEY RANCH LLC	ATTN MARY WHITTLE	PO BOX 24567		SEATTLE	WA	98124	HWY 10	CLE ELUM

KITTITAS VALLEY WIND POWER PROJECT  
 DEVELOPMENT ACTIVITIES APPLICATION - EXHIBIT 3d  
 LANDOWNERS ADJACENT TO PROJECT SITE WITHIN 300FT

ASSESSOR'S ID	ACRES	LEGAL	OWNER NAME	OWNER ADDRESS	ADDRESS 1	ADDRESS 2	CITY	ST	ZIP	INDUSTRY	CITY
19-17-20000-0001	80.85	ACRES 78.38, SEC 20, TWP 19, RGE 17 N 1/2 NE 1/4 NE 1/4 NE 1/4 LESS 1.07 DITCH R/W NW 1/4 NE 1/4 LESS 55	USA (BLM)	BUREAU OF LAND MANAGEMENT	% SCHURGER, BILL	915 WALLA WALLA	WENATCHEE	WA	98801		
19-17-21000-0004	205.41	ACRES 224.02, CD 7515, SEC 21, TWP 19, RGE 17, PTN OF SECTION, LESS 13.50 @ DITCH	SWAUK VALLEY RANCH LLC	ATTN MARY WHITTLE	PO BOX 24567		SEATTLE	WA	98124	HAYWARD RD	ELLENSBURG
19-17-21000-9998	47.40		BPA TRANSMISSION LINE	KITTITAS RECLAMATION DISTRICT	PO BOX 276		ELLENSBURG	WA	98926		
19-17-21000-9998	12.39		HIGHLINE CANAL								
19-17-21000-9999	3.25		HAYWARD ROAD								
19-17-21030-0008	124.66	ACRES 98.04, CD 7517, SEC 21, TWP 19, RGE 17 PTN S 1/2 LY NE SR 10 & W OF HAYWARD & CANAL, LESS 4.50	HOLMQUIST, DAVID E ETAL	% TONSETH, DEAN	16532 HWY 10		ELLENSBURG	WA	98926	HWY 10	ELLENSBURG
19-17-23000-0000	72.84		WINES, RUSSELL/ SNOVER	PO BOX 988			ELLENSBURG	WA	98926	HWY 97	ELLENSBURG
19-17-23000-0002	88.13	ACRES 85.33, CD 7537, SEC 23, TWP 19, RGE 17, PTN N 1/2 (PTN TRACT B, SURVEY #504472)	HOLLISTER, JAMES P ETUX	4391 FAIRVIEW RD			ELLENSBURG	WA	98926	UNKNOWN	ELLENSBURG
19-17-23000-0015	10.23	ACRES 10.00, CD #7537-1, SEC 23, TWP 19, RGE 17, PTN NW 1/4 (PTN TRACT B, SURVEY #504472)	WINES, RUSSELL	PO BOX 988			ELLENSBURG	WA	98926	HWY 97	ELLENSBURG
19-17-23050-0007	52.53	ACRES 50.10, ELLENSBURG RANCHES (UNRECORDED) TRACT 7 SEC 23, TWP 19, RGE 17	SHULTS, RAY D ETUX	1310 S RUBY			ELLENSBURG	WA	98926	SAGE BRUSH RD	ELLENSBURG
19-17-23050-0009	24.89	ACRES 22.87, ELLENSBURG RANCHES (UNRECORDED) TRACT 9-A SEC 23, TWP 19, RGE 17	ENGELSTAD, GARY &	CAROLE	505 PEARL ST #28		ELLENSBURG	WA	98926	ELLENSBURG RANCHES RD	ELLENSBURG
19-17-23050-0010	14.67	ACRES 18.71, ELLENSBURG RANCHES (UNRECORDED) TRACT 2-A, SEC 23, TWP 19, RGE 17	CAMPBELL, MICHAEL J	16281 HWY 97			ELLENSBURG	WA	98926	HWY 97	ELLENSBURG
19-17-23050-0019	21.00	ACRES 18.23, ELLENSBURG RANCHES (UNRECORDED) TRACT 2B SEC 23, TWP 19, RGE 17 TAS DEED#535847 12/90 WILLIAM C BARKER ETUX TO DAVID B	CAMPBELL, JOHN E ETUX	13609 W LK KATHLEEN DR SE			RENTON	WA	98059	HWY 97	ELLENSBURG
19-17-23050-0021	14.56	ACRES 13.84, ELLENSBURG RANCHES (UNRECORDED) TRACT 1, LOT 4 SEC 23, TWP 19, RGE 17,	MILLETT, SHARON	16801 HWY 97			ELLENSBURG	WA	98926	HWY 97	ELLENSBURG
19-17-23050-0022	14.03	ACRES 12.94, ELLENSBURG RANCHES (UNRECORDED) TRACT 1, LOT 3 SEC 23, TWP 19, RGE 17,	MILLETT, SHARON	16801 HWY 97			ELLENSBURG	WA	98926	HWY 97	ELLENSBURG
19-17-23050-0027	10.44	ACRES 10.94, ELLENSBURG RANCHES (UNRECORDED) PTN TRACT 1, SEC 23, TWP 19, RGE 17	ZELLMER, DEAN R &	MILLETT, SHARON D	16801 HWY 97		ELLENSBURG	WA	98926	HWY 97	ELLENSBURG
19-17-23050-0028	4.48	ACRES 4.54, ELLENSBURG RANCHES (UNREC), PTN TRACT 1 (PTN PARCEL A, B29/P242-244) (MUST BE SOLD WITH PARCEL 19-17-14050-0001), SEC 23, TWP 19, RGE 17	WHITELEY, GARETH W	520 SW 118TH ST			SEATTLE	WA	98146	HWY 97	ELLENSBURG
19-17-24000-0001	641.37	ACRES 640.00, SEC 24, TWP 19, RGE 17 ALL SECTION	STATE OF WASH (DNR)	1111 WASHINGTON ST SE	PO BOX 47018		OLYMPIA	WA	98504-7016		
19-17-28000-9998	31.13		HIGHLINE CANAL	KITTITAS RECLAMATION DISTRICT	PO BOX 276		ELLENSBURG	WA	98926		
19-17-28050-0010	52.37	ACRES 53.16, ELLENSBURG RANCHES (UNRECORDED) TRACT 10-A, 10-B, 10-C & 10-D SEC 26, TWP 19, RGE 17	SIX TEN INVESTMENT GROUP	% HUBBARD, WAYNE	2824 GRAND AVE #202		EVERETT	WA	98201	ELLENSBURG RANCHES RD	ELLENSBURG
19-17-28050-0014	52.49	ACRES 53.35, ELLENSBURG RANCHES (UNRECORDED) TRACT 14 SEC 26, TWP 19, RGE 17	POULIN, RICK	WELL DRILLING LLC	1301 LANCASTER RD		SELAH	WA	98942	EAGLES REST RD	ELLENSBURG
19-17-28050-0032	10.32	ACRES 10.00, ELLENSBURG RANCHES (UNRECORDED) TRACT 9-B SEC 20, TWP 19, RGE 17	ENGELSTAD, GARY &	CAROLE	505 PEARL ST #28		ELLENSBURG	WA	98926	ELLENSBURG RANCHES RD	ELLENSBURG
19-17-28050-0033	10.65	ACRES 10.00, ELLENSBURG RANCHES (UNRECORDED) TRACT 9-C SEC 20, TWP 19, RGE 17	JONES, FRANK ETUX	5021 ELLENSBURG RANCHES			ELLENSBURG	WA	98926	ELLENSBURG RANCHES RD	ELLENSBURG
19-17-28050-0034	10.66	ACRES 10.02, ELLENSBURG RANCHES (UNRECORDED) TRACT 9-D SEC 20, TWP 19, RGE 17	REILLEY JOSEPH K	P O BOX 1282			AUBURN	NY	13021	ELLENSBURG RANCHES RD	ELLENSBURG
19-17-27000-0010	14.65	ACRES 14.67, CD 7580-2-1, SEC 27, TWP 19, RGE 17, PTN SW 1/4 (LOT H, B28/P18-19)	PEARSON, EDWARD I ETUX	PEARSON, EDWARD I ETUX	PO BOX 758		CLE ELLUM	WA	98922	HWY 10	ELLENSBURG
19-17-27000-0011	20.08	ACRES 20.08, CD 7582-5, SEC 27, TWP 19, RGE 17, PTN S 1/2 (LOT J, B28/P18-19)	PEARSON, EDWARD I ETUX	PEARSON, EDWARD I ETUX	PO BOX 758		CLE ELLUM	WA	98922	HWY 10	ELLENSBURG
19-17-27000-0012	23.72	ACRES 23.75, CD 7580-2-2, SEC 27, TWP 19, RGE 17, PTN NW 1/4, PTN SW 1/4 (LOT K, B28/P18-19)	HAVENS, H J ETUX	15087 HIGHWAY 10	KITTITAS RECLAMATION DISTRICT	PO BOX 276	ELLENSBURG	WA	98926	HWY 10	ELLENSBURG
19-17-27000-9998	28.28		HIGHLINE CANAL	KITTITAS RECLAMATION DISTRICT	PO BOX 276		ELLENSBURG	WA	98926		
19-17-28000-9998	5.21		HIGHLINE CANAL	KITTITAS RECLAMATION DISTRICT	PO BOX 276		ELLENSBURG	WA	98926		
19-17-28000-9999	47.59		HAYWARD ROAD								
19-17-28010-0002	13.08	ACRES 13.08, CD 7565, SEC 28, TWP 19, RGE 17, PTN E 1/2 NE 1/4 (LOT 1, B27/P75-76), LESS 5.0 DITCH	MC FARLAND, LOREN J ETUX	11024 SE 280TH ST			AUBURN	WA	98092	HAYWARD RD	ELLENSBURG
19-17-28010-0003	21.57	ACRES 24.33, CD 7566, SEC 28, TWP 19, RGE 17 NW 1/4 NE 1/4 TAX NO 7, LESS 6.6 @ STATE	HOLMQUIST, DAVID E ETAL	% TONSETH, DEAN	16532 HWY 10		ELLENSBURG	WA	98926	HWY 10	ELLENSBURG
19-17-28010-0007	29.07	ACRES 29.63, CD 7568, PTN E 1/2 NE 1/4 SEC 28 & PTN W 1/2 SEC 27 ALL OF TWP 19, RGE 17 (LOT 2, B27/P75-76)	HAVENS, HAROLD J ETUX	15087 HWY 10			ELLENSBURG	WA	98926	HWY 10	ELLENSBURG
19-17-34000-0000	4.10		YAKIMA RIVER								

KITTITAS VALLEY WIND POWER PROJECT  
 DEVELOPMENT ACTIVITIES APPLICATION - EXHIBIT 3d  
 LANDOWNERS ADJACENT TO PROJECT SITE WITHIN 300FT

ASSessor's ID	ACRES	LEGAL	OWNER NAME	OWNER ADDRESS	ADDRESS 1	ADDRESS 2	CITY	ST	ZIP	STREET	CITY
19-17-34000-9989	22 19		YAKIMA RIVER								
19-17-34000-9999	7 74		CASCADE CANAL	KITTITAS RECLAMATION DISTRICT	PO BOX 276		ELLENSBURG	WA	98926		
19-17-34010-0001	0 05	NE1/4	SCHOBER, KEITH W ETUX	PO BOX 72			CLE ELUM	WA	98922	HWY 10	ELLENSBURG
19-17-34010-0004	8 10	NW1/4 NE1/4 N OF CO RD & S OF RIVER	BUCK, ROBERT R &	BUCK, CECELIA S	421 13TH W		KIRKLAND	WA	98033	N THORP HWY	THORP
19-17-34010-0010	2 71	& 5 @ RIVER	SCHOBER, KEITH W ETUX	PO BOX 72			CLE ELUM	WA	98922	HWY 10	ELLENSBURG
19-17-34010-0011	4 50	PTN NE1/4 (PARCEL A, SURVEY #531480)	HAGEMEYER, BRUCE ETUX	PO BOX 14			ELLENSBURG	WA	98926	N THORP HWY	THORP
19-17-34010-0012	0 32	E OF ORDINARY HIGH WATER MARK OF YAKIMA RIVER	CASCADE IRRIGATION DIST	8063 HWY 10			ELLENSBURG	WA	98926		
19-17-34010-0013	108 30	(PARCELS A & B, B25/P3)	LOCUST GROVE FARM, INC	PO BOX 186			THORP	WA	98946	N THORP HWY	THORP
19-17-34020-0005	5 93	TAX NO 8	STATE OF WASH WILDLIFE	REAL ESTATE DIVISION	600 N CAPITOL WAY		OLYMPIA	WA	98502		
19-17-34020-0007	0 37	NE1/4 NW1/4 TAX NO 7, LESS 3 7 CO RD	BUCK, ROBERT R &	BUCK, CECELIA S	421 13TH W		KIRKLAND	WA	98033	N THORP HWY	THORP
19-17-34020-0012	4 28	NW1/4 NW1/4 S OF CID & N OF HWY	DER YUEN, DOUG ETUX	10 ELDORADO BEACH CLUB DR			MERCER ISLAND	WA	98040	N THORP HWY	THORP
19-17-34020-0013	4 88	CO RD & S OF RIVER	WRIGHT, CHESTER I ETUX	39019-244TH SE			ENUMCLAW	WA	98022	N THORP HWY	THORP
19-17-34020-0015	3 31	PTN NE1/4 NW1/4 (PTN TAX 9)	POLLOCK, KENNETH	PO BOX 1198			FALL CITY	WA	98024	SR 10	ELLENSBURG
19-17-34040-0011	10 54	NE1/4 SE1/4 OF YAKIMA RIVER & SWLY OF SR 10	GORONEA, GERALD A & BRAZDA, JEFF	READ, ANNE C	12610 HWY 10		ELLENSBURG	WA	98926	SR 10	ELLENSBURG
19-17-35000-0044	10 03			ELLENSBURG RANCHES	EAGLES REST ROAD		ELLENSBURG	WA	98926		
19-17-35000-9998	4 48		CASCADE CANAL	KITTITAS RECLAMATION DISTRICT	PO BOX 276		ELLENSBURG	WA	98926		
19-17-35000-9999	7 86		SR 10								
19-17-35030-0009	24 02	(MUST BE SOLD WITH CD 7831-A-3)	GORONEA, GERALD A.	12610 HWY 10			ELLENSBURG	WA	98926	HWY 10	ELLENSBURG
19-17-35050-0021	10 56	TRACT 21-A SEC 35, TWP 19, RGE 17	HOLMES, LARRY ETUX	4821 S 184TH ST			SEATTLE	WA	98188	EAGLES REST RD	ELLENSBURG
19-17-35050-0038	10 48	TRACT 21-B SEC 35, TWP 19, RGE 17	GUTIERREZ, GEORGE A. &	HILL, SUSAN	680 EAGLES REST RD		ELLENSBURG	WA	98926	EAGLES REST RD	ELLENSBURG
19-17-35050-0039	10 43	RGE 17	GUTIERREZ, GEORGE A. &	HILL, SUSAN	680 EAGLES REST RD		ELLENSBURG	WA	98926	EAGLES REST RD	ELLENSBURG
19-17-35050-0040	21 44	TRACT 21-D SEC 35, TWP 19, RGE 17	WOLANZYK, RAYMOND J &	SCHIDELER, SANDRA L	3700 CELESTE CT		PORT ORCHARD	WA	98368	EAGLES REST RD	ELLENSBURG
19-17-35051-0001	3 71	35, TWP 19, RGE 17,	MAGDLIN, ALEC S	91 ELLENSBURG RANCHES RD			ELLENSBURG	WA	98926	ELLENSBURG RANCHES RD	ELLENSBURG
20-17-34000-0001	242 81	NE 1/4, N 1/2 SE 1/4	U S TIMBERLANDS YAKIMA LLC	% U S TIMBERLAND SERV CO LLC	625 MADISON AVE STE 10-B		NEW YORK	NY	10022		
20-17-34000-0006	314 83	PTN W 1/2	RANCH ON SWAUK CREEK LLC, THE	1890 NELSON SIDING RD			CLE ELUM	WA	98922	HWY 97	CLE ELUM
20-17-35000-0004	39 57	SW1/4 SW1/4	WILSON, JAMES A	15817 LAWRENCE LAKE RD SE			YELM	WA	98597	ELK SPRINGS RD	ELLENSBURG
20-17-35000-0018	20 54	PTN SW1/4 (PARCEL 5-C, SURVEY #460305)	SANDALL, HUBERT S ETUX	PO BOX 954			ELLENSBURG	WA	98926	ELK SPRINGS RD	ELLENSBURG
20-17-35000-0034	81 26	SW1/4 SE1/4, N1/2 SE1/4 SE1/4	STEWART, PAUL A. ETUX	3810 183RD SW			LYNNWOOD	WA	98037	ELK SPRINGS RD	ELLENSBURG
20-17-35000-0035	19 95	S1/2 SE1/4 SE1/4	STEWART, PAUL A. ETUX	3810 183RD SW			LYNNWOOD	WA	98037	ELK SPRINGS RD	ELLENSBURG
20-17-35000-0038	40 88	SE1/4 SW1/4	WEILER, RICH ETUX	32002 SE 286TH ST			RAVENDALE	WA	98051	ELK SPRINGS RD	ELLENSBURG
20-17-36000-0001	637 38	(SCHOOL LAND)	STATE OF WASH (DNR)	1111 WASHINGTON ST SE	PO BOX 47016		OLYMPIA	WA	98504-7016		

**DEVELOPMENT AGREEMENT**  
**Between**  
**KITTITAS COUNTY, WASHINGTON**  
**and**  
**SAGEBRUSH POWER PARTNERS, LLC**

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**List of Exhibits**

**Exhibit A: Project Description**

**Exhibit B: Project Site Layout**

**Exhibit C: Project Land Legal Description and Landownership Interests**

**Exhibit D: Proposed SEPA Mitigation Measures**

**Exhibit E: Project Vicinity Map with Residence Locations**

**Exhibit F: Decommissioning Cost Estimate**

**Exhibit G: Fire Protection Services Agreement**

**Exhibit H: FAA Letters & Determination of Non Hazard Certificate**

**DEVELOPMENT AGREEMENT  
KITITAS VALLEY WIND POWER PROJECT**

THIS DEVELOPMENT AGREEMENT ("Agreement") is entered into and effective this \_\_\_\_ day of \_\_\_\_\_, 200\_\_, ("Effective Date") by and between Kittitas County, a Washington municipal corporation ("County") and Sagebrush Power Partners, LLC, a Delaware limited liability company authorized to do business in the state of Washington ("Applicant"). This Agreement is made pursuant to Revised Code of Washington ("RCW") 36.70B.170, Kittitas County Code ("KCC") Chapter 15A.11, and KCC Chapter 17.61A, and relates to the Kittitas Valley Wind Power Project.

**RECITALS**

A. RCW Chapter 36.70B (the "Development Agreement Statute"), and Chapter 15A.11 Kittitas County Code ("Code") authorize the County to enter into an agreement regarding development of real property located within the County's jurisdiction with any person having an ownership interest in or control of such real property. Chapter 17.16A requires execution of a development agreement as part of the approval process for wind farm projects.

B. The Applicant desires and intends to develop a wind farm in central Kittitas County known as the Kittitas Valley Wind Power Project (the "Project") located on open ridge tops between Ellensburg and Cle Elum, approximately 12 miles northwest of the city of Ellensburg. A full Project description is contained in Exhibit A.

C. The Project objective is to develop a commercially viable wind energy facility with a nameplate capacity of up to 246 Megawatts ("MW"), a maximum of up to 80 wind turbines, and necessary Project support facilities, all to deliver renewable energy to an interconnection point on the Pacific Northwest power grid.

D. The Applicant entered into agreements with the owners of the real property comprising the Project Area, giving it control of this land for the purpose of, and authority to, develop the Project as described in the Applicant's Development Activities Application (the "Development Activities Application").

E. The Project will be located on land referred to herein as the "Project Area". A map showing the location of the Project Area is contained in Exhibit B, 'Project Site Layout'. The Project Area covers approximately 6,000 acres. The land within the Project Area consists of privately-owned open space and publicly-owned land (WDNR) as more specifically described in Exhibit C, 'Project Land Legal Descriptions and Landownership Interests'.

F. A number of utilities in the region, including Puget Sound Energy, Inc. ("PSE"), Avista, and PacifiCorp, have issued requests for proposals ("RFPs") to which the Applicant has responded or intends to respond with proposals for the Project. On October 14, 2005 the Applicant submitted a consolidated Development Activities Application to the County to undergo the County process of amending the Kittitas County Comprehensive Plan for a wind farm resource land use designation area and for Wind Farm Resource Overlay rezoning, and permits related to various subparts of the Project. The Applicant's submissions for action through these County processes were deemed complete by the County on October 17, 2005. On January 13, 2003, the Applicant filed an application for site certification with Washington State Energy Facility Site Evaluation Council ("EFSEC"). As the State Environmental Policy Act ("SEPA") Lead Agency, EFSEC issued a Draft Environmental Impact Statement ("DEIS") for the Project in December 2003. Applicant agrees to abide by the Proposed SEPA Mitigation Measures contained in Exhibit D as well as the Development Standards set forth in this Agreement to mitigate impacts to the environment including but not limited to: Earth Resources, Air Quality, Water Resources,

Vegetation, Wildlife, Fisheries, Energy and Natural Resources, Noise, Land Use, Visual Resources, Population, Housing, Economics, Public Services, Utilities, Recreation, Cultural Resources, Traffic and Transportation, and Health and Safety.

G. This Agreement specifies the commitments made by the County and the Applicant for the purpose of ensuring that the Project is consistent with the Kittitas County Comprehensive Plan and Zoning Code, and to ensure that all final permit approvals will be in the best interests of the citizens of Kittitas County, and will reflect the land use planning considerations of Kittitas County.

H. This Agreement establishes that the proposed Project with the Development Standards and proposed SEPA mitigation measures contained herein is consistent with the County's Comprehensive Plan, zoning and development regulations, and is compatible with surrounding land uses.

I. This Agreement was the subject of a 30-day comment period and a hearing before the Kittitas County Planning Commission as required by KCC Title 15A.

J. This Agreement does not represent a final action on the proposal. Construction and operation will be authorized only upon approval of an EFSEC site certificate for the Project signed by the Governor of Washington.

NOW, THEREFORE, in consideration of the undertakings contained in this Agreement and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the County and the Applicant agree as follows:

## **AGREEMENT**

### **1. Termination and Modification.**

1.1 Termination. This Agreement may be terminated by mutual agreement of the Parties to this Agreement, or terminated by Applicant pursuant to Section 9, below.

1.2 Modification. On or after a date which is 30 years from the Effective Date, the County Commissioners shall have the ability to review the Project's compliance with County plans for its airport expansion and the then-current Kittitas County Zoning Code, county development regulations, as well as any other applicable local, state or federal laws or regulations (in each case related to the airport expansion) and request that reasonable modifications be made to the Project to accommodate significant changes in the County's airport plans or County and other governmental regulations so long as, in the case of the airport expansion, the County Airport Management and the FAA determine in writing that there are no other reasonable alternatives to avoid impact to the Project. On or after a date which is 30 years from the Effective Date, if there is any conflict with a planned landing approach or facility contained in the then-current Bowers Field Airport Master Plan, the County may require reasonable modifications to the Project to mitigate such conflict, so long as the County Airport Management and the FAA determine in writing that there are no other reasonable alternatives to avoid impact to the Project. Definitions.

For purposes of this Agreement, the following terms, phrases, words, and their derivations shall have the meaning given herein where capitalized; words not defined herein shall have their ordinary and common meaning. When not inconsistent with the context, words used in the present tense include the future, words in the plural number include the singular number, words in the singular number include the plural number, and the use of any gender shall be applicable to all genders whenever the sense requires. The words "shall" and "will" are mandatory and the word "may" is permissive. References to governmental entities (whether persons or entities) refer to those entities or their successors in authority. If specific provisions of law referred to herein are renumbered, then the reference shall be read to refer to the renumbered provision. References to laws, ordinances or regulations shall be interpreted broadly to cover government actions, however nominated, and include laws, ordinances and regulations now in force.

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- 2.1. Agreement. "Agreement" means this *Development Agreement between Kittitas County, Washington and Sagebrush Power Partners, LLC*, approved by the Board of County Commissioners.
- 2.2. Applicant. "Applicant" means Sagebrush Power Partners, LLC or any of its Transferee(s) as provided in Section 10.1 below.
- 2.3. BOCC. "BOCC" means the Board of County Commissioners of Kittitas County, Washington.
- 2.4. County. "County" means Kittitas County, Washington.
- 2.5. Construction Buildout Period. "Construction Buildout Period" has the meaning set forth in Section 5.16 of this Agreement.
- 2.6. Development Standards. "Development Standards" means the requirements stated in Section 5.
- 2.7. Director. "Director" means the Director of the County Department of Community Development Services.
- 2.8. Draft EIS. "Draft EIS" means the Draft Environmental Impact Statement issued by EFSEC in December 2003 for the Project.
- 2.9. Effective Date. "Effective Date" has the meaning set forth in of the Preamble to this Agreement.
- 2.10. EFSEC. "EFSEC" means Washington Energy Facility Site Evaluation Council.
- 2.11. FAA. "FAA" means Federal Aviation Administration.
- 2.12. Final EIS. "Final EIS" means the Final Environmental Impact Statement issued by EFSEC for the Project.

2.13. Force Majeure Event. "Force Majeure Event" means any event that directly prevents or delays the performance by the Party affected of any obligation arising under this Agreement, including an event that is within one or more of the following categories: condemnation; expropriation; invasion; plague; natural disasters; ice; ice storms; strikes, lockouts or labor disputes; failure of equipment not caused by the fault or negligence of the Applicant; drought; landslide; tornado; hurricane; tsunami; flood; lightning; earthquake; fire; explosion; epidemic; quarantine; war (declared or undeclared), terrorism or other armed conflict; material physical damage to the Project caused by third parties; riot or similar civil disturbance or commotion; other acts of God; acts of the public enemy; blockade; insurrection, riot or revolution; sabotage or vandalism; embargoes; and, action, inaction, ruling, decree or injunction of a governmental authority.

2.14. Loss. "Loss" means all loss, damage, cost, expense (including costs of investigation and reasonable attorneys' fees and expenses at arbitration, trial or appeal and without institution of arbitration or suit), liability, claims and demands of whatever kind or nature (including those arising under the Federal Employers Liability Act).[Chris: we never use this definition—however, as renamed it can replace the defined term Claim in Section 13—indemnity]

2.15. Parties. "Parties" means Kittitas County, Washington and Applicant.

2.16. Project. "Project" means the Kittitas Valley Wind Power Project generally consisting of up to 80 Turbines, each with a nameplate capacity up to 3 Megawatts (MW), for a total project nameplate capacity of up to 246 MW, and other associated and necessary Project Facilities as described in Exhibit A, modified as necessary to be consistent with the Development Standards contained herein and the proposed SEPA mitigation measures contained in Exhibit D.

2.17. SEPA. "SEPA" means the State Environmental Policy Act of Washington.

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2.18. Substantial Completion. "Substantial Completion" means the Project is generating and delivering energy to the electric power grid for sale in commercial quantities.

2.19. Technical Advisory Committee ("TAC"). "TAC" means a committee composed of representatives from Washington Department of Fish and Wildlife, EFSEC, Kittitas County, local interest groups, project landowners and Applicant, which Applicant shall convene to evaluate the mitigation and monitoring program and determine the need for further studies or mitigation measures for the Project.

2.20. Transferee. A party to which the Project is transferred or assigned in part or in whole under the provisions contained in Section 10.1 of this Agreement.

2.21. Turbine. "Turbine" means a structure that produces electricity and consists of a tower anchored to a foundation, a three bladed rotor, and a nacelle (the housing for the generator and other machinery), all of which are described in further detail in Exhibit A.

### 3. Project Description

The Project generally consists of up to 80 Turbines, each with a nameplate capacity up to 3 MW, for a total project nameplate capacity of up to 246 MW, and other associated and necessary Project Facilities as described in Exhibit A, modified as necessary to comply with and to be consistent with the Development Standards contained herein and the proposed SEPA DEIS mitigation measures in Exhibit D.

### 4. Vesting.

This Agreement regarding land use consistency vests the Project to the existing County land use plans and regulations effective as of the Effective Date of this Agreement.

5. Development Standards.

5.1. Number of Turbines. Under this Agreement, Applicant shall construct no more than eighty (80) Turbines within the corridors as described in the Project Description contained in Exhibit A.

5.2. Maximum Turbine Height. The maximum height (measured to the tip of the blade pointing straight up) of any Turbine that may be constructed as part of the Project is 410 feet, illustrated in Figure 1 in Exhibit A.

5.3. Location and Description of Project. The general location of components of the Project including, but not limited to: the turbine corridors, roadways, electrical collection and distribution system, operations and maintenance facility, electrical substations, transmission lines and other related Project Facilities is described in Exhibit A, 'Project Description' and illustrated In Exhibit B, 'Project Site Layout', modified as necessary to be consistent with the following Development Standards and SEPA mitigation measures. Exhibit E illustrates the location of the Project Facilities and the Turbines in relation to existing residences in the vicinity of the Project.

5.4. Fire Protection Services. Applicant has executed a fire protection services agreement with Kittitas County Fire District No. 1 for the Project to ensure that suitable fire protection services are in place during the construction and on-going operations of the Project. A copy of this fire protection services agreement is contained in Exhibit G attached hereto. A fire protection services agreement shall be maintained for the life of the Project, or until the Project site is annexed into a Fire District or other municipal entity which provides fire protection services.

5.5. FAA Review. Exhibit H contains letters confirming that the FAA Determination of Non Hazard certificates released for the Project in August, 2004 confirm that the Project does not interfere with any of the current IFR flight approaches for the Bowers Field Airport which were approved on June 10, 2004. Exhibit H also contains a sample determination of non hazard certificate for one of the proposed Project turbine locations. Due to the bulk of the additional certificates, Applicant shall provide

Determination of Non Hazard certificates issued by the Federal Aviation Administration (FAA) and related information to the Director, which demonstrates that the Project will not impact approved flight approaches, flight communications, or operations at the Bowers Field Airport in Ellensburg prior to construction.

5.6. Emergency Plans. Emergency plans shall be prepared and submitted to the County prior to construction as set forth in Exhibit D under "Health and Safety" in Section 3.15.4.

5.7. Project Access Roads. Access to the various rows of turbines will be achieved via graveled access roads branching from state highways 10 and 97 and County roads Bettas and Hayward roads. Access roads from state highways 10 and 97 shall be constructed with slope and culverts designed according to WSDOT and Washington state access management standards under Title 468 WAC and Chapter 47.50 RCW. Access from County roads shall be constructed with the appropriate slopes and culverts in accordance with Kittitas County standards. Project site roads shall be designed in accordance with Table 12-1 of the Kittitas County Road Standards for Private Roads with Low Density Traffic. In areas where Project roads exceed a 12% grade, the roads shall be designed to ensure that fire vehicles can gain access to the site as necessary to provide emergency services. If variances from the above referenced standards are required, they shall be reviewed for approval by the Public Works Director and the Fire Marshall prior to construction, which approval shall not be unreasonably withheld. In the event of denial of a variance request, Applicant may seek review and approval by the Road Variance Committee pursuant to Chapter 12.01.130 of the County Road Standards.

5.8. Road Degradation Monitoring and Mitigation. County roads, including shoulder pavement, shall be video monitored before and after construction of the Project. If construction of the Project results in the degradation of the existing pavement and/or shoulders on the County roads, Applicant shall reinstate these roads to as near the condition they were in prior to construction.

5.9. Visitor's Kiosk. Applicant will construct a visitor's kiosk and public viewing area near the proposed O&M facility off Bettas road with adequate signage directing the public to a safe parking lot to view and learn about the Project. The visitor's kiosk will be approximately 10 to 15 feet wide by 15 to 25 feet long by 10 to 15 feet tall.

5.10. Traffic Monitoring. Applicant shall monitor traffic levels following completion of construction of the Project for a period of three years. After that time, Applicant shall continue monitoring of tourist and operations traffic to the Project upon written request from the County. Should tourist and operations related traffic to and from the Project site exceed WSDOT warrants, as contained in Chapter 910 of the WSDOT Design Manual, the Applicant shall construct right and/or left turn lanes on Vantage Highway. Said improvements shall be designed and constructed in accordance with WSDOT guidelines.

5.11. County Right of Way. Approval of a franchise for location of facilities within County owned right-of-way (including overhead electric power lines) shall be required.

5.12. Project Site Access. Project access roads run across both private and public (WDNR) lands. In order to avoid and minimize potential impacts to recreation on public lands the Applicant will implement an adaptive management approach to allow access to and through the Project Area to access public lands for recreational purposes. Adaptive management allows for changes over time to the level of control and types of activities on the Project site, as needed. In general, the Applicant will permit controlled access to and through the site to public lands, as long it does not interfere with or introduce adverse impacts on Project operations or personnel. At a minimum, Project site access during operation shall be allowed as follows:

- Private property owners who wish to access their property from Project Access Roads will be allowed to do so as necessary under a formal access license and a key to a gated entrance
- Officials of the Washington State Departments of Natural Resources are currently allowed to access the Project site and will continue to be allowed access by key.
- The Applicant will allow others to access the Project site on a case-by-case basis.

Active recreation activities such as camping and off-road vehicle usage will not be allowed on the Project site in order to avoid and minimize potential impacts to habitat and wildlife from such activities. Access on the Project site for hunting activities will be determined by WDNR and individual private landowners. In order to minimize potential conflicts and risks to both workers and hunters, no hunting will be allowed on the property during construction.

5.16 Construction Buildout Period. Applicant shall be allowed to construct the Project such that Substantial Completion is achieved no later than 5 years from the date that all permits necessary to construct the Project are obtained, but in no event later than 6 years from the Effective Date of this Agreement (the "Construction Buildout Period"). Notwithstanding the foregoing, Applicant shall be entitled to an extension of the Construction Buildout Period for Force majeure Events on a day for day basis.

5.17 Turbine Setbacks from Residences. A minimum safety zone set back of 1000 feet shall be maintained between Project Turbines and residences of neighboring landowners (who have not signed agreements with the Applicant) located outside the Project boundaries illustrated in Exhibit B. Setbacks from residences of landowners with signed agreements with the Applicant will be at least blade tip height from any proposed Turbine. In the event that Applicant wishes to install Turbines closer than 1000 feet to the Project boundary, Applicant shall obtain an easement or covenant that restricts the construction of any new residences within 1000 feet of any Turbine as measured from the nearest Turbine tower center point to any such new residence.

## 6. Decommissioning

6.1. Decommissioning Plan. Prior to construction of the Project, Applicant shall provide to the County and to EFSEC, a Project decommissioning and site restoration plan (the "Plan") as required under WAC 463-42-655, prepared in sufficient detail to identify, evaluate, and resolve all major environmental, and public health and safety issues reasonably anticipated by the Applicant on the date hereof. The Plan shall

describe the process used to evaluate the options and select the measures that will be taken to restore or preserve the Project site or otherwise protect the public against risks or danger resulting from the Project. The Plan shall include a discussion of economic factors regarding the costs and benefits of various restoration options versus the relative public risk and shall address provisions for funding or bonding arrangements to meet the Project site restoration or management costs. The Plan shall be prepared in detail commensurate with the time until site restoration is to begin. The scope of proposed monitoring shall be addressed in the Plan. Details of the proposed decommissioning mitigation measures for the Project are contained in Exhibit D, under the heading *Proposed SEPA Mitigation Measures*. The Plan shall contain provisions as least as stringent as those described in this Article 5.

6.2. Decommissioning Scope and Timing. Applicant or any Transferee, as the case may be, shall decommission the Project within twelve (12) months following the earlier of either: (a) the date of termination of this Agreement, in accordance with Section 1.1 above; or (b) at the written request of the County, the Applicant demonstrates that the energy generated by the Project for the past 12 month period is less than 10% of the Historical Energy Production (defined below) and no exemptions apply. The Applicant will be exempted from the decommissioning requirement if the twelve (12) month reduced energy output period described above is the result of (i) a repair, restoration or improvement to an integral part of the Project that affects the generation of electricity that is being diligently pursued by the Applicant, or (ii) a Force Majeure Event, including, but not limited to, an extended low wind period. For these purposes, the Historical Energy Production shall be the sum of all energy generated by the Project divided by the number of months since the beginning of commercial operation multiplied by twelve, starting twelve months after commercial operation commences.

The twelve (12) month period to perform the decommissioning may be extended if there is a delay caused by sources beyond the control of the Applicant including, but not limited to, a Force Majeure Event, inclement weather conditions, equipment failure, wildlife considerations or the availability of cranes or equipment to support decommissioning. The County shall be granted reasonable access to the Project site

during decommissioning of the Project for purposes of inspecting any decommissioning work or to perform decommissioning evaluations. County personnel on the Project site shall observe all worker safety requirements enforced and observed by the Applicant and its contractors. If requested by the County, Applicant will provide monthly status reports until this decommissioning work is completed. Decommissioning the Project shall involve removal of the Turbines; removal of foundations to a depth of 3 feet below grade; re-grading the areas around the Project Facilities; removal of Project access roads and overhead cables (except for any roads and/or power cables that Project Area landowners wish to retain); and final reseedling of disturbed lands (all of which shall comprise "Decommissioning"). Decommissioning shall occur in the order of removing the Turbines as the first priority and performing the remaining elements immediately thereafter.

6.3 Decommissioning Funding and Surety. Except as provided in Section 6.4 below, Applicant or any Transferee, as the case may be, shall provide security sufficient for Decommissioning costs in the form of a performance bond, guaranty or a letter of credit to ensure the availability of funds for such costs (the "Decommissioning Security") to EFSEC. Applicant shall request that the County be listed as an additional insured on Applicant's commercial general liability insurance policies, prior to the end of the first year after commencement of construction. A detailed engineering estimate of the amount of the Decommissioning costs is included in Exhibit F. The Decommissioning Plan shall provide that the Decommissioning costs shall be reevaluated annually during construction of the Project and once every five (5) years thereafter from the date of Substantial Completion to ensure sufficient funds for Decommissioning and, if the parties agree at that time that the Decommissioning costs need to be modified, the amount of the Decommissioning Security shall be adjusted accordingly. The Applicant shall be required to provide such security within 30 business days of Substantial. On or before the date on which the Decommissioning Security must be established, the Applicant or any Transferee, as the case may be, shall provide the County with, at its election, one of the following:

**(a) Performance Bond.** Applicant or any Transferee, as the case may be, shall provide financial security for the performance of its decommissioning

obligations through a Performance Bond issued by a surety registered with the Washington State Insurance Commissioner and which is, at the time of delivery of the bond, on the authorized insurance provider list published by the Insurance Commissioner. The Performance Bond shall be in an amount equal to the Decommissioning costs. The Performance Bond shall be for a term of 1 year, shall be continuously renewed, extended, or replaced so that it remains in effect for the remaining term of this Agreement or until the secured decommissioning obligations are satisfied, whichever occurs sooner. In order to ensure continuous renewal of the Performance Bond with no lapse, each Performance Bond shall be required to be extended or replaced at least one month in advance of its expiration date. Failure to secure such renewal or extension shall constitute a default of the Applicant under this Agreement and under the Bond provisions.; or

**(b) Letter of Credit.** Applicant or any Transferee, as the case may be, shall provide financial security for the performance of its decommissioning obligations through a letter of credit issued by a bank whose long-term debt is rated "A" or better by a Rating Service. The letter of credit shall be in an amount equal to the Decommissioning costs. The letter of credit shall be for a term of 1 year, shall be continuously renewed, extended, or replaced so that it remains in effect for the remaining term of this Development Agreement or until the secured decommissioning obligations are satisfied, whichever occurs sooner. The State of Washington, by and through EFSEC or its successor or designees shall be authorized under the letter of credit to make one or more sight drawings thereon upon certification to the issuing bank of the Applicant's or Transferee's (as the case may be) failure to perform its decommissioning obligations when due; or

**(c) Guaranty.** Applicant or any Transferee, as the case may be, shall provide financial security for the performance of its decommissioning obligations by delivering a payment guaranty guaranteeing its Decommissioning obligations hereunder from an entity (i) having, at the time of delivery of such guaranty, a senior unsecured long term debt rating ("Credit Rating") of (1) if such entity has a Credit Rating from Standard and Poor's but not from Moody's, BBB- or better from Standard and Poor's or (2) if such

entity has a Credit Rating from Moody's but not from Standard and Poor's, Baa3 or better from Moody's or (3) if such entity has a Credit Rating from both Standard and Poor's and Moody's, BBB- or better from Standard and Poor's and Baa3 or better from Moody's; or (ii) having audited financial statements, prepared by a nationally-recognized firm of independent auditors and indicating a financial net worth of at least \$75,000,000.

6.4. Financial Security and Utility Project Ownership. Applicant or any Transferee, as the case may be, shall provide the Decommissioning Security for the performance of its Decommissioning obligations arising hereunder unless if, at the time the duty to provide Decommissioning security arises under Section 6.3 above, the owner of the Project is an investor-owned electric utility regulated by the FERC and the Washington Utilities and Transportation Commission (WUTC), in which case the obligation to fully decommission the Project when due shall be a general obligation of the investor-owned electric utility owner.

## 7. Consistency with Local Regulations.

The County hereby acknowledges that if the Project is developed consistent with this Agreement and any Amendments thereto, the public health, safety, and welfare will be adequately protected within the bounds of the law; the Project will be considered essential and desirable to the public convenience; the Project will not be detrimental or injurious to the public health, peace, or safety, or to the character of the surrounding neighborhood; the Project will not be unreasonably detrimental to the economic welfare of the County; and the Project will not create excessive public cost for public facilities and services.

The Turbines are located on adjacent and contiguous tax parcels which are zoned as Forest and Range, and Ag-20. Due to Project and equipment design, and the safety zone setback described in Section 5.17 above, the Project poses no potential risks to residents from ice throw, blade throw or tower collapse. Other potential impacts such as shadow flicker and noise impacts are not significant adverse impacts due to the distance of the Turbines from potential receptors. The Project will deliver cost effective renewable energy to the electric grid and, as such, is essential and desirable to the public

convenience. The Project will contribute significant tax revenues to the County which will far exceed the limited public service costs the Project will introduce.

## **8. Amendments and Revisions.**

This Development Agreement may be amended by mutual agreement of the Parties only if the amendment is in writing and signed by Applicant and the County and is approved by the BOCC (an "Amendment"). The following sections specify what Project actions and revisions can be undertaken without the need for amendment of the Development Agreement and what revisions require Amendment to the Agreement.

8.1 Project Facility Repair, Maintenance and Replacement. Applicant shall be permitted, without any further approval from the County or amendment to this Agreement, to repair, maintain and replace Project Facilities consistent with the terms of this Agreement.

8.2 Turbine Repair, Maintenance and Replacement. Applicant shall be permitted to repair and maintain the Turbines without any further approval from the County or amendment to this Agreement and to: (i) replace any Turbine with the same make and model Turbine originally used in the Project ("Replacement Turbine") so long as the Replacement Turbine meets the Development Standards contained in this Agreement, (ii) replace any Turbine with a Comparable Turbine in the event Applicant cannot or it is impracticable for it to obtain a Replacement Turbine. "Comparable Turbine" means any wind turbine that is within the size limits and general configuration defined in the Project Description in Exhibit A and located in the same location as the Turbine being replaced and meets the Development Standards contained in this Agreement.

## **9. Termination.**

Applicant shall have the option, in its sole discretion, to terminate this Agreement prior to commencing any construction including any site grading and excavation work for installation of the Project or its support facilities. If Applicant elects to terminate this Agreement, Applicant shall submit a Notice to this effect to the County.

10. **General Provisions.**

10.1 **Assignment.** The County and Applicant acknowledge that development of the Project may involve the sale and/or assignment of all or substantially all of the assets of the Project or all or substantially all of the membership interests in the Applicant to third parties. In addition the County and Applicant acknowledge that Applicant and its permitted Transferees may obtain financing for all or a portion of the costs of the Project. Applicant shall have the right to assign or transfer all or any portion of its interest in the Project at any time, including rights, obligations and responsibilities arising hereunder, including financial assurance for decommissioning as set forth in Section 6 above, to third parties acquiring all or substantially all the assets of the Project or all or substantially all of the membership interests in Applicant (each such third party, a "Transferee"), provided such assignments or transfers are made in accordance with the following:

10.1.1 **Assignments or Transfers Requiring the Consent of the County.**

Applicant may at any time enter into a written agreement with a Transferee other than those described in Sections 10.1.2 and 10.1.3 to transfer all or substantially all the assets of the Project or all or substantially all the membership interests in Applicant, including rights, obligations and responsibilities arising hereunder (such agreement, a "Transfer Agreement"); provided that Applicant obtains the prior written consent of the County as described in this section:

(a) Such Transfer Agreement shall not take effect unless and until the County has consented in writing to such transfer or assignment, which consent shall not be unreasonably withheld, conditioned, or delayed. Written notice of the proposed Transfer Agreement shall be mailed, first-class, to the County at least thirty (30) days in advance of the proposed date of transfer or assignment. Failure by the County to respond within thirty (30) days after receipt of a request made by Applicant for such consent shall be deemed to be the County's approval of the Transfer Agreement. The County may refuse to give its consent to a Transfer Agreement only if there is a material reason for such refusal, including without limitation, (i) the

Transferee's failure to perform material obligations under a similar Development Agreement, or (ii) a failure to demonstrate adequate financial capability, including financial assurance for decommissioning as set forth in Section 6 above, to perform the obligations proposed to be assumed by such Transferee.

(b) Any Transfer Agreement shall be binding on the Applicant, the County and the Transferee. Upon approval of a Transfer Agreement by the County, the Applicant shall be released from those obligations and responsibilities assumed by the Transferee therein.

(c) Applicant shall be free from any and all liabilities accruing on or after the date of any assignment or transfer with respect to those obligations assumed by a Transferee pursuant to an approved Transfer Agreement. No breach or default hereunder by any person that assumes any portion of Applicant's obligations under this Agreement pursuant to an approved transfer shall be attributed to Applicant, nor shall any of Applicant's remaining rights hereunder be cancelled or diminished in any way by any such breach or default.

(d) No breach or default hereunder by Applicant shall be attributed to any person succeeding to any portion of Applicant's rights or obligations under this Agreement, nor shall such Transferee's rights be cancelled or diminished in any way by any such breach or default.

(e) Upon any transfer made in accordance with this Section 10.1.1 for which the County has consented, the Transferee shall be entitled to all interests and rights and be subject to all obligations under this Agreement, and Applicant shall be automatically released of all liabilities and obligations under this Agreement as to that portion of its interest so transferred or assigned.

#### **10.1.2 Collateral Assignments Without the Consent of the County.**

Notwithstanding anything herein to the contrary, Applicant or any Transferee shall be permitted to collaterally assign its interest in the Project to a lender or lenders providing financing for the Project without the consent of the County, provided that Applicant or any Transferee delivers written notice to the County at least thirty (30) days prior to the date of such collateral assignment and identifies such lender or lenders.

10.1.3 Assignments or Transfers without the Consent of the County.

Applicant may transfer or assign all or any portion of its interest in the Project at any time, including rights, obligations and responsibilities arising hereunder, to third parties acquiring all or substantially all the assets of the Project or all or substantially all the membership interests in Applicant without the consent of the County provided that:

(i) Transferee is (a) an investor-owned electric utility regulated by the Federal Regulatory Energy Commission ("FERC") and the Washington Utilities and Transportation Commission ("WUTC") or a wholly owned subsidiary of such an investor-owned electric utility, or; (b) an entity having, at the time of transfer or assignment, a senior unsecured long term debt rating ("Credit Rating") of (1) if such entity has a Credit Rating from Standard and Poor's but not from Moody's, BBB- or better from Standard and Poor's or (2) if such entity has a Credit Rating from Moody's but not from Standard and Poor's, Baa3 or better from Moody's or (3) if such entity has a Credit Rating from both Standard and Poor's and Moody's, BBB- or better from Standard and Poor's and Baa3 or better from Moody's; and

(ii) Transferee agrees to be bound by the rights, obligations and responsibilities of Applicant hereunder, including financial assurance for decommissioning as set forth in Section 6 above, on and after the date of such transfer or assignment. In the event that Applicant transfers or assigns all or any portion of its interest in and to the Project in accordance with this provision, Applicant shall be released from all obligations or liabilities under this Agreement on and after the date of such transfer or assignment as to that portion of Applicant's interest so transferred or assigned.

10.2 Binding Effect. This Agreement shall be binding upon, and inure to the benefit of, the Parties and their respective heirs, successors (by merger, consolidation or otherwise) and assigns.

10.3 Washington Law. This Agreement is entered into under the laws of the State of Washington, and the parties hereto intend that Washington law shall apply to the interpretation hereof.

10.4 Severability. If any provisions of this Agreement are determined to be unenforceable or invalid, this Agreement shall thereafter be modified, to implement the intent of the Parties to the maximum extent allowable under law and the remainder of this Agreement shall remain unaffected and in full force and effect.

10.5 Authority. Each Party represents and warrants that it has the respective power and authority, and is duly authorized, to enter into this Agreement on the terms and conditions herein stated, and to execute, deliver and perform its obligations under this Agreement.

10.6 No Third-Party Beneficiary. This Agreement is made and entered into for the sole protection and benefit of the Parties hereto and their successors and assigns. No other person shall have any right of action based upon any provision of this Agreement.

10.7 Duty to Act Reasonably and in Good Faith. Unless otherwise expressly provided, each party shall act reasonably in giving consent, approval, or taking any other action under this Agreement. The Parties agree that each of them shall at all times act in good faith in order to carry out the terms of this Agreement and each of them covenants that it will not at any time voluntarily engage in any actions which frustrate the purpose and intent of the Parties to develop the Project in conformity with the terms and conditions specified in this Agreement. The Parties understand and agree that the process described in this Agreement depends upon timely and open communication and cooperation between the Parties. The Parties agree to use best efforts to communicate regarding issues, changes, or problems that arise in the performance of the rights, duties and obligations hereunder as early as possible in the process, and not wait for explicit

due dates or deadlines. Each party agrees to work cooperatively and in good faith toward resolution of any such issues.

10.8 Time of Essence. Time is of the essence in the performance of each and every obligation to be performed by the Parties hereto.

10.9 Staffing Agreement for County Project Costs. The Applicant will pay for County costs, including 3<sup>rd</sup> party consultant costs, if necessary, incurred to support plan review and inspection of the Project during construction, in accordance with K.C.C. 14.04 et. al., under a County Staffing Agreement. Such Staffing agreement shall be substantially similar in form to the existing Staffing Agreement in place for the Project, dated August 3, 2004, including the hourly costs for County staff and consultant resources. The Staffing Agreement shall be approved by the County prior to construction, and such approval shall not be unreasonably withheld.

11. Notices.

11.1 Written Notice. Any notice, demand, or other communication ("Notice") given under this Agreement shall be in writing and given personally or by registered or certified mail (return receipt requested). A courtesy copy of the Notice may be sent by facsimile transmission.

11.2 Addresses. Notices shall be given to the Parties at their addresses set forth below.

If to the County:                      Kittitas County Community Development Services  
411 North Ruby, Suite 2  
Ellensburg, Washington 98926  
Attn: Director

CC:    Kittitas County Prosecuting Attorneys Office  
205 West Fifth, Room 213  
Ellensburg, Washington 98926  
Attn: Jim Hurson

If to Applicant:                              Sagebrush Power Partners, LLC  
222 Fourth Ave  
Ellensburg, Washington 98926

Facsimile No.: 509-962-1123

CC:

Sagebrush Power Partners, LLC  
c/o Horizon Wind Energy  
1001 McKinney St, Suite 1740  
Houston, TX 97202  
Facsimile No.: 713-571-6659  
Attn: General Counsel

11.3 Notice by hand delivery shall be effective upon receipt. If deposited in the mail, notice shall be deemed delivered forty-eight (48) hours after deposited. Any party at any time by Notice to the other party may designate a different address or person to which such notice or communication shall be given.

## **12. Default and Remedies.**

No party shall be in default under this Agreement unless it has failed to perform as required under this Agreement for a period of thirty (30) days after written notice of default from the other party. Each notice of default shall specify the nature of the alleged default and the manner in which the default may be cured satisfactorily. If the nature of the alleged default is such that it cannot be reasonably cured within the thirty (30) day period, then commencement of the cure within such time period and the diligent prosecution to completion of the cure shall be deemed a cure of the alleged default.

### **12.1 Dispute Resolution Process.**

12.1.1. In the event of any dispute relating to this Agreement, each Party, upon the request of the other Party, shall meet within seven (7) calendar days to confer and seek to resolve the dispute ("Conference") during the seven day period thereafter. The Conference shall be attended by the following parties: (a) the County shall send department director(s) and County employees and contractors with information relating to the dispute, and (b) Applicant shall send an Applicant's representative and any Applicant's consultant with technical information or expertise related to the dispute. The parties shall, in good faith, endeavor to resolve their disputes through the Conference.

12.1.2. Mediation. If this Conference process does not resolve the dispute within the 7 day Conference period, the Parties shall in good faith submit the matter to mediation. The Parties shall send the same types of representatives to mediation as specified for the "Conference" process. Additionally the Parties shall have representatives present at the mediation with full authority to make a settlement within the range of terms being discussed, should settlement be deemed prudent. The mediation shall take place within 45 days of the parties submitting the dispute to mediation.

In order to expedite the mediation, during the Conference process the Parties shall select the mediator. The mediator must be a neutral professional full time mediator with time available to meet with the parties within the 45 day mediation period following the 7 day Conference period.

To prepare for mediation, during the 7 day Conference period, the County will select three qualified mediators, as specified above, who are available in the following 45 days. At the end of the 7 day Conference period, if the matter has not been resolved, the Project Owner shall, within the 24 hours of being given the three names select one of the three. The parties will in good faith attempt to resolve the dispute in the 45 day mediation period.

If the dispute is not able to be resolved through the mediation process in the 45 day period, the parties may pursue their legal remedies in accordance with Washington law.

### **13. Indemnity.**

The Applicant shall indemnify and hold harmless the County and its elected officials and employees from and against any and all Losses that are caused by or result from the negligent act or omission of Applicant or it's employees, officers, or agents in the operation of the Project; provided, however, that the total and cumulative obligation hereunder for all such Losses is limited to and shall not exceed five million dollars (\$5,000,000.00). In the event of concurrent negligence, Applicant shall indemnify and hold harmless the County only to the extent of Applicant's negligence, subject to the foregoing five-million-dollar limitation for any and all Losses.

14. Entire Agreement.

This Agreement, together with all exhibits hereto, constitutes the entire agreement between the Parties with respect to the subject matter of this Agreement. This Agreement is specifically intended by the Parties to supersede all prior agreements, whether written or oral.

APPROVED this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

BOARD OF COUNTY COMMISSIONERS  
Kittitas County, Washington

\_\_\_\_\_  
Chairman, Perry Huston

\_\_\_\_\_  
Vice Chairman, David B. Bowen

\_\_\_\_\_  
Clerk of the Board, Julie Kjorsvik

\_\_\_\_\_  
Commissioner, Alan A. Crankovich

Approved by:  
\_\_\_\_\_

Kittitas County Prosecuting Attorney, Deputy  
  
James Hurson

SAGEBRUSH POWER PARTNERS, LLC, a Delaware limited liability company

By: \_\_\_\_\_

Name: Michael Skelly

Title: Vice President--Development

*[Handwritten signature]*

**EXHIBIT A**

**PROJECT DESCRIPTION**

**DRAFT**

### Project Description

The Project will be built on open ridge tops between Ellensburg and Cle Elum at a site located about 12 miles northwest of the city of Ellensburg. The site center is located approximately where the main Bonneville Power Administrations (BPA) and Puget Sound Energy (PSE) east-west transmission line corridors intersect with state Highway 97. Maps showing the Project location and site layout are presented in Exhibits 1 and 2. Land use in the entire study area consists primarily of privately-owned open space and livestock grazing and publicly-owned land (WDNR). The entire Project encompasses approximately 6,000 acres. A permanent footprint of approximately 90 acres of land area will be required to accommodate the proposed turbines and related support facilities. Turbines will be located on open rangeland in areas that are currently zoned as Forest and Range and Ag-20 by Kittitas County. The Project area is bisected by five Bonneville Power Administration (BPA) and one Puget Sound Energy (PSE) high-voltage transmission lines. A Project substation, which would connect the Project's output to the regional transmission grid, would be constructed near the center of the Project site, adjacent to the BPA or PSE lines.

### Infrastructure

The Project will consist of up to 80 wind turbines for an installed nameplate capacity of up to 246 megawatts (MW). The Applicant has not made a final selection of the specific turbine model to be used for this Project. Figure 1 shows the minimum and maximum dimensions for the range of turbines being considered for the Project. If a larger turbine model is selected (i.e. over 3MW nameplate capacity), fewer turbines will be installed. For purposes of this application, the Project will utilize proven, 3-bladed, upwind, megawatt-class wind turbines on tubular steel towers.

The Kittitas Valley Wind Power Project will also include other prime elements including roads, foundations, underground and overhead electrical lines, grid interconnection facilities, feeder lines running from the on-site step-up substations to the interconnection substations, O&M center and associated supporting infrastructure and facilities. The Project turbines will be laid out in strings (also called rows), connected by a network of gravel access roads. A general site layout illustrating these key elements is contained in Exhibit 1, 'Project Site Layout'.

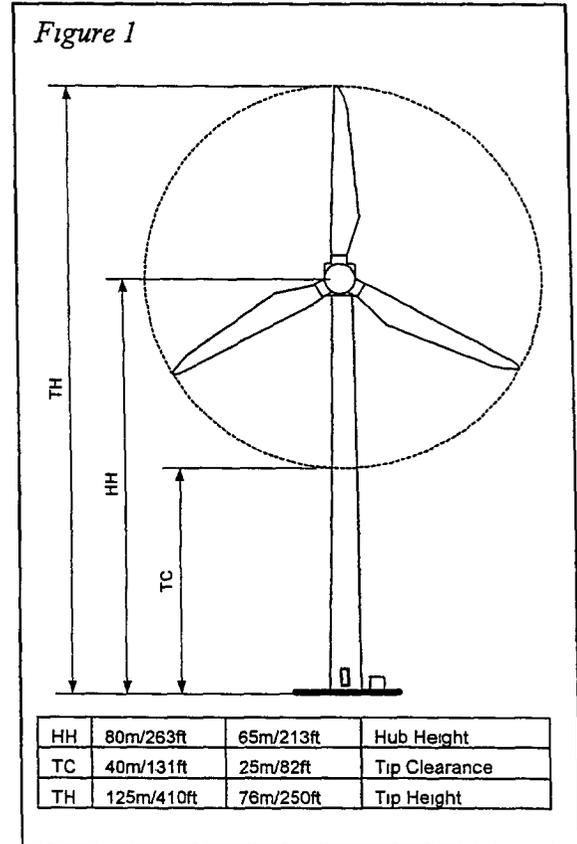
### Wind Turbine Generators

Several wind turbine generators (WTGs) are under evaluation for the Project. Based on these evaluations, a number of wind turbine vendors have been pre-qualified to supply equipment for the Project. The Project will implement 3-bladed wind turbines on tubular steel towers each ranging in size from 1.8 MW to 3 MW (generator nameplate capacity) and with dimensions as shown in Figure 1.

The pre-qualified wind turbines all have a minimum design life of 20 years under extreme high wind and high turbulence conditions. Based on the lower turbulence intensities on the Project site, it is likely that the original WTGs will operate well into their third decade before a retrofit or replacement program is implemented.

### Wind Turbine Basic Configuration

Wind turbines consist of 3 main physical components that are assembled and erected during construction: the tower, the nacelle (machine house) and the rotor (3-blades).



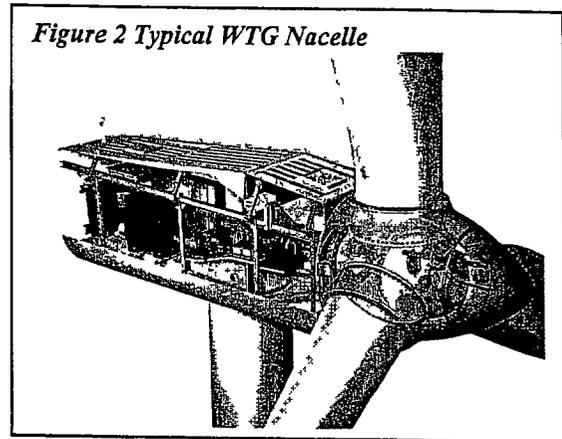
### Tower

The WTG tower is a tubular conical steel structure that is manufactured in multiple sections depending on the tower height. Towers for the Project will be fabricated, delivered and erected in 2 to 4 sections. A service platform at the top of each section allows for access to the tower connecting bolts for routine inspection. An internal ladder runs to the top platform of the tower just below the nacelle. A nacelle ladder extends from the machine bed to the tower top platform allowing nacelle access independent of its orientation. The tower is equipped with interior lighting and a safety glide cable alongside the ladder.

The tower design is certified by experienced and qualified structural engineers who have designed several generations of turbine towers that have proven themselves well in some of the most aggressive wind regions of the world. The towers and foundations are designed for a survival gust wind speed of 90+ mph with the blades pitched in their most vulnerable position. For the cold-weather winter conditions on the Project site, special material specifications are set to ensure that materials do not go below the brittle transition temperature.

### Nacelle

Figure 2 shows the general arrangement of a typical nacelle that houses the main mechanical components of the WTG. The nacelle consists of a robust machine platform mounted on a roller bearing sliding yaw ring that allows it to rotate (yaw) to keep the turbine pointed into the wind to maximize energy capture. A wind vane and anemometer are mounted at the rear of the nacelle to signal the controller with wind speed and direction information.



The main components inside the nacelle are the drive train, a gearbox, and the generator. On some turbines, the step-up transformer is situated at the rear of the nacelle that eliminates the need for a pad-mounted transformer at the base of the tower.

The nacelle is housed by a fully enclosed steel reinforced fiberglass shell that protects internal machinery from the environment and dampens noise emissions. The shroud is designed to allow for adequate ventilation to cool internal machinery such as the gearbox and generator.

### Drive Train

The rotor blades are all bolted to a central hub. The hub is bolted to the main shaft on a large flange at the front of the nacelle. The main shaft is independently supported by the main bearing at the front of the nacelle. The rotor transmits torque to the main shaft that is coupled to the gearbox. The gearbox increases the rotational speed of the high speed shaft that drives the generator at 1200-1800 RPM to provide electrical power at 60 Hertz (Hz).

### Rotor Blades

Modern WTGs have 3-bladed rotors that turn quite slowly at about 17-20 RPM resulting in a graceful appearance during operation. The rotor blades are typically made from a glass-reinforced polyester composite similar to that used in the marine industry for sophisticated racing hulls. Much of the design and materials experience comes from both the marine and aerospace industries and has been developed and tuned for wind turbines over the past 25 years. The blades are non-metallic, but are equipped with a sophisticated lightning suppression system that is defined in detail in Section 2.3.6.1.11, 'Lightning Protection Systems', of the ASC.

### Turbine Control Systems

Wind turbines are equipped with sophisticated computer control systems which are constantly monitoring variables such as wind speed and direction, air and machine

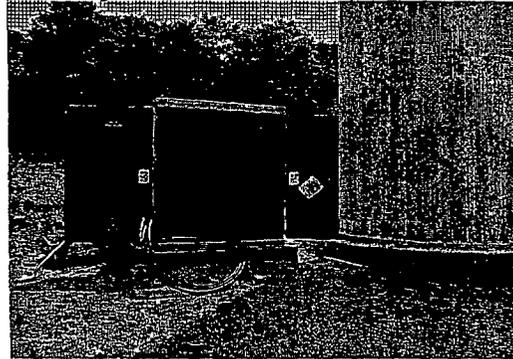
temperatures, electrical voltages, currents, vibrations, blade pitch and yaw angles, etc. The main functions of the control system include nacelle operations as well as power operations. Generally, nacelle functions include yawing the nacelle into the wind, pitching the blades, and applying the brakes if necessary. Power operations controlled at the bus cabinet inside the base of the tower include operations of the main breakers to engage the generator with the grid as well as control of ancillary breakers and systems. The control system is always running and ensures that the machines are operating efficiently and safely.

#### Electrical Collection System

Electrical power generated by the wind turbines will be transformed and collected through a network of underground and overhead cables that terminate at the Project interconnection substation.

Power from the wind turbines will be generated at 575-690 Volts (V), depending on the type of turbine utilized for the Project. Power from the turbines is fed through a breaker panel at the turbine base inside the tower and is interconnected to a pad-mounted step-up transformer (located either inside the tower base or on an adjacent concrete pad) that steps the voltage up to the collection system voltage (typically 34.5kV or 24.94kV). The pad transformers are interconnected on the high side to underground cables that connect all of the turbines together electrically. Where practicable, the underground cables are installed in a trench that runs beside the Project's roadways. In locations where two or more sets of underground lines converge, underground vaults and/or pad-mounted switch panels will be utilized to tie the lines together into one or more sets of larger feeder conductors.

*Typical Pad-Mount Transformer  
(shown before terminations landed)*

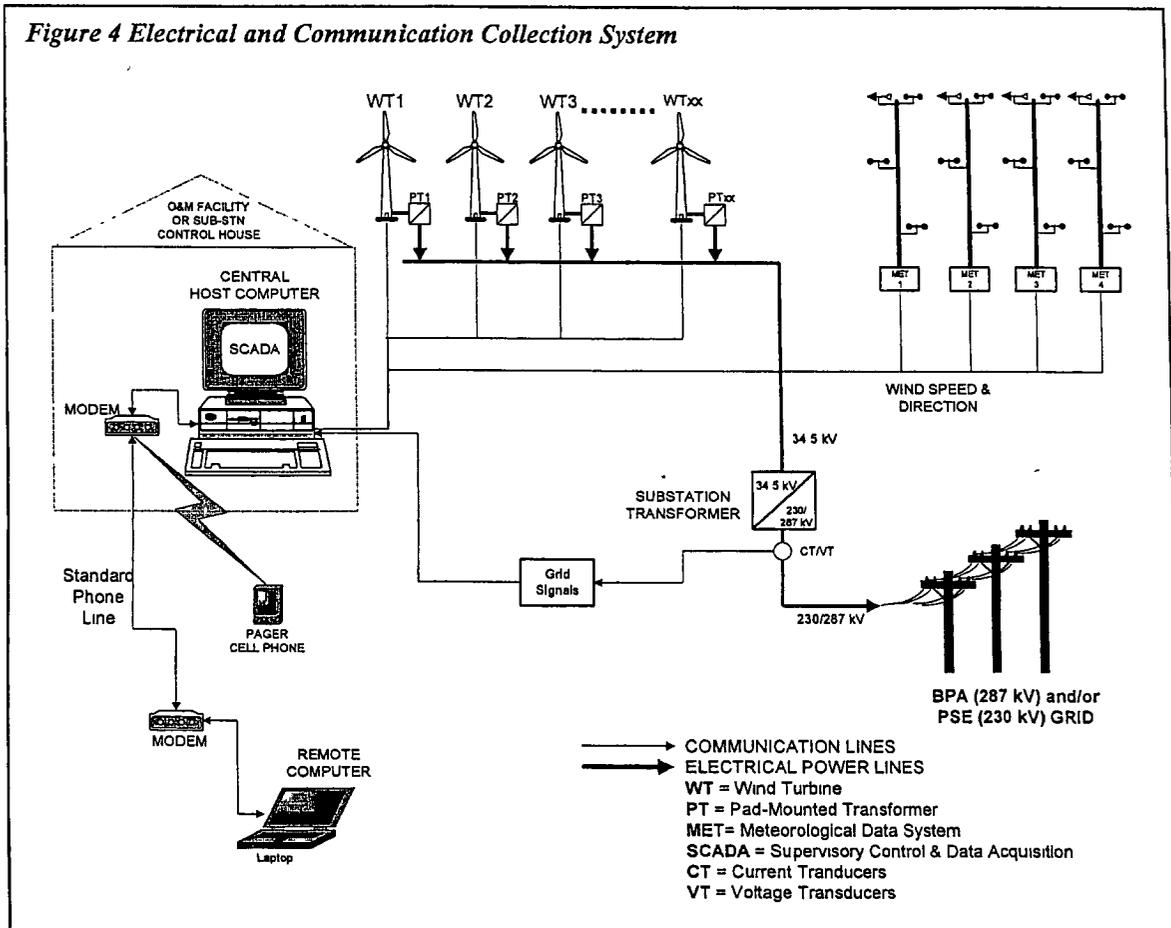


Short sections of overhead collector cable may be required at a few locations, such as over steep ravines or riparian areas, where trenched cable would have a greater environmental impact. For the few short runs of overhead power lines, a fused, switch-riser pole will be used to run the cables from the underground trench to the overhead conductors. The collection cables feed to a step-up/interconnection substation where the voltage is stepped up to interconnection voltage (230kV), then interconnected to the transmission grid.

#### Central SCADA System

Each turbine is connected to a central Supervisory Control and Data Acquisition (SCADA) System as shown schematically in Figure 4. The SCADA system allows for remote control and monitoring of individual turbines and the wind plant

as a whole from both the central host computer or from a remote PC. In the event of faults, the SCADA system can also send signals to a fax, pager or cell phone to alert operations staff.



### Safety Systems

All turbines are designed with several levels of built-in safety and comply with the codes set-forth by European standards as well as those of OSHA and ANSI.

### Braking Systems

The turbines are equipped with two fully independent braking systems that can stop the rotor either acting together or independently. The braking system is designed to be fail-safe, allowing the rotor to be brought to a halt under all foreseeable conditions. The system consists of aerodynamic braking by the rotor blades and by a separate hydraulic disc brake system. Both braking systems operate independently such that if there is a fault with one, the other can still bring the turbine to a halt. Brake pads on the disc brake system are spring loaded against the disc and power is required keep the pads away from the disc. If power is lost, the brakes will be mechanically activated immediately. The aerodynamic braking system is also configured such that if power is lost it will be activated immediately using back-up battery power or a hydraulic actuator, depending on the turbine's design.

After an emergency stop is executed, remote restarting is not possible. The turbine must be inspected in-person and the stop-fault must be reset manually before automatic operation will be re-activated.

The turbines are also equipped with a parking brake that is generally used to "park" the rotor while maintenance routines or inspections that require a stationary rotor are performed.

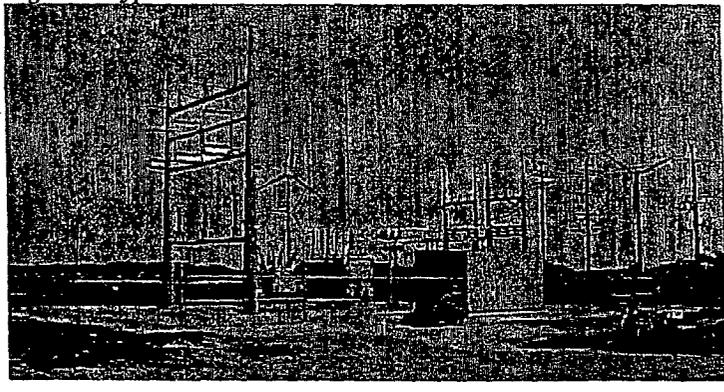
#### Electrical Collection and Communication System

The electrical output of the WTGs is collected and transmitted to the Project substation via underground and overhead electric cables. Underground cables are proposed wherever feasible to minimize visual and avian impacts. At the substation, the voltage will be increased to be compatible with the transmission lines to which the Project will be interconnected. Along with the electric collector cables, fiber optic or copper communication wires also link the individual turbines to a central operations and maintenance (O&M) center allowing around-the-clock remote monitoring and control of the turbines. This electrical collection and communication system is depicted schematically in Figure 4.

#### Substation and O&M Facility

Electrical power generated by the wind turbines is transformed and collected through a network of underground and overhead cables which all terminate at the Project step-up/interconnection substation. Because the BPA and PSE high voltage transmission

*Figure 5 Typical Substation*



lines directly cross the Project site, it is most likely a single combined step-up and interconnection substation will be constructed for the Project. The Project Site Layout in Exhibit 1 shows the general routing paths of the underground and overhead electrical lines as well as the proposed step-up/interconnection substation location. The main function of the substation and interconnection facilities will be to step up the voltage from the collection lines (at 34.5 kV) to the transmission level (230 kV or 287 kV), to interconnect to the utility grid and provide fault protection. The basic elements of the substation and interconnection facilities are a control house, a bank of main transformers, outdoor breakers, relaying equipment, high voltage bus work, steel support structures, and overhead lightning suppression conductors. All of these main elements will be installed on concrete foundations that are designed for the soil conditions at the substations sites. The substations

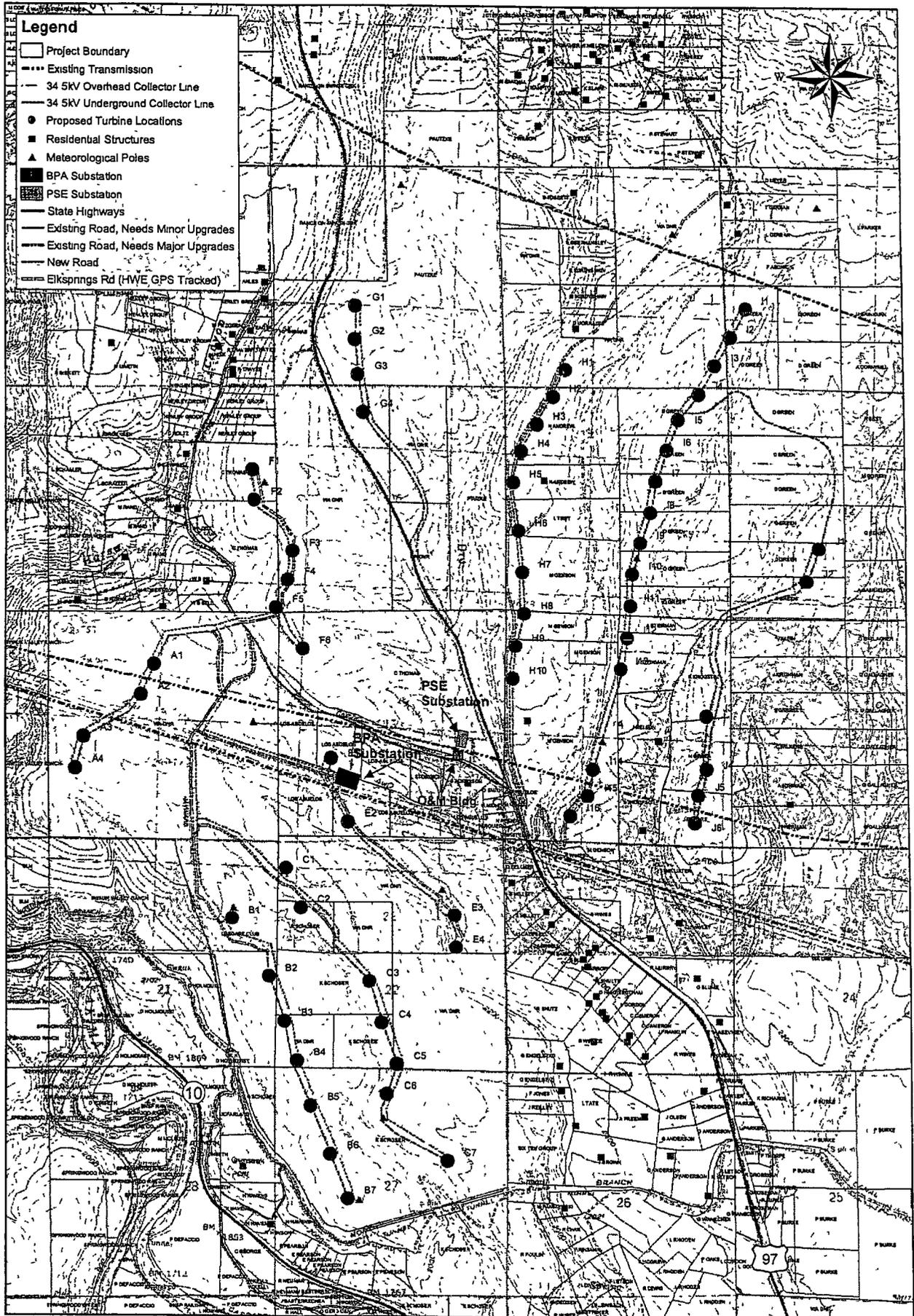
and interconnection facilities each consist of a graveled footprint area of approximately 2-3 acres, a chain link perimeter fence, and an outdoor lighting system as depicted in Figure 5.

An O&M facility is planned near the center of the Project site as indicated on the Project Site Layout in Exhibit 1. The O&M Facility will include a main building with offices, spare parts storage, restrooms, a shop area, outdoor parking facilities, a turn around area for larger vehicles, outdoor lighting and a gated access with partial or full perimeter fencing. The O&M building will have a foundation footprint of approximately 50 ft. by 100 ft. The O&M facility area will be leveled and graded and will serve as a central base. The overall O&M facility area will have a footprint of approximately 2 acres. The final design and architecture of the O&M facility will comply with all required building standards and codes and be determined prior to its construction.

**EXHIBIT B**

**PROJECT SITE LAYOUT**

**DRAFT**



Kittitas Valley Wind Power Project  
 Kittitas County Development Agreement  
 Preliminary Site Layout  
 Map Revised November 21, 2005

0 01 02 04 06 Miles

**EXHIBIT C**

**PROJECT LAND LEGAL DESCRIPTION AND  
LANDOWNERSHIP INTERESTS**

**DRAFT**

KITTITAS VALLEY WIND POWER PROJECT  
 PROJECT AREA LEGAL DESCRIPTION UNDERLYING LANDOWNER CONTACT INFORMATION

ASSESSOR NO.	LEGAL DATA (Legal Description, Landowner, Consent to Development)	OWNER NAME	OWNER ADDRESS	ADDRESS 2	CITY	ST	ZIP	PHONE
19-17-11000-0002	ACRES 100 32, CD 7487-1, SEC 11, TWP 19, RGE 17, PTN NW1/4 (TRACTS 1 & 2, SURV #501915)	ANDREW, NOEL	2701 ELK SPRINGS RD		ELLENSBURG	WA	98926	509-306-5348
19-17-11000-0003	ACRES 50 13, CD #7487-1-1, SEC 11, TWP 19, RGE 17 PTN NW1/4 (TRACT 3, SURVEY #501915)	ANDREW, NOEL	2701 ELK SPRINGS RD		ELLENSBURG	WA	98926	509-306-5348
19-17-21000-0001	ACRES 182 38, CD 7514, SEC 21, TWP 19, RGE 17, E1/2 OF SEC E OF HAYWARD RD & NORTH OF KRD, LESS 3 00 STATE	CASCADE FIELD & STREAM CLUB	PO BOX 424		CLE ELUM	WA	98922	509-674-9278
19-17-14000-0002	ACRES 260 84, CD 7492-1, SEC 14, TWP 19, RGE 17, PTN W1/2 LY N STATE HWY 131 (SURVEY, B21/P197)	GENSON, MICHAEL K	101 ELK SPRINGS RD		ELLENSBURG	WA	98926	509-964-9082
19-17-14000-0003	ACRES 39 44, CD 7492-1-1, SEC 14, TWP 19, RGE 17, PTN N1/2 NW1/4 (SURVEY B21/P197)	GENSON, MICHAEL K	101 ELK SPRINGS RD		ELLENSBURG	WA	98926	509-964-9082
19-17-14000-0004	ACRES 9 83, CD 7492-1-2, SEC 14, TWP 19, RGE 17, PTN NW1/4 (SURVEY, B21/P197)	GENSON, MICHAEL K	101 ELK SPRINGS RD		ELLENSBURG	WA	98926	509-964-9082
19-17-11000-0005	ACRES 106 04, CD #7487-1-3, SEC 11, TWP 19, RGE 17 PTN SW1/4 (TRACTS 5 & 6, SURVEY #501915)	GENSON, MICHAEL K ETUX	101 ELK SPRINGS RD		ELLENSBURG	WA	98926	509-964-9082
19-17-23000-0014	ACRES 10 00, CD 7535-1, SEC 23, TWP 19, RGE 17, PTN W1/2 LYING NLY OF BPA POWER LINE ROAD (SURVEY, B21/P197)	GENSON, MICHAEL K	101 ELK SPRINGS RD		ELLENSBURG	WA	98926	509-964-9082
19-17-01000-0002	ACRES 40 00, CD 7452, SEC 1, TWP 19, RGE 17, NE1/4 SW1/4	GREEN, DANIEL A ETUX	715 CARP LAKE RD		CAMANO ISLAND	WA	98282	360-387-3495
19-17-01000-0009	ACRES 40 00, CD #7452-2, SEC 1, TWP 19, RGE 17, NW1/4 SW1/4,	GREEN, DANIEL A ETUX	715 CARP LAKE RD		CAMANO ISLAND	WA	98282	360-387-3495
19-17-01000-0010	ACRES 40 00, CD #7452-3, SEC 1, TWP 19, RGE 17, SW1/4 SW1/4,	GREEN, DANIEL A ETUX	715 CARP LAKE RD		CAMANO ISLAND	WA	98282	360-387-3495
19-17-01000-0011	ACRES 40 00, CD #7452-4, SEC 1, TWP 19, RGE 17, SE1/4 SW1/4,	GREEN, DANIEL A ETUX	715 CARP LAKE RD		CAMANO ISLAND	WA	98282	360-387-3495
19-17-11000-0001	ACRES 70 00, CD 7487, SEC 11, TWP 19, RGE 17, N1/2 N1/2 NE1/4, N1/2 S1/2 N1/2 NE1/4, N1/2 S1/2 S1/2 N1/2 NE1/4,	GREEN, DANIEL A ETUX	715 CARP LAKE RD		CAMANO ISLAND	WA	98282	360-387-3495
19-17-11000-0006	ACRES 50 00, CD #7487-2, SEC 11, TWP 19, RGE 17, S1/2 S1/2 S1/2 N1/2 NE1/4, N1/2 S1/2 NE1/4,	GREEN, DANIEL A ETUX	715 CARP LAKE RD		CAMANO ISLAND	WA	98282	360-387-3495
19-17-11000-0007	ACRES 50 00, CD #7487-3, SEC 11, TWP 19, RGE 17, S1/2 S1/2 NE1/4, N1/2 N1/2 N1/2 N1/2 SE1/4,	GREEN, DANIEL A ETUX	715 CARP LAKE RD		CAMANO ISLAND	WA	98282	360-387-3495
19-17-11000-0008	ACRES 50 00, CD #7487-4, SEC 11, TWP 19, RGE 17, S1/2 N1/2 N1/2 N1/2 SE1/4, S1/2 N1/2 N1/2 SE1/4, N1/2 S1/2 N1/2 SE1/4,	GREEN, DANIEL A ETUX	715 CARP LAKE RD		CAMANO ISLAND	WA	98282	360-387-3495
19-17-11000-0009	ACRES 50 00, CD #7487-5, SEC 11, TWP 19, RGE 17, S1/2 S1/2 N1/2 SE1/4, N1/2 N1/2 S1/2 SE1/4, N1/2 S1/2 N1/2 S1/2 SE1/4,	GREEN, DANIEL A ETUX	715 CARP LAKE RD		CAMANO ISLAND	WA	98282	360-387-3495

KITTITAS VALLEY WIND POWER PROJECT  
PROJECT AREA LEGAL DESCRIPTION UNDERLYING LANDOWNER CONTACT INFORMATION

ASSESSOR NO	LEGAL DESCRIPTION	OWNER NAME	OWNER ADDRESS	CITY	STATE	ZIP	PHONE
19-17-11000-0010	ACRES 50 00, CD #7487-6, SEC 11, TWP 19, RGE 17, S1/2 S1/2 N1/2 S1/2 SE1/4, S1/2 S1/2 SE1/4,	GREEN, DANIEL A. ETUX	715 CARP LAKE RD	CAMANO ISLAND	WA	98282	360-387-3495
19-17-12000-0002	ACRES 70 00, CD 7489, SEC 12, TWP 19, RGE 17, N1/2 N1/2 NW1/4, N1/2 S1/2 N1/2 NW1/4, N1/2 S1/2 S1/2 N1/2 NW1/4,	GREEN, DANIEL A. ETUX	715 CARP LAKE RD	CAMANO ISLAND	WA	98282	360-387-3495
19-17-12000-0006	ACRES 50 00, CD #7489-1, SEC 12, TWP 19, RGE 17, S1/2 S1/2 S1/2 N1/2 NW1/4, N1/2 S1/2 NW1/4,	GREEN, DANIEL A. ETUX	715 CARP LAKE RD	CAMANO ISLAND	WA	98282	360-387-3495
19-17-12000-0007	ACRES 50 00, CD #7489-2, SEC 12, TWP 19, RGE 17, S1/2 S1/2 NW1/4, N1/2 N1/2 N1/2 N1/2 SW1/4,	GREEN, DANIEL A. ETUX	715 CARP LAKE RD	CAMANO ISLAND	WA	98282	360-387-3495
19-17-12000-0008	ACRES 50 00, CD #7489-3, SEC 12, TWP 19, RGE 17, S1/2 N1/2 N1/2 N1/2 SW1/4, S1/2 N1/2 N1/2 SW1/4, N1/2 S1/2 N1/2 SW1/4,	GREEN, DANIEL A. ETUX	715 CARP LAKE RD	CAMANO ISLAND	WA	98282	360-387-3495
19-17-12000-0009	ACRES 50 00, CD #7489-4, SEC 12, TWP 19, RGE 17, S1/2 S1/2 N1/2 SW1/4, N1/2 N1/2 S1/2 SW1/4, N1/2 S1/2 N1/2 S1/2 SW1/4,	GREEN, DANIEL A. ETUX	715 CARP LAKE RD	CAMANO ISLAND	WA	98282	360-387-3495
19-17-12000-0010	ACRES 50 00, CD #7489-5, SEC 12, TWP 19, RGE 17, S1/2 S1/2 N1/2 S1/2 SW1/4, S1/2 S1/2 SW1/4,	GREEN, DANIEL A. ETUX	715 CARP LAKE RD	CAMANO ISLAND	WA	98282	360-387-3495
19-17-14000-0005	ACRES 50 00, CD #7492-2, SEC 14, TWP 19, RGE 17, PTN E1/2 (LOT 2, SURVEY #505298 ROLLING ACRES)	GREEN, MARVIN ETUX	519 GOBBLER LN	HOLLADAY	TN	38341	217-553-2130
19-17-14000-0001	ACRES 54 53, CD 7492, SEC 14, TWP 19, RGE 17, PTN E1/2 (LOT 1, SURVEY #505298 ROLLING ACRES), LESS 39 STATE, 2 63 SR 135,	KROGSTAD, KARL ETUX	PO BOX 95260	SEATTLE	WA	98145	206-323-6472
19-17-15000-0007	ACRES 69 06, CD 7495-4, SEC 15, TWP 19, RGE 17, PTN S1/2 (PARCEL F, B29/P242-244)	LOS ABUELOS INC	361 CEDAR COVE RD	ELLENSBURG	WA	98926	509-925-3902
19-17-15000-0008	ACRES 51 49, CD 7495-5, SEC 15, TWP 19, RGE 17, PTN SW1/4 (PARCEL G, B29/P242-244)	LOS ABUELOS INC	361 CEDAR COVE RD	ELLENSBURG	WA	98926	509-925-3902
19-17-15000-0009	ACRES 32 42, CD. 7495-6, SEC 15, TWP 19, RGE 17, PTN W1/2 W1/2 (PARCEL H, B29/P242-244)	LOS ABUELOS INC	361 CEDAR COVE RD	REDMOND	WA	98926	509-925-3902
19-17-15000-0010	ACRES 32 39, CD 7495-7, SEC 15, TWP 19, RGE 17, PTN NW1/4, PTN SW1/4 (PARCEL J, B29/P242-244)	LOS ABUELOS INC	361 CEDAR COVE RD	ELLENSBURG	WA	98926	509-925-3902
19-17-14000-0006	ACRES 50 00, CD #7492-3, SEC 14, TWP 19, RGE 17, PTN E1/2 (LOT 3, SURVEY #505298 ROLLING ACRES)	MAJORS, JAMES L. ETUX	521 RUSTIC RD	ELLENSBURG	WA	98926	509-962-4059
19-17-03000-0003	ACRES 400 00, CD 7456-1, SEC 3, TWP 19, RGE 17, NE 1/4 & PTN S 1/2 E SR131	PAUTZKE BAIT CO INC	PO BOX 36	ELLENSBURG	WA	98926	509-925-9365
19-17-10000-0001	ACRES 160 00, CD 7483, SEC 10, TWP. 19, RGE 17, E1/2 E1/2	PAUTZKE BAIT CO INC	PO BOX 36	ELLENSBURG	WA	98926	509-925-9365
19-17-15000-0003	ACRES 60 00, SEC 15, TWP 19, RGE 17, THAT PTN OF NE1/4 LYING E SR 131 ROAD	PAUTZKE BAIT CO INC	PO BOX 36	ELLENSBURG	WA	98926	509-925-9365
20-17-34000-0004	ACRES 80 00, CD 7766, SEC 34, TWP 20, RGE 17, S 1/2 SE 1/4	PAUTZKE BAIT CO INC	PO BOX 36	ELLENSBURG	WA	98926	509-925-9365

KITTITAS VALLEY WIND POWER PROJECT  
 PROJECT AREA LEGAL DESCRIPTION UNDERLYING LANDOWNER CONTACT INFORMATION

ASSESSOR NO.	Legal Description	OWNER NAME	OWNER ADDRESS 1	ADDRESS 2	CITY	ST	ZIP	PHONE
19-17-22000-0003	ACRES 40 00, CD 7532, SEC 22, TWP 19, RGE 17, SW1/4 NW1/4	SCHOBER, KEITH W ETUX	PO BOX 72		CLE ELUM	WA	98922	509-674-2217
19-17-22000-0008	ACRES 80 00, CD 7532-1, SEC 22, TWP 19, RGE 17, N1/2 SW1/4	SCHOBER, KEITH W ETUX	PO BOX 72		CLE ELUM	WA	98922	509-674-2217
19-17-22000-0009	ACRES 40 00, CD 7532-2, SEC 22, TWP 19, RGE 17, SE1/4 SW1/4	SCHOBER, KEITH W ETUX	PO BOX 72		CLE ELUM	WA	98922	509-674-2217
19-17-27000-0001	ACRES 506 50, CD 7563, SEC 27, TWP 19, RGE 17 TAX NO 1	SCHOBER, KEITH W ETUX	PO BOX 72		CLE ELUM	WA	98922	509-674-2217
19-17-28010-0001	ACRES 27 70, CD 7564, SEC 28, TWP 19, RGE 17 NE1/4 NE1/4 TAX NO'S 8 & 9	SCHOBER, KEITH W ETUX	PO BOX 72		CLE ELUM	WA	98922	509-674-2217
19-17-02000-0001	ACRES 155 33, SEC 2, TWP 19, RGE 17 NE 1/4 LOTS 1 & 2	STATE OF WASH (DNR)	1111 WASHINGTON ST SE	PO BOX 47016	OLYMPIA	WA	98504-7016	509-925-8510
19-17-02000-0003	ACRES 40 00, SEC 2, TWP 19, RGE 17 SW 1/4 NW 1/4	STATE OF WASH (DNR)	1111 WASHINGTON ST SE	PO BOX 47016	OLYMPIA	WA	98504-7016	509-925-8510
19-17-02000-0005	ACRES 280 00, SEC 2, TWP 19, RGE 17 ALL S 1/2 EXCEPT NE 1/4 SW 1/4	STATE OF WASH (DNR)	1111 WASHINGTON ST SE	PO BOX 47016	OLYMPIA	WA	98504-7016	509-925-8510
19-17-10000-0002	ACRES 80 00, SEC 10, TWP 19, RGE 17 W 1/2 NE 1/4	STATE OF WASH (DNR)	1111 WASHINGTON ST SE	PO BOX 47016	OLYMPIA	WA	98504-7016	509-925-8510
19-17-10000-0005	ACRES 80 00, SEC 10, TWP 19, RGE. 17 W 1/2 SE 1/4	STATE OF WASH (DNR)	1111 WASHINGTON ST SE	PO BOX 47016	OLYMPIA	WA	98504-7016	509-925-8510
19-17-10000-0006	ACRES 320 00, SEC. 10, TWP 19, RGE 17 ALL W 1/2	STATE OF WASH (DNR)	1111 WASHINGTON ST SE	PO BOX 47016	OLYMPIA	WA	98504-7016	509-925-8510
19-17-16000-0001	ACRES 640 00, SEC 16, TWP 19, RGE 17 ALL SECTION	STATE OF WASH (DNR)	1111 WASHINGTON ST SE	PO BOX 47016	OLYMPIA	WA	98504-7016	509-925-8510
19-17-22000-0001	ACRES 240 00, SEC 22, TWP. 19, RGE 17 ALL NE 1/4, N 1/2 NW 1/4	STATE OF WASH (DNR)	1111 WASHINGTON ST SE	PO BOX 47016	OLYMPIA	WA	98504-7016	509-925-8510
19-17-22000-0002	ACRES 40 00, SEC 22, TWP 19, RGE 17 SE 1/4 NW 1/4	STATE OF WASH (DNR)	1111 WASHINGTON ST SE	PO BOX 47016	OLYMPIA	WA	98504-7016	509-925-8510
19-17-22000-0005	ACRES 40 00, SEC 22, TWP 19, RGE. 17 SW 1/4 SW 1/4	STATE OF WASH (DNR)	1111 WASHINGTON ST SE	PO BOX 47016	OLYMPIA	WA	98504-7016	509-925-8510
19-17-22000-0007	ACRES 160 00, SEC 22, TWP 19, RGE 17 ALL SE 1/4	STATE OF WASH (DNR)	1111 WASHINGTON ST SE	PO BOX 47016	OLYMPIA	WA	98504-7016	509-925-8510
19-17-14000-0010	ACRES 20 20, CD #7492-7, SEC 14, TWP 19, RGE 17, PTN E1/2 (LOT 7, SURVEY #505298 ROLLING ACRES)	STEINMAN, ANDREA A	19822 28TH AVE W		LYNNWOOD	WA	98036	425-774-0790
19-17-14000-0009	ACRES 50 08, CD #7492-6, SEC 14, TWP 19, RGE 17, PTN E1/2 (LOT 6, SURVEY #505298 ROLLING ACRES)	STEINMAN, MERLE JR	19822 28TH AVE W		LYNNWOOD	WA	98036	425-774-0790
19-17-09010-0003	ACRES 60 00, CD 7480, SEC 9, TWP 19, RGE 17, S1/2 NE1/4 E OF CO RD	THOMAS, CARLA L	911 ROBBINS RD		ELLENSBURG	WA	98926	509-962-8572
19-17-09040-0003	ACRES 105 00, CD 7480-1, SEC 09, TWP 19, RGE 17, SE1/4 E OF CO RD	THOMAS, CARLA L	911 ROBBINS RD		ELLENSBURG	WA	98926	509-962-8572
19-17-15000-0001	ACRES 268 00, CD 7494, SEC 15, TWP 19, RGE 17, ALL NO CO RD EX PTN LYING E SR 131 ROAD @ 24 07	THOMAS, CARLA L	911 ROBBINS RD		ELLENSBURG	WA	98926	509-962-8572
19-17-11000-0004	ACRES 50 18, CD #7487-1-2, SEC 11, TWP 19, RGE 17 PTN W1/2 (TRACT 4, SURVEY #501915)	TRITT, LARRY L ETUX	PO BOX 725		ROSLYN	WA	98941	509-649-3611

**EXHIBIT D**

**PROPOSED SEPA MITIGATION MEASURES**

**MSFT**

*Proposed*

**SEPA  
Mitigation Measures**

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*This document is a summary listing of the State Environmental Policy Act (SEPA) mitigation measures proposed by the Application and by the Washington State Energy Facility Site Evaluation Council (EFSEC) taken from the Draft Environmental Impact Statement (DEIS) issued by EFSEC in December 2003 and the Addendum to the DEIS issued by EFSEC in December 2005.*

*Section numbers listed in the Table of Contents reflect the numbering system in the DEIS.*

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## **EARTH RESOURCES**

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### **3.1.4 Mitigation Measures**

#### **Erosion Control during Project Construction**

Before construction begins, a detailed SWPPP would be developed and approved by EFSEC for the project to minimize the potential for pollutant discharge from the site during construction and operation activities. The SWPPP would be designed to meet the requirements of the Washington Department of Ecology General Permit to Discharge Storm Water through its stormwater pollution control program (Chapter 173-220 WAC) associated with construction activities.

The SWPPP would include both structural and non-structural BMPs. Examples of structural BMPs include the installation of silt curtains and/or other physical controls to divert flows from exposed soils or otherwise limit runoff and pollutants from exposed areas of the site. Examples of non-structural BMPs include materials handling protocol, disposal requirements, and spill prevention methods.

The SWPPP would be prepared along with a detailed project grading plan by the EPC contractor when design level topographic surveying and mapping are prepared for the project site. The EPC contractor would carry out the construction BMPs, with enforcement by the project's environmental monitor, who would be responsible for implementing the SWPPP.

Site-specific BMPs would be identified on the construction plans for the site slopes, construction activities, weather conditions, and vegetative buffers. The sequence and methods of construction activities would be controlled to limit erosion. Clearing, excavation, and grading would be limited to the minimum areas necessary to construct the project. Surface protection measures, such as erosion control blankets or straw matting, also may be required during construction before site restoration if the potential for erosion is high.

All construction practices would emphasize erosion control over sediment control through such non-quantitative activities as:

- Using straw mulch and vegetating disturbed surfaces;
- Retaining original vegetation wherever possible;
- Directing surface runoff away from denuded areas;
- Keeping runoff velocities low by minimizing slope steepness and length; and
- Providing and maintaining stabilized construction entrances.

Work on the access roads would include grading and regravelling existing roads and constructing new roads. The site would have gravel roadways generally with a low profile design, allowing water to flow over them in most areas. Erosion control measures to be installed during work on the access roads include:

- Maintaining vegetative buffer strips between the affected areas and any nearby receiving waterways;

- Installing sediment fence/straw bale barriers on disturbed slopes and other locations shown in the SWPPP;
- Using straw mulch at locations adjacent to an affected road;
- Providing temporary sediment traps and Sedimat-type mats downstream of seasonal stream crossings;
- Installing silt fences on steep, exposed slopes; and
- Planting affected areas with designated seed mixes.

At each turbine location, a crane pad area would be graded and covered with road rock. During construction, silt fences, hay bales, or matting would be placed on the downslope side of the crane pad. Wind turbine equipment such as blades, tower sections, and nacelles would be transported and off-loaded at each turbine location near the foundation and crane pad. After construction, disturbed areas around all crane pad staging areas would be reseeded as necessary to restore the area as closely as possible to its original condition.

### **Erosion Control during Project Operations**

The project operations group would be responsible for monitoring the SWPPP measures that are implemented during construction to ensure they continue to function properly. Final designs for the permanent BMPs would be incorporated into the final construction plans and specifications prepared by the engineering team's civil design engineer. The EPC contractor's civil design engineer and the project's engineering team would prepare an operations manual for permanent BMPs. The permanent stormwater BMPs would include erosion and sedimentation control through site landscaping, grass, and other vegetative cover. The final designs for these permanent BMPs would conform to the Washington Department of Ecology Western Washington Storm Water Management Manual with adjustment for conditions in Eastern Washington.

Operational BMPs would be adopted, as part of the SWPPP, to implement good housekeeping, preventive and corrective maintenance procedures, steps for spill prevention and emergency cleanup, employee training programs, and inspection and record keeping practices, as necessary, to prevent stormwater pollution. Examples of good operational housekeeping practices, which would be used by the project, include:

- Prompt cleanup and removal of spillage;
- Regular pickup and disposal of garbage;
- Regular sweeping of floors;
- HAZMAT data sheet cataloguing and recording; and
- Proper storage of containers.

The project operations group would periodically review the SWPPP against actual practice. The plant operators would determine if the controls identified in the plan are adequate and if employees are following them.

### **Earthquakes**

Prior to final project design, a detailed geotechnical investigation and field survey would be performed to ensure that no turbine locations or other project components lie immediately above a high-risk fault.

The wind turbines would be equipped with vibration sensors that would automatically shut down the turbine in the event of a severe earthquake (Sagebrush Power Partners LLC 2003a, Section 7.2.9). In addition, current engineering standards applicable in Kittitas County (that is, the 1997 UBC) would be used in the design of project facilities. These standards require that under the “design” earthquake, the factors of safety or resistance factors used in design exceed certain values. This factor of safety is introduced to account for uncertainties in the design process and to ensure that performance is acceptable. Given the relatively low level of earthquake risk for the site, application of the UBC in project design would provide adequate protection for the project facilities and ensure protection measures for human safety (Sagebrush Power Partners LLC 2003a, Section 2.15.3).

Earthquakes occur without warning, thus damage prevention measures and plans must be made in advance. The Applicant would prepare onsite emergency plans to protect the public health, safety, and environment on and off the project site in case of a major natural disaster such as an earthquake. The Applicant proposes the following measures for its detailed emergency plans that would be developed prior to project construction and operation to mitigate for potential hazards during an earthquake (Sagebrush Power Partners LLC 2003a, Section 7.2.9):

- Personnel would seek safety at the nearest protected location;
- Personnel would take cover to avoid any falling debris;
- All personnel would check the immediate area to identify injuries and equipment failures and report to the Site Construction Manager, O&M Manager, or designee;
- All personnel would be instructed to report to a protected area, as necessary, or would continue monitoring the operating equipment;
- A determination would be made about missing personnel and a search and rescue effort would be taken if safe and appropriate;
- If the conditions warrant, Kittitas County Emergency Communications Center and Bonneville or PSE (the electric transmission line operator) would be notified;
- Turbines would be shut down manually as required depending on the severity of the quake and brought back on-line after they have been cleared for restart;
- Off-duty personnel would report to the site, if they can, as designated in the emergency plan;
- If the structures are intact and other plant safety issues are under control, the O&M Manager would approve re-entry of personnel to any turbines for search and rescue efforts.

#### **Volcanic Hazards**

In the event of damage from a volcanic eruption, the project facilities would be shut down until safe operating conditions return. If an eruption occurred during construction, a temporary shutdown would most likely be required to protect equipment and human health (Sagebrush Power Partners LLC 2003a, Section 2.15.4).

The Applicant would prepare onsite emergency plans to protect the public health, safety, and environment on and off the project site in case of a major natural disaster such as a volcanic eruption. The Applicant proposes the following actions be taken to reduce potential impacts from a volcanic eruption (Sagebrush Power Partners LLC 2003a, Section 7.2.10):

- Close all O&M facility vents to prevent ash from entering buildings;

- Cover data processing equipment and computers not required for safe project operation or shutdown, and shut down other electronic equipment sensitive to dust;
- If the dust load is heavy enough, shut down the project facilities;
- If the conditions warrant, notify Kittitas County Emergency Communications Center and Bonneville or PSE (the electric transmission line operator);
- Determine if employees should be sent home immediately before roads become unsafe or if personnel must be sheltered onsite;
- Initiate ash cleaning operations by personnel wearing protective equipment;
- Coordinate all ash disposal activities with local Kittitas County officials.

### **Decommissioning Plans**

During the EIS scoping process, a commenter requested that the costs of preparing and implementing a restoration plan for the reclamation (i.e., decommissioning) phase of development be bonded to or deposited with the state prior to project approval. The Applicant would provide adequate financial assurances to cover all anticipated costs associated with decommissioning the project, including the costs of preparing and implementing a restoration plan. In all cases, final financial responsibility for decommissioning would rest with the Applicant (Sagebrush Power Partners LLC 2003a, Section 1.3.3). Refer to Section 6.3 of the Development Agreement for further details.

### **Additional Mitigation Measures Proposed in the Addendum to the DEIS**

Because new impacts have not been identified based on the revised project layout, additional mitigation measures are not warranted.

## **VEGETATION, WETLANDS, WILDLIFE AND HABITAT, FISHERIES, AND THREATENED AND ENDANGERED SPECIES**

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### **3.25 Mitigation Measures**

#### **Mitigation Measures Proposed by the Applicant**

##### **Thorough Study and Analysis to Avoid Impacts**

The Applicant has commissioned extensive studies by qualified biologists of plants and animals at the project site to avoid impacts on sensitive populations. These studies include:

- Rare plant surveys,
- Habitat mapping,
- Avian use point count surveys,
- Aerial raptor nest surveys,
- Wintering bald eagle surveys,
- Non-avian wildlife surveys,
- Biological assessment for threatened and endangered species, and
- Stream and wetland surveys.

The results and recommendations of these studies have been incorporated into the proposed design, construction, operation, and mitigation for the project.

##### **Project Design Features to Avoid and/or Minimize Impacts**

The proposed design of the project incorporates numerous features to avoid and/or minimize impacts on plants and wildlife. These features are based on site surveys, experience at other wind power projects, and recommendations from consultants performing studies at the site. Features of the project that are designed to avoid or minimize impacts on plants and animals include:

- Avoiding when possible, construction in sensitive areas such as riparian zones, wetlands, forests, etc.
- Minimizing new road construction by improving and using existing roads and trails instead of constructing new roads.
- Choosing underground (vs. overhead) electrical lines wherever feasible to minimize perching locations and electrocution hazards to birds.
- Choosing turbines with low rotations per minute and using tubular towers to minimize risk of bird collision with turbine blades and towers.
- Using unguyed permanent meteorological towers to minimize potential for avian collisions with guy wires.
- Equipping all overhead power lines with raptor perch guards to minimize risks to raptors.
- Spacing all overhead power line conductors to minimize potential for raptor electrocution.

## **Construction Techniques and BMPs to Minimize Impacts**

Constructing the project has the potential to impact both habitat and wildlife in a variety of ways. The Applicant proposes using construction techniques and BMPs to minimize these potential impacts. These include the following:

- Using BMPs to minimize construction-related surface water runoff and soil erosion.
- Using certified “weed free” straw bales during construction to avoid introduction of noxious or invasive weeds.
- Flagging sensitive habitat areas (e.g., raptor nests, wetlands, etc.) near proposed areas of construction activity and designation of such areas as “off limits” to all construction personnel.
- Developing and implementing a fire control plan, in coordination with local fire districts, to minimize risk of accidental fire during construction and respond effectively to any fire that does occur.
- Establishing and enforcing reasonable driving speed limits during construction to minimize potential for road kills.
- Properly storing and managing all wastes generated during construction.
- Requiring construction personnel to avoid driving over or otherwise disturbing areas outside the designated construction areas.
- Monitoring raptor nests on site for activity prior to construction and modifying construction timing and activities to avoid impacts on nesting raptors.
- Designating an environmental monitor during construction to monitor construction activities and ensure compliance with mitigation measures.

## **Post-Construction Restoration of Temporarily Disturbed Areas**

The following measures would be taken to restore temporarily disturbed areas after construction:

- All temporarily disturbed areas would be reseeded with an appropriate mix of native plant species as soon as possible after construction is completed to accelerate the revegetation of these areas and to prevent the spread of noxious weeds.
- The Applicant would consult with WDFW regarding the appropriate seed mixes for the project area.

## **Noxious Weed Control**

Because noxious weeds can have numerous detrimental effects on rare plant populations, measures would be implemented to control the introduction and spread of undesirable plants during and after construction. Noxious weed control measures include:

- Cleaning construction vehicles prior to bringing them into the project area from outside areas.
- Quickly revegetating habitats temporarily disturbed during construction.
- Actively controlling noxious weeds that have established themselves as a result of the project.
- Developing a noxious weed control plan prior to construction, and implementing the plan over the life of the project as mitigation.

## **Dust Control**

The Applicant has proposed to implement a comprehensive dust control program. See Section 3.11, Air Quality, for a detailed description of mitigation measures to minimize fugitive dust emissions from construction-related traffic and additional wind-blown dust as a result of ground disturbance.

## **Fire Protection**

Prior to construction, a comprehensive fire control plan would be developed, and implemented project-wide over the life of the project. The fire control plan would take into account the dry nature of the region, and address risks on a seasonal basis. See Section 3.4, Health and Safety, for a detailed description of mitigation measures to minimize or prevent the risk of fire and explosion at the project site during both project construction and operations. A Fire Protection Services Agreement is in place, refer to Exhibit G for details.

## **Monitoring and Adaptive Management**

The Applicant proposes to convene a Technical Advisory Committee (TAC) to evaluate the mitigation and monitoring program and determine the need for further studies or mitigation measures. The TAC would be composed of representatives from WDFW, USFWS, Kittitas County, local interest groups, project landowners, and the Applicant. The role of the TAC would be to coordinate appropriate mitigation measures, monitor impacts on wildlife and habitat, and address issues that arise regarding wildlife impacts during construction and operation of the wind power project. The post-construction monitoring plan would be developed in coordination with the TAC and approved by EFSEC.

The TAC would evaluate the mitigation and monitoring program and determine the need for further studies and mitigation measures in accordance with the *Wind Project Habitat Mitigation Draft Guidance Document* (WDFW 2003a). Based on a verbal agreement by the Applicant and WDFW coordinated in July 2003, three years of monitoring studies to evaluate impacts from project operations should occur.

## **Acquisition and Enhancement of Onsite Habitat**

The Applicant proposes to purchase and protect, for the life of the project, a large area of habitat in the project area. This privately owned parcel, approximately 550 acres in size, is between proposed turbine strings B and C (Sections 22 and 27, Township 19 North, Range 17 East, WM) and is adjacent to land owned by the Washington DNR. The Applicant proposes to purchase this parcel and implement measures to enhance its value as habitat. Based on an agreement by the Applicant and WDFW, the Applicant proposes to protect and restore replacement habitat for habitat temporarily and permanently disturbed by the project. Proposed mitigation ratios and replacement acres of habitat for the middle scenario are identified in Table 3.2-13. The same replacement ratio would apply under the lower and upper end scenarios.

Based on data provided, WDFW has determined that the proposed mitigation site would provide adequate mitigation for the impacts on wildlife habitat that are expected to result from the proposed project (WDFW 2003f).

Overall, the parcel is in fair to good condition. However, several opportunities for enhancement exist that would be expected to raise habitat quality further. Primary among these is management and control of cattle grazing within the entire parcel, and especially within the riparian zone. A grazing management plan could be developed that reduces or eliminates cattle pressure on the most sensitive portions, and allows for re-establishment of native vegetation in specific problem areas. Implementing riparian replanting designed to re-establish native species would benefit certain problem areas along the unnamed creek in the mitigation parcel.

Although high concentrations of noxious weeds were not found within the parcel, scattered patches and individuals (primarily diffuse knapweed [*Centaurea diffusa*]) are present throughout. An overall noxious weed control effort for the parcel, developed in coordination with the Kittitas County Noxious Weed Control Board, would likely be effective at reducing or eliminating noxious weeds from the site, increasing the habitat quality and effectiveness.

### **Loss of Wetlands and Streams**

In August 2003, the Applicant submitted a JARPA to the U.S. Army Corps of Engineers and other applicable resource agencies to mitigate for the project's expected minor loss of jurisdictional wetlands and waters of the United States. The Corps issues Nationwide Permits that authorize minimal project impacts on wetlands and waters. NWP 12 addresses Utility Line Activities and specifically addresses utility lines and access roads. NWP 14 addresses Linear Transportation Projects and crossings of waters of the state by roadways. Both permits provide acreage limits of not greater than one-half-acre (21,779 square feet). There are some differences

**Table 3.2-13: Proposed Mitigation Ratios and Replacement Acres of Habitat under the Middle Scenario (Acres)**

Vegetation Type	Permanently Disturbed Area <sup>1</sup>	Permanent Mitigation Ratio	Permanent Mitigation Area <sup>1</sup>	Temporarily Disturbed Area	Temporary Mitigation Ratio	Temporary Mitigation Area	Total Mitigation Area Needed	Total Mitigation Area Provided
Dense Conifers	<0.1	2:1	0.0	0.1	0.5:1	0.1	0.1	0.0
Deciduous Shrub Thicket	<0.1	2:1	0.1	0.0	0.5:1	0.0	0.1	2.8
Dense Shrub-Steppe	2.4	1:1	4.8	6.0	0.5:1	3.0	7.8	0.0
Moderate Shrub-Steppe	22.6	2:1	45.2	57.2	0.5:1	28.6	73.8	274.9
Sparse Shrub-Steppe	15.9	2:1	31.9	54.0	0.5:1	27.0	58.8	73.1
Low Sagebrush	9.8	2:1	19.6	28.4	0.5:1	14.2	33.8	0.0
Grassland	40.3	1:1	40.3	159.2	0.1:1	15.9	56.2	185.1
Riparian Tree	<0.1	2:1	0.0	0.4	0.5:1	0.2	0.2	8.0
Riparian	0.0	2:1	0.0	0.0	0.5:1	0.0	0.0	0.0
Developed	1.5	0:1	0.0	5.3	0.0:1	0.0	0.0	0.0
<b>Totals</b>	<b>92.5</b>		<b>141.8</b>	<b>310.5</b>		<b>88.9</b>	<b>230.7</b>	<b>543.9</b>

<sup>1</sup> Permanent disturbance to low sagebrush habitat assumes disturbance of both the proposed Bonneville and PSE substation sites (3 acres each), therefore, total acreage numbers have been adjusted accordingly

in the requirements for these two different permits, and the Corps would make the determination of which NWP to apply for the proposed project. EFSEC would provide Section 401 water quality certification to the Corps if the project is approved by the Governor. Depending on the total project impacts and which NWP the Corps assigns, EFSEC may require compensatory mitigation for the project. Therefore, the specific mitigation requirements to compensate for loss of wetlands and water resources at the project site is considered an issue of uncertainty that has yet to be resolved.

### **Post-Construction Restoration of Temporarily Disturbed Areas**

Existing project design minimizes both permanent and temporary impacts from facilities construction. The Applicant proposes to reseed temporarily disturbed areas with an appropriate mix of native plant species as soon as possible after construction is completed (see Mitigation Measures Proposed by the Applicant, above). WDFW recommends that a broadcast application (4 to 6 pounds per acre) of a lithosol origin biotype such as native Sandberg Bluegrass should be applied to restored areas (WDFW 2003e).

### **Additional Mitigation Measures Proposed in the Addendum to the DEIS**

Because new impacts have not been identified based on the revised project layout, additional mitigation measures are not warranted.

## **WATER RESOURCES**

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### **3.3.4 Mitigation Measures**

#### **Mitigation Measures Proposed by the Applicant**

##### **Surface Runoff Pollution during Construction**

The Applicant proposes to develop and implement, as required by the National Pollutant Discharge Elimination System (NPDES) General Stormwater Permit for Construction Activities, a detailed SWPPP to minimize the potential for discharge of pollutants from the site during construction. See Mitigation Measures in Section 3.1, Earth Resources, for a detailed description of proposed SWPPP activities and measures to be implemented during construction.

##### **Surface Runoff Pollution during Operations**

The Applicant proposes to develop and implement a detailed SWPPP to minimize the potential for discharge of pollutants from the site during operations and maintenance activities. See Mitigation Measures in Section 3.1, Earth Resources, for a detailed description of proposed SWPPP activities and measures to be implemented during project operations and maintenance.

##### **Water Supply**

A licensed well driller would install a potable water well to serve the O&M facility. The well would be installed consistent with Kittitas County Environmental Health Department and Ecology requirements.

##### **Additional Mitigation Measures Proposed in the Addendum to the DEIS**

Because new impacts have not been identified based on the revised project layout, additional mitigation measures are not warranted.

## **HEALTH AND SAFETY**

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### **3.4.4 Mitigation Measures**

#### **Mitigation Measures Proposed by the Applicant**

The Applicant and its subcontractors would comply with all applicable local, state, and federal safety, health, and environmental laws, ordinances, regulations, and standards. Some of the main laws, ordinances, regulations, and standards designed to protect human health and safety that would be reflected in the design, construction, and operation of the project include:

- Occupational Safety And Health Act Of 1970 (29 USC 651, et seq.) and 29 CFR 1910, Occupational Safety and Health Standards;
- Washington Industrial Safety and Health Act (RCW 49.17) and associated rules (WAC 296); Uniform Fire Code;
- Americans with Disabilities Act;
- Uniform Fire Code Standards;
- Uniform Building Code;
- National Fire Protection Association, which provides design standards for the requirements of fire protection systems;
- National Institute for Occupational Safety and Health, which requires that safety equipment carry markings, numbers, or certificates of approval for stated standards;
- American Society of Mechanical Engineers, which provides plant design standards;
- American National Standards Institute, which provides plant design standards;
- National Electric Safety Code;
- American Concrete Institute Standards;
- American Institute of Steel Construction Standards;
- American National Standards Institute;
- American Society for Testing and Materials;
- Institute of Electrical and Electronic and Installation Engineers; and
- National Electric Code.

#### **Fire and Explosion Risk Mitigation Plan (Construction and Operations)**

Table 3.4-3 presents the potential causes of fire or explosion during both project construction and operations, and mitigation measures that would be employed to minimize or prevent the risk.

**Table 3.4-3: Fire and Explosion Risk Mitigation Plan**

C/O <sup>1</sup>	Potential Fire or Explosion Source	Mitigation Measures
C & O	General Fire Protection	<ul style="list-style-type: none"> <li>• All onsite service vehicles fitted with fire extinguishers</li> <li>• Fire station boxes with shovels, water tank sprayers, etc installed at multiple locations onsite along roadways during summer fire season</li> <li>• Minimum of one water truck with sprayers must be present on each turbine string road with construction activities during fire season</li> </ul>
C & O	Dry vegetation in contact with hot exhaust catalytic converters under vehicles	<ul style="list-style-type: none"> <li>• No gasoline-powered vehicles allowed outside of graveled areas</li> <li>• Mainly diesel vehicles (i e., w/o catalytic converters) used on site</li> <li>• Use of high clearance vehicles on site if used off road</li> </ul>
C & O	Smoking	<ul style="list-style-type: none"> <li>• Restricted to designated areas (outdoor gravel covered areas)</li> </ul>
C	Explosives used during blasting for excavation work	<ul style="list-style-type: none"> <li>• Only state-licensed explosive specialist contractors are allowed to perform this work; explosives require special detonation equipment with safety lockouts</li> <li>• Clear vegetation from the general footprint area surrounding the excavation zone to be blasted.</li> <li>• Standby water spray trucks and fire suppression equipment to be present during blasting activities</li> </ul>
C & O	Electrical fires	<ul style="list-style-type: none"> <li>• All equipment is designed to meet NEC and NFPA standards</li> <li>• Graveled areas with no vegetation surrounding substation, fused switch risers on overhead pole line, junction boxes and pad switches</li> <li>• Fire suppressing, rock-filled oil containment trough around substation transformer</li> </ul>

**Table 3.4-3: Continued**

C/O <sup>1</sup>	Potential Fire or Explosion Source	Mitigation Measures
C & O	Lightning	<ul style="list-style-type: none"> <li>• Specially engineered lightning protection and grounding systems at wind turbines and substations</li> <li>• Footprint areas around turbines and substation are graveled with no vegetation</li> </ul>
C	Portable Generators – hot exhaust	<ul style="list-style-type: none"> <li>• Generators not allowed to operate on open grass areas</li> <li>• All portable generators to be fitted with spark arresters on exhaust system</li> </ul>
C	Torches or field welding onsite	<ul style="list-style-type: none"> <li>• Immediate surrounding area will be wetted with water sprayer.</li> <li>• Fire suppression equipment to be present at location of welder/torch activity</li> </ul>
C & O	Electrical arcing	<ul style="list-style-type: none"> <li>• Electrical designs and construction specifications meet or exceed requirements of NEC and NFPA.</li> </ul>

Source: Sagebrush Power Partners LLC 2003c.

1 Indicates risk during construction (C) and/or operations (O)

### **Additional Measures to Reduce Risk of Fire and Explosion during Construction**

- The Construction Manager would be responsible for staying abreast of fire conditions in the project area by contacting DNR and implementing necessary fire precautions.
- Fire risk reporting by the Washington DNR would be actively posted at the construction job site during the high-risk season.
- A Fire Protection and Prevention Plan would be developed and implemented, in coordination with the Kittitas County Fire Marshal and other appropriate agencies.
- Potential hazards associated with use of flammable liquids such as construction equipment fuels would be reduced by compliance with a Construction Health and Safety Plan. Each contractor would develop its own plan tailored to suit the specific site conditions, design, and construction requirements for the project. These contractors would administer the program to ensure compliance with laws, ordinances, regulations, and standards pertaining to worker safety, including the State of Washington's construction safety standards (Chapter 296-155 WAC) and the requirements of the Occupational Safety and Health Administration (OSHA) (Title 29, Labor, Code of Federal Regulations Part 1926, Safety and Health Regulations for Construction). The Construction Health and Safety Plan would include the following provisions:
  - Injury and illness prevention plan;
  - Written safety program;
  - Personnel protective devices program;
  - Onsite fire suppression program;
  - Offsite fire suppression support; and
  - Emergency plan.

## **Additional Measures to Reduce Risk of Fire and Explosion during Operations**

- The Applicant has committed to developing and implementing emergency response procedures and employee training addressing the following topics:
  - Personnel injury;
  - Construction emergencies;
  - Project evacuation;
  - Fire or explosion;
  - Floods;
  - Extreme weather abnormalities;
  - Earthquakes;
  - Volcanic eruption; and
  - Facility blackout.
- The project O&M group and third party contractors would receive regular emergency response and safety training to ensure that effective and safe action would be taken to reduce and limit the impact of an emergency (including fires and explosions) during project operations.
- The wind turbine generators would be equipped with specially engineered lightning protection systems that connect the blades, nacelle, and tower to a grounding system at the base of the tower. The blades would be constructed with an internal copper conductor and an additional lightning rod that extends above the wind vane and anemometer at the rear of the nacelle. The Applicant also proposes to keep the areas around each turbine base graveled with no vegetation, to reduce fire risk.
- The turbine control system would detect overheating in turbine machinery. Internal fires would be detected by these sensors, causing the machine to shut down immediately and to send an alarm signal to the central SCADA system which would notify operators of the alarm by cell phone or pager.
- The proposed substations would be equipped with specially engineered lightning protection systems to minimize the risk of fire during substation operations. All electrical designs for the substations and interconnection facilities would comply with the National Electric Code and the National Fire Protection Agency regulations and standards. The substations would be completely enclosed by a locked fence and access would be limited to authorized personnel. The area surrounding the substations would be graveled and no combustible vegetation would be located within the fenced area.
- Permanent meteorological monitoring towers would be installed with a grounding system that protects the meteorological sensors and loggers from electrostatic discharge and provides lightning protection to the tower by bringing the tower and everything mounted on it to ground potential. Lightning dissipaters or rods would be installed at the top of the towers to provide an umbrella of protection for the upper sensors.
- Only qualified personnel would perform maintenance on the electrical cables. Sufficient clearance would be provided for all types of vehicles traveling under the overhead segments of the electrical lines.

## **Measures to Reduce Potential Releases of Hazardous Materials to the Environment during Construction**

- During construction, the EPC contractor would use fuel trucks for refueling construction vehicles and equipment on site. There would be no fuel storage tanks used at the project site. To avoid spills, fueling trucks would be equipped with auto shutoff valves and other safety devices. The fuel trucks would be properly licensed and would incorporate features in equipment and operation, such as automatic shutoff devices, to prevent accidental spills.
- The oil truck used to fill substation transformers would be properly licensed and would incorporate several special features in equipment and operation, such as automatic shutoff devices, to prevent accidental spills.
- The details of how lubricating oils and other materials would be stored and contained at the construction staging area would be documented in a construction spill prevention and control plan developed and approved by EFSEC prior to commencement of construction. This plan would show storage, detention, and response procedures for all potential chemicals used on site. Implementation of appropriate spill prevention and control measures would ensure that the risk of an accidental release of hazardous materials remains low throughout construction.
- The EPC contractor would be responsible for compliance with applicable federal, state, and local laws, ordinances, regulations, and standards to ensure that the risk of release does not create an adverse health and safety or environmental impact. The EPC contractor would also be responsible for training its personnel in spill prevention and control and, if an incident occurs, would be responsible for containment and cleanup. Spills would be addressed in accordance with the construction spill prevention plan.

## **Measures to Reduce Potential Releases of Hazardous Materials to the Environment during Operations**

- The wind turbines would be equipped with sensors to automatically detect loss in fluid pressure and/or increases in temperature; these sensors would enable the turbines to be shut down in case of a fluid leak. The turbines would be designed with fluid catch basins and containment systems to prevent accidental releases from leaving the nacelle. Any accidental gear oil or other fluid leaks from the wind turbines would be contained inside the towers because they are sealed around the base.
- The pad-mounted transformers would be designed to meet stringent electrical industry standards, including containment tank welding and corrosion protection specifications. These transformers would also be equipped with oil level indicators to detect potential spills.
- The substation transformers would have a specifically designed containment system to ensure that any accidental fluid leak does not result in discharge to the environment. The substation design would incorporate an oil containment system consisting of a perimeter containment trough, large enough to contain the full volume of transformer mineral oil with a margin of safety, surrounding the main substation transformers. The trough and/or membrane would drain into a common collection

sump area that would be equipped with a sump pump designed to pump rainwater out of the trough to a nearby natural drainage. To prevent the sump from pumping oil out to the surrounding area, it is fitted with an oil detection shutoff sensor that would shut off the sump when oil is detected. A fail-safe system with redundancy is built into the sump controls because the transformers are also equipped with oil level sensors. If the oil level inside a transformer drops due to a leak in the transformer tank, it would also shut off the sump pump system to prevent it from pumping oil and an alarm would be activated at the substation and into the main wind project control (SCADA) system.

- Waste fluids would be stored in appropriate containers on a concrete surface inside the O&M facility for collection by a licensed collection service for recycling or disposal. The storage area inside the O&M facility would be surrounded by a berm or trough to trap any leaks or spills.

### **Measures to Minimize Risk of Ice Throw**

In order to prevent ice from causing any potential danger, the proposed turbines would be located at least 1,000 feet from any residences. For additional safety, selected turbine rows within 328 feet of public roads would also be equipped with a fail-safe icing sensor system, which would shut the turbines down and activate a local alarm during rare icing events. The affected machine(s) would remain dormant until icing conditions are no longer present.

### **Measures to Minimize Risk of Tower Collapse and Blade Throw**

- The Applicant proposes setbacks of at least the height of the tower plus the blade (overall tip-height) from any public roads and residences. The size of this setback would vary depending on the selected project scenario. The tip-height would range from a low of 260 feet under the upper end scenario to a high of 410 feet under the lower end scenario.
- The wind turbines would meet international engineering design and manufacturing safety standards. This includes tower, blade, and generator design. There is an international quality control assurance program for turbines, and a number of relevant safety and design standards. Quality Assurance/Quality Control (QA/QC) inspections of the wind turbine generators and towers would typically include, but not be limited to, the following operations, checks, and review:
  - Inspection of turbines at manufacturer's facilities;
  - Review and inspection of manufacturer's QA/QC procedures;
  - Manufacturing drawing review and verification;
  - Verification of welding procedure specifications compliance ;
  - Material mill certificates tracking system and verification;
  - Overall visual inspection (including assembly, fastening systems and welding);
  - Inspection of flange interface flatness measurements, finishing and protection;
  - Witness or review of turbine run-in load testing;
  - Inspection of paint finishing and protection;
  - Inspection of painting/marketing/preparation for shipment;
  - Verification of field wiring and tagging; and
  - Pre-Commissioning field testing and verification.

- Foundation design and commissioning checks would address potential equipment failure due to extreme events such as earthquakes or extreme wind loadings, as well as frequency tuning of the different parts of the structure to avoid failure due to dynamic resonance.

### **Measures to Minimize Exposure to EMF**

Proposed high voltage transmission lines would be designed and built according to industry standards to avoid EMF impacts.

### **Measures to Minimize Electric Shock**

The substations would be designed and constructed to have a robust grounding grid that would divert stray surges and faults. Generally, the substation grounding grid would consist of heavy gauge bare copper conductor buried in a grid fashion and welded to a series of multiple underground grounding rods.

### **Measures during Decommissioning**

An audit would be performed of the relevant operation records and a project site survey would be conducted to determine if a release of hazardous material has occurred. A review of all facilities would be performed to determine if hazardous or dangerous materials (as then defined by regulation) are present as construction materials or materials used in the operation of any facility components such as cleaning and maintenance fluids, lubricating oils, and gases. The project site inspection would determine and record the location, quantity, and status of all identified materials.

### **Additional Recommended Mitigation Measures**

In addition to the mitigation measures proposed by the Applicant above, the following measures would further reduce health and safety related impacts and risks.

### **Measures to Minimize Risk of Ice Throw**

The Applicant proposes to equip selected turbines within 328 feet of public roads with a fail-safe icing sensor system. However, some of the residents in the project area travel on private roads to access their properties. Because some roads appear to be close to the proposed turbines, the Applicant should install a similar icing sensor system on any turbine located within 328 feet of private roads.

### **Measures to Minimize Risk of Tower Collapse and Blade Throw**

The Applicant proposes setbacks of at least the turbine tip-height (ranging from 260 to 410 feet, depending on the project scenario) from public roads and residences as a safety measure to reduce the risk of tower collapse or blade throw. However, some of the residents in the project area travel on private roads to access their properties. Because some roads appear to be close to the proposed turbines, the Applicant should adjust the siting of individual turbines, as necessary, to avoid encroaching upon a 260- to 410-foot setback around private roads.

### **Measures to Minimize Shadow-Flicker Effects**

Shadow-flicker caused from low-angle sun shining through rotating wind turbines would affect several residences in proximity to the project site. Although the number of expected hours of exposure is relatively low, residents may perceive these effects to be significantly disruptive in nature. Recommended mitigation measures to minimize the nuisance effect from shadow-flicker to residents in the project area should include one or more of the following:

- Plant trees between the affected residence and the turbines causing the effect;
- Install fixed shades on affected windows;
- Install automatic shades on affected windows that are opened and closed by electric motor on a timer.

### **Additional Mitigation Measures Proposed in the Addendum to the DEIS**

Because new impacts have not been identified based on the revised project layout, additional mitigation measures are not warranted.

## **ENERGY AND NATURAL RESOURCES**

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### **3.5.4 Mitigation Measures**

The Applicant proposes to implement energy conservation measures during project construction and operation including, but not limited to, the following:

- Use lignin (a non-toxic wood byproduct) as a dust palliative to reduce water consumption for dust suppression during construction;
- Encourage carpooling of onsite construction crews;
- Use high-efficiency electrical fixtures and appliances in the O&M facility and substation
- control house; and
- Use low-water-use flush toilets in the O&M facilities.

#### **Additional Mitigation Measures Proposed in the Addendum to the DEIS**

Because new impacts have not been identified based on the revised project layout, additional mitigation measures are not warranted.

## **LAND USE AND RECREATION**

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### **3.6.5 Mitigation Measures**

#### **Mitigation Measures Proposed by the Applicant**

- During project construction, it would be necessary to remove cattle from areas where blasting or heavy equipment operations are taking place. The Applicant proposes to make arrangements with property owners and livestock owners to keep livestock out of these areas during those periods.
- After construction is completed, disturbed areas would be returned as closely as possible to their original state, excluding service and access roads, which would remain in place for the life of the facility.

#### **Additional Recommended Mitigation Measures**

In addition to measures proposed by the Applicant and inherent in the project design, the following mitigation measure is recommended to minimize potential conflicts between project construction and operation activities and onsite recreation users:

- In June 2003, DNR and the Applicant executed a lease agreement that would permit the Applicant to construct and operate portions of the proposed wind turbine project on DNR property (DNR 2003). Under the terms of the agreement, DNR's activities on this property, and any grant of rights DNR makes to any person or entity, shall not unreasonably interfere with the construction, installation, maintenance, operation, or removal of the project, access to the project, or the undertaking of other permitted activities allowed by the lease. If DNR determines that potential conflicts between turbine construction and/or operations and existing recreational uses on DNR property would occur, the agency could take steps to limit access to its property. For example, DNR could post appropriate signs on its property limiting public pedestrian and/or vehicle access to portions of the project area during construction or operation.

#### **Additional Mitigation Measures Proposed in the Addendum to the DEIS**

Because new impacts have not been identified based on the revised project layout, additional mitigation measures are not warranted.

## **SOCIOECONOMICS**

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### **3.7.4 Mitigation Measures**

To minimize the potential increase in visitors to the project site, the Applicant proposes to construct an information kiosk and public viewing area near the proposed O&M facility off Bettas Road. Signs would be provided to direct tourists to this viewing area (see Chapter 2, Proposed Action and Alternatives, Section 2.2.3, Facilities). No other mitigation measures are required or have been identified for potential socioeconomic impacts.

#### **Additional Mitigation Measures Proposed in the Addendum to the DEIS**

Because new impacts have not been identified based on the revised project layout, additional mitigation measures are not warranted.

## **CULTURAL RESOURCES**

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### **3.8.5 Mitigation Measures**

#### **Mitigation Measures Proposed by the Applicant**

A qualified archaeologist would monitor the ground-disturbing activities; the Yakama Nation would be contacted prior to these activities and invited to have representatives present during all ground disturbances. If intact archaeological resources or human burials are encountered during construction, the construction foreman would immediately direct activities that could further disturb the deposits away from their vicinity. The construction foreman or Sagebrush Power Partners LLC would then contact Dr. Robert G. Whitlam, Washington State Archaeologist, the Yakama Nation, and other pertinent parties who would determine how the materials should be treated. The area would be secured and placed off limits for anyone but authorized personnel.

#### **Additional Recommended Mitigation Measures**

Because tribal consultation is ongoing and cultural resources significant to the Yakama Nation may yet be identified, mitigation measures appropriate for these resources should be developed by the Applicant and approved by EFSEC and the Yakama Nation before construction begins. It is recommended that the Yakama Nation be involved in establishing procedures to be followed in the event of any unanticipated finds during the construction and decommissioning phases of the proposed project.

#### **Additional Mitigation Measures Proposed in the Addendum to the DEIS**

Because new impacts have not been identified based on the revised project layout, additional mitigation measures are not warranted.

## **VISUAL RESOURCES**

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### **3.9.5 Mitigation Measures**

Mitigation of aesthetic and light and glare impacts related to wind power projects could include a combination of methods. The goal of mitigation is to avoid, reduce, and compensate for impacts to the maximum extent practical. The most fundamental mitigation method is to completely avoid the impacts at a given location by either not constructing the project or constructing it at a different location. This option is discussed in Section 3.9.4, No Action Alternative.

In current literature on the subject, a number of commonly accepted aesthetic and light and glare impacts are associated with wind power projects. Many of these impacts may be reduced if recommended planning and design methods are followed. The Applicant is proposing some of these impact-reduction methods, as summarized below.

#### **Mitigation Measures Proposed by the Applicant**

- During the construction period, active dust suppression would be implemented to minimize the creation of dust clouds.
- When construction is complete, areas disturbed during the construction process would be restored to natural conditions.
- The wind turbine towers, nacelles, and rotors used would be uniform in design throughout the project.
- The turbines would have neutral gray finish to minimize contrast with the sky backdrop. Because the turbines are most frequently seen against the sky, particularly in close-range views where visual concerns are the greatest, the gray finish is the most effective choice for minimizing project aesthetic impacts.
- A low-reflectivity finish would be used for all surfaces of the turbines to minimize the reflections that can call attention to structures in a landscape setting.
- Because of the prevailing wind conditions and the high level of reliability of the equipment being used, the rotors would be turning approximately 80-85% of the time, minimizing the amount of time that turbines would appear to be not operating.
- The small cabinets containing pad-mounted equipment that would be located at the base of each turbine would have an earthtone finish to help them blend into the surrounding ground plane.
- The only exterior lighting on the turbines would be the aviation warning lighting required by the FAA. The warning lighting would be the minimum required intensity to meet the current FAA standards.
- Most of the project's electrical collection system would be buried.
- The 1.2-mile aboveground segment of the electrical collection system would include wood poles, low-reflectivity conductors, and non-reflective insulators. The aboveground segment would be located along two sets of existing overhead high voltage transmission.

- To the extent feasible, existing road alignments would be used to provide access to the turbines, minimizing the amount of additional surface disturbance required. Access road widths would be restricted to 20 feet in the middle and upper scenarios. The roads would have a gravel surface and would have grades of not more than 15% to reduce unsightly soil erosion.
- The O&M facility would have a low-reflectivity earth tone finish to reduce visual contrast with the surrounding landscape.
- The colors of the asphalt and gravel used for circulation and parking areas at the O&M facility would be selected to minimize contrast with the site's soil colors.
- Outdoor night lighting at the O&M facility and substations would be the minimum necessary for safety and security. All lights would be shielded to reduce offsite light trespass.
- All substation equipment would have a low-reflectivity neutral gray finish to reduce visual impact.
- All insulators in the substations and on takeoff towers would be non-reflective and non-refractive.
- The control buildings located at each substation would have a low-reflectivity earthtone finish.
- The chain-link fences surrounding the substations would have a non-reflective, dark finish to reduce their contrast with the surroundings.
- In the areas surrounding the O&M facility and substations, naturalistic groupings of indigenous trees and shrubs would be established to provide partial screening and to help visually integrate the facilities into the landscape.
- An information kiosk and public viewing area would be constructed near the proposed O&M facility off Bettas Road. Signs would be provided to direct tourists to this viewing area (see Chapter 2). There is evidence from viewer survey results that people who have an understanding of the technology and characteristics of wind energy facilities are less likely to find views of turbines in the landscape objectionable.

### **Additional Recommended Mitigation Measures**

During EIS scoping, concerns were raised about the project's aesthetic impacts. It was suggested that the County impose scenic setbacks from US 97 to protect the project area's viewshed. Kittitas County would make decisions regarding scenic setbacks in the project area.

Other commentors requested that the project compensate for lost sleep or loss of enjoyment of property caused by the proposed turbine lighting. Specific types of mitigation include methods to mitigate for light pollution at residences that do not have window coverings and methods to shield or somehow create a visual barrier between the tower lights and nearby residences. However, as noted below, attempts to screen or buffer views of the wind turbines should be carefully examined because a failed attempt to screen the turbines could have a greater negative impact than no attempt at all.

Additional measures or modifications that could further reduce the aesthetic and light and glare impacts of the project are recommended below. Some of the potential mitigation measures are published recommendations in current literature about wind power project aesthetic impacts (e.g., Pasqualetti et al. 2001). See Section 3.4, Health and Safety, for a discussion of recommended measures to minimize the effects of shadow-flicker during project operations.

- Architectural compatibility with the region's agricultural building types would unify the O&M facility and potentially the substation with the surrounding landscape. For example, if the O&M facility looked like a barn and the parking area was hidden behind it, travelers on US 97 would be less likely to view the structure as atypical for the area.
- For wind turbines that would be viewed uphill within a 1-mile distance, planting natural-looking groups of native conifers should be explored as a means to reduce the overall impact. However, any attempt to screen or buffer views of the wind turbines should be carefully examined because the aesthetic impact of a failed attempt to screen the turbines could have more impact than no attempt at all. Any attempt to camouflage or paint in a decorative way would make the turbines more noticeable and incongruous. The wind turbines should not be painted to match sky or ground surface colors because the sky and surface colors are constantly changing. For paint colors other than white or light gray, the degree of contrast between the turbines and sky or ground surface could range from very low to very high depending on conditions such as snow or seasonal vegetative cover.
- The wind turbines should not be installed on a foundation that is raised above natural (existing) grades. The grasses and other plants used in post-construction restoration efforts should continue to the base of the tower so that the tower is visually connected to the earth.
- All wind turbines should be the same design, height, and color, and their blades should rotate in the same direction. The nacelles should have only one small logo visible on the two longest sides. Cellular dish-type antennas should not be attached. Narrow antennas could likely be added to the wind turbines with minimal aesthetic impact.
- The towers should be constructed to house the transformer and any control panels within the base of the tower to avoid visual clutter.
- To compensate for visual impacts, the Applicant should acquire conservation easements on land in important foreground views of the wind turbines so that no further development occurs in these areas until after decommissioning. This approach would conserve natural areas so that the visual contrast between the wind turbine and the land maintains its order and purity.

#### **Additional Mitigation Measures Proposed in the Addendum to the DEIS**

The mitigation measures presented in the Draft EIS for visual impacts remain appropriate. However, mitigation of the exterior lighting of turbines required by FAA will be revised as follows:

- The only exterior lighting on the turbines will be the nighttime aviation warning lighting required by the FAA. This lighting will conform to the FAA's new standards for marking of wind turbines, required intensity and synchronization. It is anticipated that according to the FAA's new guidance daytime lighting of the turbines will not be required.

## **TRANSPORTATION**

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### **3.10.4 Mitigation Measures**

#### **Mitigation Measures Proposed by the Applicant**

##### **Construction Traffic Control**

The following mitigation measures are proposed to reduce the impact of project construction on roadway traffic in the region:

- The Applicant would prepare a Transportation Management Plan (TMP) that would be reviewed and approved by WSDOT and Kittitas County. The TMP would direct and obligate the contractor to implement procedures that would minimize traffic impacts;
- The TMP would include coordination between project-related construction traffic and WSDOT planned construction projects;
- Any oversize or overweight vehicles would comply with applicable state and county requirements, as permitted by WSDOT and Kittitas County.
- The Applicant would provide notice to landowners when construction takes place to help minimize access disruptions;
- The Applicant would provide proper road signs and warnings of “Equipment on Road,” “Truck Access,” or “Road Crossings”;
- When slow or oversized wide loads are in transit to and from the site, advance signs and traffic diversion equipment would be used to improve traffic safety. Pilot cars would be used as WSDOT codes dictate depending on load size and weight. Permits would be obtained for these oversized or overweight vehicles as required by WSDOT and Kittitas County;
- The Applicant would construct necessary site access roads and entrance driveways that would be able to service truck movements of legal weight;
- The Applicant would encourage carpooling for the construction workforce to reduce traffic volume;
- In consultation with Kittitas County, the Applicant would provide detour plans and warning signs in advance of any traffic disturbances;
- The Applicant would employ flaggers as necessary to direct traffic when large equipment is exiting or entering public roads to minimize risk of accidents;
- One travel lane would be maintained at all times.

##### **Hazardous Materials Transport**

- Transportation of hazardous materials would be conducted in a manner that protects human health and the environment and is in accordance with applicable federal and WSDOT requirements.

### **Access Road Construction**

- The access road from US 97 would be constructed with slopes and culverts designed according to WSDOT and Washington State access management standards under Title 468 WAC and Chapter 47.50 RCW. Access from county roads (Bettas or Hayward) would also be constructed with the appropriate slopes and culverts in accordance with Kittitas County standards.

### **Roadway Maintenance**

- The Applicant proposes to upgrade the northern portion of Hayward Road prior to construction to allow passage of heavy equipment and trucks and to restore this portion of Hayward Road to a condition equal to or better than its present condition after construction is completed.
- The Applicant would consult with the Kittitas County Department of Public Works to determine the specific requirements for any improvement and restoration to Hayward Road (and any other county roads used by the project).
- The Applicant proposes to take responsibility for ongoing maintenance to the northern portion of Hayward Road that is necessitated by the project's operation. Assuming the County chooses to keep Hayward Road closed for the winter, the Applicant would coordinate with the County to keep non-project vehicles off this road during the closure period.
- The Applicant plans to submit an Application for Proposed Use of ROW to Bonneville for joint use of the 1-mile section of ROW between Hayward Road and the proposed Bonneville substation and turbine string E. With Bonneville approval, the Applicant proposes to upgrade this section of ROW from dirt to gravel surface and would assume responsibility for maintenance of this section of ROW.

### **Tourism-Induced Traffic**

- The Applicant proposes to construct an information kiosk and public viewing area near the proposed O&M facility off Bettas Road. Signs would be provided to direct tourists to this site (see Section 2.2.3, Facilities). This measure would minimize tourist-generated traffic impacts on county roadways.

### **Additional Recommended Mitigation Measures**

#### **Construction Traffic Control**

- The Applicant should consult and coordinate with WSDOT and Kittitas County to identify additional temporary measures that could be implemented to improve LOS along US 97 north during the construction period.

#### **Parking**

To ensure that adequate parking is provided to accommodate both project employees at the O&M facility and tourists attracted to the project area, the following mitigation measure is recommended:

- The Applicant should monitor the volume of tourists visiting the proposed viewing area to determine if overflow parking is required. If additional parking is needed, the Applicant could identify and create an adjacent overflow parking area. The specific location of an overflow parking area should be sited so that tourist traffic does not conflict with employee access into and out of the O&M facility and no additional environmental impacts are caused.

### **Traffic Safety**

In the absence of projected increased traffic volumes at the intersection of US 97 and Bettas Road, WSDOT recommends the following mitigation measure to improve traffic safety at this intersection during project operations (WSDOT 2003b):

- WSDOT would monitor the incidence of traffic accidents at the intersection of US 97 and Bettas Road. If, within a five-year time period, WSDOT determines that channelization improvements at the intersection of US 97/Bettas Road are necessary to reduce accidents caused by additional turning traffic, the Applicant should be responsible for all costs associated with the safety improvement. The safety improvement would be limited to a northbound left-turn lane, a southbound right-turn lane, or both. The time period for monitoring would begin at the time of development approval.

### **Aviation Safety**

To ensure that the project would not create hazards to aviation under any of the project scenarios, the following mitigation measure is recommended:

- If the Applicant's final proposal differs from the proposal submitted to, reviewed, and approved by the FAA in terms of number, siting, or size of proposed turbines, the Applicant should notify the FAA of these changes and secure any additional "Determinations of No Hazard to Air Navigation," as warranted.

### **Additional Mitigation Measures Proposed in the Addendum to the DEIS**

Because new impacts have not been identified based on the revised project layout, additional mitigation measures are not warranted.

## AIR QUALITY

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### 3.11.5 Mitigation Measures

Construction of the proposed project would create fugitive dust emissions from construction-related traffic and additional wind-blown dust because of ground disturbance. The proposed project would require mitigation measures to comply with Ecology's regulations to control dust during construction (WAC 173-400-040).

The proposed project would implement a dust control program to minimize any potential disturbance from construction-related dust and to avoid creating a local nuisance or significant environmental impacts. The specific details of the dust control program would depend largely on the timing of construction, which is itself dependent on the date when the project is permitted. For example, a more aggressive dust control effort would be required if major civil construction work occurs in the late dry summer as opposed to early spring (Sagebrush Power Partners LLC 2003g).

Dust suppression would be accomplished through application of either water or a water-based, environmentally safe dust palliative such as lignin, in accordance with the Proposed Dust Abatement Policy developed by Kittitas County Public Works Department. (This draft policy has not been formally adopted by the Board of County Commissioners.) The use of a dust palliative such as lignin (a non-toxic, non-hazardous compound derived from trees) would result in the use of substantially less water for dust suppression (see Section 3.3, Water Resources) and therefore less traffic from water trucks to the construction site. The EPC contractor in consultation with local authorities would make the final decision regarding dust suppression techniques.

The Applicant proposes the following mitigation measures for construction-related air emissions and dust:

- All vehicles used during construction would comply with applicable federal and state air quality and vehicle emission regulations;
- Operational measures such as limiting engine idling time and shutting down equipment when not in use would be implemented;
- Active dust suppression would be implemented on unpaved construction access roads, parking areas and staging areas, using water-based dust suppression materials in compliance with state and local regulations;
- Traffic speeds on unpaved access roads would be kept to 25 mph to minimize generation of dust;
- Carpooling among construction workers would be encouraged to minimize construction-related traffic and associated emissions;
- Disturbed areas would be replanted or graveled to reduce wind-blown dust; and
- Erosion control measures would be implemented to limit deposition of silt to roadways.

No mitigation is proposed for project operations because there would be no regulated air or odor emissions.

**Additional Mitigation Measures Proposed in the Addendum to the DEIS**

Because new impacts have not been identified based on the revised project layout, additional mitigation measures are not warranted.

## **NOISE**

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### **3.12.4 Mitigation Measures**

#### **Mitigation Measures Proposed by the Applicant**

- Substation transformers and high-voltage switching equipment would be specified or designed to comply with the 70 dBA limit at all Class C EDNA property lines and 50 dBA at all Class A EDNA structures (Sagebrush Power Partners LLC 2003c).

#### **Additional Recommended Mitigation Measures**

##### **Construction**

Although no specific receivers are identified as being adversely affected by construction noise, the following contractor practices are recommended to minimize the effects of construction noise in the project area:

- Implement work-hour controls so that noisy activities occur between 7 a.m. and 10 p.m., which would reduce the impact during sensitive nighttime hours.
- Maintain equipment in good working order and use adequate mufflers and engine enclosures to reduce equipment noise during operation.
- Turn off engines when not in use to eliminate needless engine idle noise.
- Locate stationary equipment away from receiving properties to help reduce the noise through increased distance between source and receiver.
- Coordinate construction vehicle travel to reduce the number of passes by sensitive receivers.
- Schedule noisy activities to occur at the same time since additional sources of noise generally do not add a significant amount of noise.
- In the most severe case of construction noise, use temporary noise barriers or curtains to reduce noise from stationary equipment or activities located near sensitive receivers.

##### **Operations and Maintenance**

During EIS scoping, concerns were raised about the effects of the project's operational noise on nearby residents. It was suggested that trees should be planted for property owners to buffer noise impacts. Retaining existing trees and shrubs and planting new vegetation around residences in the project area would reduce noise annoyance psychologically by removing the noise source from view. However, to actually reduce noise levels, vegetation must completely block the line of sight between the receptor and the wind turbine. In addition, the vegetative buffer must be of sufficient depth to reduce noise. For example, dense woods with a depth of 100 feet would be required to reduce noise by 5 dBA. This kind of sound reduction from intervening landscaping would be expected to occur in the forested, residential establishment northwest of the project site, referred to as "Section 35." However, on the rangeland portions of the site, planting dense landscaping of sufficient depth to reduce noise would require a change in use of

adjacent agricultural and residential properties. Therefore, vegetative buffering to reduce noise is not considered to be a reasonable mitigation measure for those properties.

To ensure that noise levels in the project do not exceed regulatory thresholds during project operations, the following mitigation measure is recommended:

- Prior to construction, an acoustical analysis of the final turbine layout should be prepared for all wind turbines to be located within one mile of an existing residence prior to project construction. The analysis should be conducted using noise level data for the final turbine type, size, and layout and would demonstrate compliance with the WAC (173-60). If compliance is not demonstrated, turbines should be relocated or removed, to the extent necessary, so that the project meets applicable regulatory thresholds.

**Additional Mitigation Measures Proposed in the Addendum to the DEIS**

Because new impacts have not been identified based on the revised project layout, additional mitigation measures are not warranted.

## **PUBLIC SERVICES AND UTILITIES**

### **3.13.4 Mitigation Measures**

#### **Mitigation Measures Proposed by the Applicant**

##### **General**

The following mitigation measures would be implemented to reduce impacts to public services and utilities resulting from construction of the project:

- Tax revenues generated by the Applicant's project would mitigate potential impacts to public services and utilities. Should there be construction impacts requiring additional staffing levels during construction, or other impacts or costs related to services that would not be covered in a timely manner by tax revenues, the Applicant would enter into agreement(s) with the appropriate local governmental agency for prepayment of taxes for mitigation of the cost impacts. This would include fire, police, and county roads.
- If emergency fire protection services are required during project operations prior to having an agreement in place, local fire officials informed the Applicant that the costs of these services could be billed to the project on a cost-recovery basis. Therefore, if an emergency occurs, the responding district(s) would bill the Applicant for their actual costs of responding.
- The Applicant would provide all local police, fire, and emergency medical agencies with emergency response information for the project including employee contact information, procedures for rescue operations to the nacelles, and location of rescue basket.

##### **Law Enforcement**

- The Applicant would consult with the county regarding the impact on county law enforcement staffing. If additional staffing is required, the Applicant proposes to mitigate by prepaying taxes in a sufficient amount to provide adequate staffing levels during construction.
- As described in Chapter 2, Section 2.2.4, Construction Activities, a full time security plan would be implemented during project construction to reduce the potential need for increased police services to the project site. For example, temporary fencing with a locked gate would be installed for a roughly 1.5-acre area adjacent to the site trailers for the temporary storage of special equipment or materials. In addition, construction trailers would be equipped with outdoor lighting and motion-sensor lighting, and access to the project site would be controlled. These measures would help to significantly reduce the potential for incidents at the project site that would require a response by local law enforcement agencies.
- As described in Chapter 2, Section 2.2.5, Operations and Maintenance Activities, the plant operations group would prepare a detailed security plan to protect the security of the project and project personnel. Site visitors including vendor equipment personnel, maintenance contractors, material suppliers, and all other third parties

would require permission for access from authorized project staff prior to entrance. The plant operations manager, or designee, would grant access to critical areas of the site on an as-needed basis. Arrangements would be made with adjacent landowners that have legal ingress and egress easements across areas where project facilities would be located to ensure their continued access.

## **Fire Protection**

- Fire risk potential is constantly tracked and reported during the summer fire season by the DNR; fire danger levels would be actively posted at the construction job site during the high-risk season.
- The construction manager would be responsible for monitoring fire conditions in the project area by contacting Washington DNR and implementing necessary fire precautions. A Fire Protection and Prevention Plan would be developed and implemented, in coordination with the Kittitas County Fire Marshall and other appropriate agencies. In addition, all onsite construction employees would be responsible for contributing to fire prevention through the following programs:
  - Construction Written Safety Program;
  - Construction Onsite Fire Suppression and Prevention; and
  - Construction Offsite Fire Suppression Support.
- All turbines and towers and the substations would be built with engineered lightning protection systems and the footprint areas around these facilities would be graveled with no vegetation. In the event of a nacelle fire, project operations staff and fire personnel would not attempt to put it out, but would prevent the fire from spreading to adjacent lands. This can be achieved either by use of fire suppressant material or a small, controlled burn around the base of the tower (Sagebrush Power Partners LLC 2003a, Section 5.3.3.2.2).
- All onsite operations employees would be responsible for contributing to ongoing fire prevention in the project area through the following programs:
  - Operational Safety Program;
  - Operations Written Safety Program;
  - Emergency Action Plan;
  - Fire Prevention Plan.
- Onsite emergency plans would be prepared for the project in case of a major natural disaster or accident relating to or affecting the project. The plans would describe the emergency response procedures to be implemented during various emergency situations that may affect the project or surrounding community or environment.
- The Applicant would also be responsible for the following fire protection and prevention measures:
  - Contract with fire district(s) for protection services during construction;
  - Provide special training to fire district personnel on how to respond to fires related to wind turbines, and to EMS personnel in how to use a rescue basket that would be kept at the operations and maintenance facility for the purpose of removing injured employees from the towers;
  - Provide detailed maps that show all access roads to the project;

- Provide keys to a master lock system that would enable emergency personnel to unlock gates that would otherwise limit access to the project;
- Use spark arresters on all power equipment, e.g., cutting torches and cutting tools;
- Inform workers at the project site of emergency contact phone numbers and train them in emergency response procedures;
- Carry fire extinguishers in all maintenance vehicles; and
- Coordinate with DNR when the fire danger is high.

The Applicant's proposed Fire and Explosion Risk Mitigation Plan is presented in Table 3.4-2 in Section 3.4, Health and Safety.

### **Emergency Medical Services**

- Onsite emergency plans would be prepared to protect the public health, safety, and environment on and off the project site in the case of a major natural disaster or industrial accident relating to or affecting the project. The construction specifications would require that the contractors prepare and implement a Construction Health and Safety Program that includes an emergency plan. The Construction Health and Safety Program would include the following provisions:
  - Construction Injury and Illness Prevention Plan;
  - Construction Written Safety Program;
  - Construction Personnel Protective Devices;
  - Construction Onsite Fire Suppression Prevention; and
  - Construction Offsite Fire Suppression Support.
- In the event that operations personnel are seriously injured and require evacuation from a remote location within the project area, the Applicant would make arrangements with the Kittitas Valley Community Hospital for helicopter transportation service.

### **Schools**

Pursuant to the terms of the project lease agreement signed between the Applicant and DNR in July 2003, approximately \$5.6 million dollars would be generated by the project and diverted into a state trust fund for school construction over the life of the project (Daily Journal of Commerce 2003). Therefore, project-generated funding could be used to help offset the capacity issues being faced by the local school districts.

### **Water Supply**

A licensed well contractor, in compliance with the requirements and standards of Chapter 173-160 WAC (Department of Ecology Minimum Standards for Construction and Maintenance of Wells) would install the domestic water well.

### **Wastewater**

The Applicant would coordinate with Kittitas County and comply with the county's septic tank and subsurface disposal field design, installation, and maintenance

requirements for systems with designed flows of less than 3,500 gallons/day pursuant to Kittitas County Code Title 13.04.

### **Communication Services**

- Once the specific location and configuration of the turbines is identified on paper, the Applicant proposes to conduct final field measurement test surveys of communication microwave paths. If the results of these final surveys identify that the proposed turbines would interfere with or obstruct communication microwave paths, the Applicant would adjust the tower location, accordingly, to avoid line-of-sight interference.
- The Applicant plans baseline field studies to more precisely determine the existing quality of television reception in the Swauk Prairie prior to construction of the project. After the project is built, the Applicant plans follow-up field studies to determine if the quality of television reception could be degraded by project operations. In the event that the project creates significant television reception problems for residents in this area, the Applicant would consult with affected residents to develop an appropriate solution.

### **Additional Recommended Mitigation Measures**

#### **Fire Protection**

Additional mitigation measures recommended by the County Fire Marshall (Kittitas County 2003) but not specified by the Applicant include the following:

- Comply with equipment rules and regulations required by DNR for work conducted in wildland/forested lands (e.g., fire extinguishers and shovels would be required on each piece of equipment);
- Limit parking areas for vehicles;
- Provide garbage containers; and
- Implement restrictions on burning.

In addition, the following mitigation measure is recommended to further reduce the potential for wildland fires during project construction:

- Implement the terms of any negotiated agreements between Fire District No. 1 and the Applicant regarding improvements to the southern portion of Hayward Hill Road to ensure adequate fire protection to the project area. If Hayward Hill Road were upgraded to meet fire department standards, it is estimated that Fire District No. 1 could respond to a project area fire in approximately seven to eight minutes. If the southern portion of Hayward Hill Road is not improved, Fire District No. 1 trucks responding to an emergency fire in the project area would need to be re-routed from Thorp to US 97. Under this scenario, estimated response times to the project area would be approximately three times longer (Evans, pers. comm., 2003).

## **Communication Services**

If the Applicant's follow-up studies determine that the project creates significant television reception problems in the area, one of the following mitigation measures to minimize television interference impacts should be implemented by the Applicant:

- Improve the receiving antenna system;
- Install a remote antenna;
- Install an antenna for TV stations less vulnerable to interference;
- Connect affected residents to an existing cable system; or
- Connect affected residents to an existing satellite system.

To reduce the impact of potential cell phone degradation in the project area, the Applicant should implement the following mitigation measures:

- The Applicant should conduct a field study before and after project construction to determine if the quality of cell phone service in the project area is degraded by project operations.
- If cell phone degradation is identified as a result of project operations, the Applicant should be responsible for implementing appropriate mitigation to minimize impacts. This could include developing and funding a program under which the cell phone service provider would establish new antenna locations to ensure continued high-quality reception and transmission. These locations could include the wind turbine generator towers or other locations as determined by the cell phone service provider.

Regarding the potential impact of radio interference in the project area, the Applicant should implement the following mitigation measures:

- Prior to construction, but after the final turbine make, model, and size and site configuration have been selected, the Applicant should provide data regarding the frequency spectrum of electrical noise generated by the wind turbine generators at locations surrounding the generator similar to those made for audible noise emissions. The Applicant should then compare this frequency spectrum with frequency spectrums from existing, operating radio communication devices in the project area to identify if potential harmful interference could occur.
- If radio interference is identified as a potential impact, mitigation could be accomplished by reducing the amount of noise generated or by screening the electrical equipment to prevent radiation of unwanted frequencies.

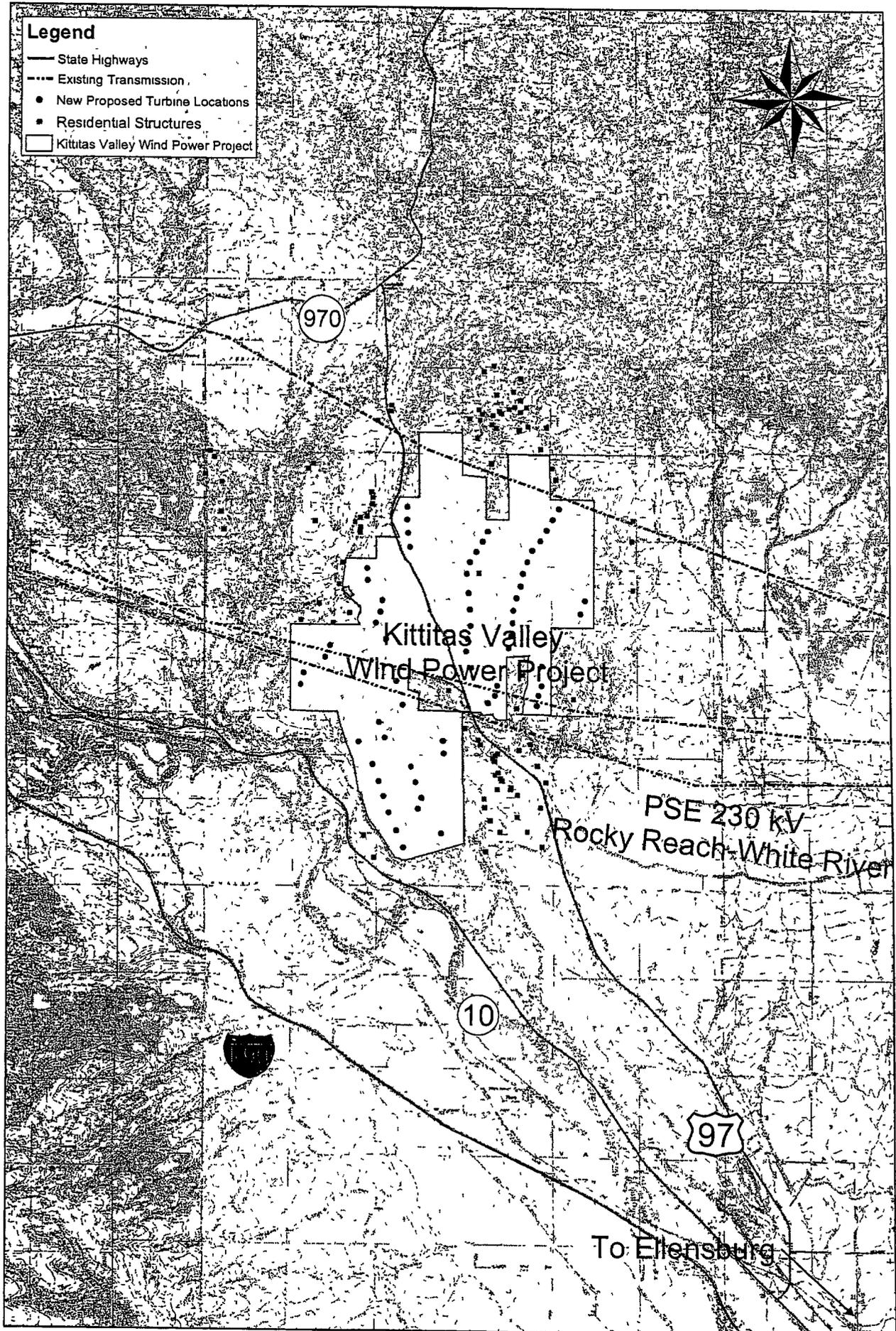
### **Additional Mitigation Measures Proposed in the Addendum to the DEIS**

Because new impacts have not been identified based on the revised project layout, additional mitigation measures are not warranted.

**EXHIBIT E**

**PROJECT VICINITY MAP WITH RESIDENCE  
LOCATIONS**

**DRAFT**



**Legend**

- State Highways
- - - Existing Transmission
- New Proposed Turbine Locations
- Residential Structures
- Kittitas Valley Wind Power Project

Kittitas Valley  
Wind Power Project

PSE 230 kV  
Rocky Reach-White River

To Ellensburg

**EXHIBIT F**

**DECOMMISSIONING COST ESTIMATE**

**DRAFT**

**EXHIBIT F  
DRAFT ONLY**

**Kittitas Valley Wind Power Project**

<b>Removal Scope Item</b>	<b>Approx Quantity</b>	<b>2006 COST ESTIMATE</b>	
1 Cut & Drop Turbines, towers, nacelle, blades, and machinery	Up to 64 WTGs	\$	1,235,443
2 Disposal of unsalvageable WTG equipment	Up to 64 WTGs	\$	32,000
3 Remove WTG foundations to 3 feet	5 acres	\$	770,000
4 Remove buried cable miles:	10	\$	71,923
5 Remove overhead collector & feeder cable miles:	1	\$	2,143
6 Remove overhead collector & feeder cable poles:	20	\$	3,846
7 Remove O&M building & foundation to 3 ft.:	5,000 sq.ft	\$	45,000
8 Remove Substations	2	\$	60,000
9 Remove MET towers	5	\$	50,000
<b>Removal Total Estimate</b>		\$	<b>2,270,355</b>
<b>Restoration Scope Item</b>			
1 Restore WTG foundation & pad area	5 acres	\$	10,000
2 Restore buried cable area (10' wide)	15 acres	\$	30,000
3 Restore O&M area	2 acres	\$	4,000
4 Restore substation area	8 acres	\$	16,000
5 Restore parking area	2 acres	\$	5,000
6 Regrade & ReSeed Road miles:	18	\$	158,400
7 ReSeeding requirements:	Mixed native grass	\$	43,548
<b>Restoration Total Estimate</b>		\$	<b>266,948</b>
<b>Decommissioning Grand TOTAL</b>		\$	<b>2,537,303</b>

**EXHIBIT G**

**FIRE PROTECTION SERVICES AGREEMENT**

**ENFT**

## FIRE SERVICES AGREEMENT

This FIRE SERVICES AGREEMENT (the "Agreement") dated as of SEPTEMBER 15, 2004, (the "Effective Date") is by and between SAGEBRUSH POWER PARTNERS, LLC, a Delaware limited liability company ("Company"), having an office at 222 East Fourth Ave., Ellensburg, WA 98926 and KITTITAS COUNTY FIRE PROTECTION DISTRICT 1, a municipal corporation ("District"), whose address is P.O. Box 34, THORP, WA 98946. The Company and the District are sometimes referred to herein individually as a "Party" and jointly as "Parties".

### RECITALS

- A. The Company is developing the Kittitas Valley Wind Power Project (the "Project"), a wind-powered, electric generating facility in Kittitas County, Washington.
- B. The Project has a planned nameplate capacity of up to 246 MW, currently expected to be comprised of up to approximately one hundred twenty-one (121) wind turbine generators (individually a "WTG" and collectively the "WTGs").
- C. The District is organized and equipped to provide fire protection services within and in the vicinity of the District's boundaries, and the Company desires that the District provide such services to the Project located within the District's jurisdiction.
- D. In connection therewith, the Company will provide certain funding to the District to support the purchase of certain Fire Equipment (as defined below) to facilitate the District's ability to provide the fire protection services to the Project on the terms set forth herein.
- E. Accordingly, the Company desires to retain the District to perform fire protection services for Company and the District has agreed to do so upon the terms and conditions set forth below.
- F. The duty of the District to provide fire protection under the provisions of this Agreement is a duty owed to the public generally and by entering into this Agreement, the District does not incur a special duty to the Company.

### AGREEMENT

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties to this Agreement agree as follows:

with such use without mark-up. The Company shall pay such invoiced amounts within thirty (30) days of the receipt of such invoice. In the event the Company does not pay the invoiced amounts or the Fire Protection Services Fee when due, such overdue amounts shall accrue interest at a rate equal to ten percent (10%) per annum from the date such amounts were due until the date of payment. . Air support services are not included in the Fire Protection Services, and if required, such services shall be charged to the Company at cost.

3.3 Disputed Payments. If the Company disputes any amounts included in any invoice provided to the Company by the District, the Company shall give written notice to the District of each such disputed amount and shall pay the full amount of such invoice that is not in dispute within the time periods set forth herein for such payment. The Company and the District shall endeavor diligently and in good faith to resolve any issue with respect to the amount remaining in dispute within thirty (30) days after the date of the District's receipt of the notice of disputed amount. If agreement is not reached within such thirty (30) day period, the Parties will continue to try to resolve such dispute; provided, however, that either Party may instead submit the dispute to resolution in accordance with this Agreement.

3.4 On-Site Water Trucks. For the period commencing on the date the Company commences construction of the Project on an unlimited basis and ending on the date that construction of the Project is complete, the Company shall maintain two (2) dedicated water trucks to remain full at all times on the Project site for fire safety purposes and the Fire Safety Plan developed in accordance with Section 2.2 shall identify the number and location of such water trucks.

## ARTICLE IV

### TERM; TERMINATION

4.1 Term of Agreement. This Agreement shall become effective upon the Effective Date and, unless earlier terminated in accordance with the terms hereof, shall continue thereafter until the earlier to occur of (i) the date that is twenty-five (25) years following the Effective Date or (ii) the date on which the Project has been decommissioned and is no longer in service.

4.2 Termination. The Company shall have the right to terminate this Agreement by providing the District sixty (60) days prior written notice of its intent to terminate. Subject to Section 5.2, the District shall have the right to terminate this Agreement in the event the Company fails to make any payment to the District when due and such failure continues for forty-five (45) days after receipt of notice from the District to cure such failure. This Agreement shall also be terminated by the mutual written agreement of the Parties.

## ARTICLE V

### ASSIGNMENT; FINANCING PARTIES

5.1 Successors and Assigns. This Agreement shall be binding upon and shall inure to the benefit of the successors and permitted assigns of the District and the Company. This Agreement or any right or obligation contained herein may be assigned (i) by the Company, to the Financing Parties as collateral security (and in connection therewith, the District shall execute and deliver to the Financing Parties a consent agreement in a form reasonably requested by the Financing Parties), or (ii) by the Company to a purchaser of the Project or the ownership or membership interests in the Company. Except as expressly provided in this Section 5.1, no Party may assign or transfer this Agreement, in whole or in part. In connection with any permitted assignment under this Section 5.1, the District agrees to execute one or more consents to assignment with terms and conditions as may be reasonably required by such assignees and the Company.

5.2 Financing Party Cure Rights. Provided that the District has received prior written notice that a Financing Party is entitled to notice under this Section 5.2, including an accurate address for the Financing Party, the District's right to exercise the option to terminate this Agreement pursuant to Section 4.2 is subject to the District's first delivering to the Financing Parties, simultaneously with delivery thereof to the Company, notice of the Company's failure to cure the payment default and the District's intent to terminate as a result thereof. Each Financing Party shall have the option to cure such the Company default within thirty (30) calendar days after receipt of such notice or to cause the Financing Parties' designee to assume this Agreement. If the Financing Parties desire to cause their designee to assume this Agreement, they shall (i) provide written notice to that effect; and (ii) cure the default within ninety (90) calendar days after receipt of the District's notice to the Financing Parties of the District's intent to terminate. In such case, the District's right to terminate this Agreement for such default shall be of no further force and effect upon the cure by the Financing Parties of such default within ninety (90) days from the date of receipt by the Financing Parties of the District's notice of the District's intent to terminate this Agreement.

## ARTICLE VI

### RELATIONSHIP OF THE PARTIES

6.1 Relationship of the Parties. It is not the intention of the Parties to create, and this Agreement shall not be construed as creating, a partnership, association, joint venture or trust, as imposing a trust or partnership covenant, obligation or liability, on or with regard to any one or more of the Parties, or as rendering the Parties liable as partners or trustees. Neither Party shall be under the control of, or be deemed to control, the other Party. Neither Party as such shall be the agent of, or have a right or power to bind, the other Party.

## ARTICLE VII

### INDEMNIFICATION

7.1 Company Indemnity. Except as provided in Section 7.3 and except for claims arising proximately from the negligence or other wrongful conduct of the District or any of its Commissioners, agents, members, directors, officers and employees (the "District Indemnified Persons"), the Company hereby agrees to protect, indemnify and hold the District Indemnified Persons free and harmless from and against any and all claims, demands, causes of action, suits or other proceedings (including all costs in connection therewith and in connection with the defense thereof, including reasonable attorney's fees), liabilities and losses, of every kind and character whatsoever, including third party claims against any District Indemnified Person, on account of bodily injuries, death, damage to property, or damages of any kind whatsoever (collectively, the "Claims"), provided such injury, liability, loss or damage is incident to, or arises out of, the presence or the activities of the Company at the Project.

7.2 District Indemnity. Except as provided in Section 7.3 and except for claims arising proximately from the negligence or other wrongful conduct of the Company or its affiliates, or any of its or their respective agents, shareholders, members, directors, officers and employees (the "Company Indemnified Persons"), the District hereby agrees to protect, indemnify and hold the Company Indemnified Persons free and harmless from and against any and all claims, demands, causes of action, suits or other proceedings (including all costs in connection therewith and in connection with the defense thereof, including reasonable attorney's fees), liabilities and losses arising out of third party claims against any the Company Indemnified Person, on account of bodily injuries, death, damage to property, or damages of any kind whatsoever, provided such injury, liability, loss or damage is incident to, or arises out of, the presence or the activities of the District at the Project or the District's (or its subcontractor's) performance hereunder.

7.3 Scope of Indemnity. The indemnity obligation of the District and the Company provided for by Sections 7.1 and 7.2 shall not extend to claims by either the District or the Company, or either Party's agents, shareholders, members, directors, officers and employees (or anyone claiming by, through or under such Persons), against the other for breach of this Agreement. Furthermore, the indemnification provided for in

Sections 7.1 and 7.2 shall not extend to or cover claims by either Party's employees, contractors or agents which arise in connection with service taken or provided under this Agreement and are covered by any worker's compensation law, and each of the Parties shall be solely responsible for, and shall bear all costs arising from or related to, such worker compensation claims of its own employees, contractors or agents.

7.4 Exclusion of Consequential Damages. Anything herein to the contrary notwithstanding, neither Party shall be liable hereunder for lost revenue or profits or for indirect, incidental, or other consequential damages, provided that this Section 7.4 shall not limit a Party's indemnification obligation in respect of a third party claim within the scope of Section 7.1 or 7.2.

7.5 Benefits. This Agreement is entered into for the benefit of the Parties to this Agreement only and shall confer no benefits, direct or implied, on any third persons, except for the District Indemnified Persons and the Company Indemnified Persons identified in Sections 7.1 and 7.2, respectively.

7.6 Services Limitation. The District makes no guarantee or assurance of providing responses within any specific period of time or of the number and types of equipment and number of personnel that will respond at any particular emergency. The duty of the District to provide fire protection and emergency medical services under the provisions of this Agreement is a duty owed to the public generally and by entering into this Agreement, the District does not incur a special duty to the Company.

## ARTICLE VIII

### NOTICES

8.1 Notices. Unless otherwise provided herein, any notice, demand or request provided for in this Agreement shall be in writing and shall be deemed properly served, given, or made if delivered in person or sent by registered or certified mail, postage prepaid, or sent by telecopy (with telecopy receipt confirmed) addressed to the Party being notified as listed below at the then current address:

If to the Company:

Sage Brush Power Partners, LLC  
c/o Zilkha Renewable Energy, LLC  
222 East Fourth Ave.  
Ellensburg, WA 98926  
Attn: Andrew Young  
Telephone: 503-222-9400  
Facsimile: 503-222-9404  
Email address: ayoung@zilkha.com

With a copy to:

Zilkha Renewable Energy, LLC  
1001 McKinney  
Suite 1740  
Houston, TX 77002  
Attn: R.A. Winsor  
Telephone: 713-265-0244  
Facsimile: 713-571-6659  
Email address: [rwinsor@zilkha.com](mailto:rwinsor@zilkha.com)

If to the District:

Kittitas County Fire Protection District 1

PO Box 34  
THORP, WA 98946

Attn: DS EVANS  
Telephone: 1-5099642435  
Facsimile: 1-509964-2022  
Email address: kcfd1@elltel.net

Addresses shall be kept current by written notice made in the manner provided above for any written notice.

## ARTICLE IX

### MISCELLANEOUS

9.1 Governing Law, Jurisdiction and Venue. This Agreement shall be governed by and construed according to the laws of the State of Washington, excluding any conflict of laws rules that would result in the application of the laws of another jurisdiction.

9.2 Amendments and Integration. This Agreement constitutes the complete and entire agreement between the Parties hereto with respect to the subject matter hereof. No prior statement or agreement, oral or written, shall vary or modify the written terms hereof. This Agreement may be amended only by a written document signed by both Parties.

9.3 Disputes. The Parties agree to attempt informally to resolve all disputes arising hereunder, or out of or in relation to the interpretation or performance of this Agreement, through meetings of representatives of the Parties; provided, however, that any such dispute which cannot be amicably resolved between the Parties shall be submitted to binding arbitration upon the written notice of either Party delivered to the

other of such Party's intention to arbitrate and shall otherwise conform to the requirements set forth below. The alternative dispute resolution procedures that shall apply under this Agreement are as follows:

(a) Each notification of intent to arbitrate shall be made in good faith and not for the purpose of delay or harassment. The notification shall state the nature of the dispute, the facts relied upon, the specific provisions of this Agreement and Applicable Law, which support the notifying Party's position, and the amount claimed and the remedy sought by such Party. Within thirty (30) days after receipt thereof the Parties shall meet, by telephone or otherwise, in an attempt to settle the dispute. During such thirty-day period the Party receiving the notification may, but shall not be required to, submit a written response.

(b) If the Parties cannot informally settle the dispute within thirty (30) days after the initial meeting specified in Subsection (a) of this section or within such other period of time as the Parties agree to in writing, either Party may give notice to the other Party within fourteen (14) business days after the expiration of the thirty-day period, or otherwise agreed upon period, requiring that the dispute be referred either to expert resolution, as provided in Subsection (c) of this section, or to arbitration, as provided in Subsections (d) through (f) of this section. Disputes involving only technical matters and not requiring legal interpretations, including interpretation hereof, shall be submitted to expert resolution in accordance with Subsection (c) of this section. Disputes involving legal interpretations, including disputes involving interpretation of this Agreement, shall be submitted to arbitration.

(c) Expert resolution shall be effected by a single expert agreed upon, in writing, by the Parties. If the Parties fail to agree upon a single expert within thirty (30) days after the notice requesting expert resolution is received by one Party from the other Party, or after it is determined that the dispute shall be submitted to expert resolution, whichever is later, a single expert shall be nominated in writing by the American Arbitration Association upon the request of either Party. Such nominee shall be expert in the subject matter of the dispute and shall not be an employee of either Party or have had any association with either Party, but may be an employee of the American Arbitration Association. Within thirty (30) days after the appointment of an expert, such expert shall accept written submissions regarding the dispute from the Parties. A copy of such submissions shall be provided concurrently to the other Party by the submitting Party. The expert shall resolve the matter and provide, in writing, the reasons for such resolution within sixty (60) days of appointment. The expert shall be deemed to be acting as an expert and not as an arbitrator, and such expert's determination shall be final and binding on the Parties. The costs of any expert resolution shall be borne equally by the Parties.

(d) Arbitration as set forth herein shall be effected by a panel of three arbitrators in accordance with the provisions of this section and in accordance with the Commercial Arbitration Rules of the American Arbitration Association; provided, however, that notwithstanding any provisions of such rules, the Parties shall have the right to take depositions and obtain discovery regarding the subject matter of the arbitration in accordance with the Federal Rules of Evidence. Judgment upon the award

rendered by the arbitrators may be entered in any court having jurisdiction. The arbitrators shall determine all questions of fact and law relating to any controversy, claim or dispute hereunder, including whether or not any such controversy, claim or dispute is subject to the arbitration provisions contained herein.

(e) Any Party desiring arbitration shall serve on the other Party and the Seattle Office of the American Arbitration Association, in accordance with the Commercial Arbitration Rules, its Notice of Intent to Arbitrate ("Notice of Intent"). The Notice of Intent shall be filed in writing concurrently with the American Arbitration Association, and shall be accompanied by the name of an arbitrator suggested by the Party serving the Notice of Intent. The Party served with the notice shall advise the other Party in writing of the name of its suggested arbitrator within ten (10) days after receipt of such notice. Within twenty (20) calendar days after the Notice of Intent has been made, the two arbitrators shall choose a third arbitrator who shall act as chairperson of the arbitral proceedings. If the two arbitrators chosen by the Parties do not agree upon a third arbitrator within twenty (20) calendar days after the filing of the Notice of Intent, then, upon the application of either Party, the third arbitrator shall be selected in accordance with the Commercial Arbitration Rules. The arbitration proceedings provided hereunder are hereby declared to be self-executing, and it shall not be necessary to petition a court to compel arbitration. All arbitration proceedings shall be held in Seattle, Washington. The Parties shall bear their own costs associated with any required travel to and from such location. The arbitrators shall make a determination within three (3) months after the dispute is submitted for arbitration.

(f) Notwithstanding the existence of a dispute and until the expert or arbitrator, as applicable, renders a decision, each Party shall be obligated to fulfill its obligations and continue its performance in accordance with the terms hereof.

9.4 Severability. In the event that any clause, provision or remedy in this Agreement shall, for any reason, be deemed invalid or unenforceable, the remaining clauses, provisions and remedies otherwise available at law or in equity shall not be affected, impaired or invalidated and shall remain in full force and effect. With respect to any provision held invalid or unenforceable, the Parties shall amend this Agreement as necessary to give effect to the Parties' original intent as closely as possible.

9.5 Cooperation. Provided that the Company is in compliance with the terms of this Agreement and with the Fire Safety Plan established under Section 2.2, the District shall fully support and cooperate with the Company's efforts to obtain from any governmental authority or any other Person or entity any environmental impact review, permit entitlement, approval, authorization or other rights necessary or convenient in connection with the Company's development, construction and operation of the Project, and the District shall, without demanding additional consideration therefor, (a) execute, and, if appropriate, cause to be acknowledged, any map, application, document or instrument that is reasonably requested by the Company in connection herewith or therewith, (b) return the same (as executed) to the Company within ten (10) days after the District's receipt thereof, and (c) reasonably cooperate with the Company's efforts to obtain all such permits, approvals, authorizations or other rights.

9.6 Interpretation. Unless otherwise required by the context in which any term appears: (a) capitalized terms used in this Agreement shall have the meanings specified in Article I; (b) the singular shall include the plural and vice versa; (c) references to "Articles," "Sections," "Schedules," "Preamble," or "Exhibits" (if any) shall be to articles, sections, schedules, preamble, or exhibits of or to this Agreement; (d) all references to a particular entity shall include a reference to such entity's successors and permitted assigns; (e) the words "herein," "hereof" and "hereunder" shall refer to this Agreement as a whole and not to any particular section or subsection of this Agreement; (f) the words "without limitation" shall be deemed to follow any variation of the word "include"; (g) all accounting terms not specifically defined herein shall be construed in accordance with generally accepted accounting principles in the United States of America, consistently applied; (h) references to this Agreement shall include a reference to all appendices, annexes, schedules and exhibits hereto, as the same may be amended, modified, supplemented or replaced, when in writing, and mutually agreed to by the Parties, from time to time, provided, however, that if the terms of an appendix, annex, exhibit or schedule is in conflict with the terms of the body of this Agreement, the terms of the body of this Agreement shall prevail; (i) references to any agreement, document or instrument shall be to such agreement, document or instrument as the same may be amended, modified, supplemented or replaced, when in writing and mutually agreed to by the Parties, from time to time; (j) the masculine shall include the feminine and neuter and vice versa; and (k) the section headings are inserted for convenience of reference only and shall in no way affect, modify, define, or be used in construing the text of this Agreement. The Parties collectively have prepared this Agreement, and none of the provisions hereof shall be construed against one Party on the ground that such Party is the author of this Agreement or any part hereof.

9.7 Waiver. No delay or omission by the Parties hereto in exercising any right or remedy provided for herein shall constitute a waiver of such right or remedy nor shall it be construed as a bar to or waiver of any such right or remedy on any future occasion.

9.8 Further Assurances. The District and the Company agree to provide such information, execute and deliver any instruments and documents and to take such other actions as may be necessary or reasonably requested by the other Party which are not inconsistent with the provisions of this Agreement and which do not involve the assumptions of obligations other than those provided for in this Agreement, in order to give full effect to this Agreement and to carry out the intent of this Agreement.

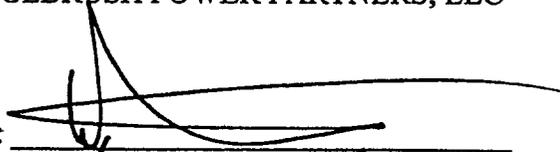
9.9 Counterparts. This Agreement may be executed by the Parties in one or more counterparts, all of which taken together, shall constitute one and the same instrument.

IN WITNESS WHEREOF, the Parties have caused their authorized representatives to execute this Fire Services Agreement as of the date first written above.

KITTITAS COUNTY FIRE PROTECTION DISTRICT 1

By:   
Name: DJ EVANS  
Title: FIRE CHIEF  
Date: 9/15/04

SAGEBRUSH POWER PARTNERS, LLC

By:   
Name: Michael Kelly  
Title: Authorized Representative  
Date: 9-20-04

**Kittitas County Fire District 1**

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From: "General Fire.com" <gfabel@generalfire.com>  
To: "DJ Evans" <kcfd1@elitel.net>  
Sent: Wednesday, September 15, 2004 2:01 PM  
Attach: kitt1xbodynew.doc  
Subject: From Bob Bell General Fire

Hi Chief, I have revisited the X Body prices and as I have it an estimate only should be as follows

Chassis: \$32k  
Body: \$94  
Total: \$126k plus sales tax.

Attached are the changes as per our conversation. Also remember this is a estimate in the ruff if we get any closer to a bid due I will run for a total reprice as of the latest prices on our networks. I can do this but it doesn't take more than 30 days and the prices can dance once again. Sorry for spacing this out but I did after I waited for a price from Ford I spaced the finished job back to you.

Thanks, Bob Bell  
[gfabel@generalfire.com](mailto:gfabel@generalfire.com)

$  \begin{array}{r}  32,000 \\  + 94,000 \\  \hline  126,000 \\  \times .075 \\  \hline  9,450 \\  \text{TAX} -  \end{array}  $	$  \begin{array}{r}  126,000 \\  + 9,450 \\  \hline  135,450 \text{ -TOTAL}  \end{array}  $
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<b>Section 1</b>	<b>Fire Pump</b>
<b>Section 2</b>	<b>Plumbing</b>
<b>Section 3</b>	<b>Gated: Suction Inlets, Discharges, &amp; Pre-Connects.</b>
<b>Section 4</b>	<b>Booster Tank Valves, Piping and Accessories</b>
<b>Section 5</b>	<b>Booster Tank And Lower Body Compartments</b>
<b>Section 6</b>	<b>Apparatus Body &amp; Components</b>
<b>Section 7</b>	<b>Upper Apparatus Body Compartments</b>
<b>Section 8</b>	<b>Aluminum Tread Plate</b>
<b>Section 9</b>	<b>Apparatus Body Handrails and Grab Rails</b>
<b>Section 12</b>	<b>Hard Suction.</b>
<b>Section 14</b>	<b>Electrical Equipment &amp; Battery System</b>
<b>Section 15</b>	<b>Fuel System</b>
<b>Section 16</b>	<b>Emergency Signal &amp; Lighting</b>
<b>Section 18</b>	<b>Painting, Printing, Decorating, Lettering, &amp; Signs.</b>
<b>Section 20</b>	<b>Chassis Modification &amp; Miscellaneous:</b>
<b>Section 21</b>	<b>Loose Equipment And Services Supplied by Body Builder.</b>
<b>Section D</b>	<b>Ford F-550 Commercial Cab and Chassis.</b>

### **Section 1: Fire Pump**

**1.01**

The fire pump shall be installed at the rear of the apparatus body. The fire pump control console shall be positioned to allow easy operation from the street level.

YES/NO

**1.08**

Pump Engine to include: Oil pressure lubrication system with an automotive style oil filter. Oil fill with hose drain line installed for ease of service and to accommodate oil changes system to also have dip stick oil level style check. Engine starter to be 12 volt and include manual recoil. Pump shall be powered by its own engine. Engine shall have enough horsepower to meet pumping capacity rating as set forth in the below specifications. Pump and engine shall be mounted on the rear of the apparatus body. The pump and pump operations shall be so design to allow and pump controls from the ground level.

YES/NO

**1.10**

The Waterous E-500 pump will include a pump engine control panel mounted on the rear of the apparatus positioned for easy street level operations. The pump engine control panel will include the following features: Intake, and discharge gauges, tachometer, with pump hour meter, oil and temperature overheat indicator, glow plug indicator, water in fuel indicator, engine start/stop, throttle control and pump panel light and on off switch.

YES/NO

Class One Water Level Indicator

HyPro 1600 Foam controls and instruction plate

**1.11**

YES/NO

**Waterous hand pump priming system.**

YES/NO

1.20

Make Waterous Model: E 511A Series Pump. Pump engine shall be a Briggs & Stratton Vanguard in-line 3-cylinder water-cooled diesel-powered engine Model DM 950 D. The diesel engine shall delivers 26.5 hp @ 3600 RPM, 58.1 cubic inch. The pump engine shall include a 12 volt starter, and a 12-14 volt, 40 amp alternator. Fire pump will have a minimum suction inlet of 3" and a minimum discharge of 2" and meet the minimum rated capacity and pressures listed below.

100 GPM at 190 PSI

300 GPM at 50 PSI

YES/NO

1.23

The fire pump engine shall be diesel.

YES/NO

1.51

The stated volumes and pressures are to be delivered while using two (2) lengths of 2-1/2" hard suction hose and operating from a 10' suction lift.

YES/NO

1.53

The pump engine fuel supply line must run into the main chassis fuel tank utilizing a separate fuel line complete with automatic electrical fuel pump.

YES/NO

1.74

Stuffing boxes shall be equipped with self-adjusting, maintenance free mechanical shaft seals. Packing is not required and shall not be used.

YES/NO

1.76

Air Cleaner: Dual element, heavy duty paper cartridge with "oil foam" pre-cleaner.

**Section 2: Plumbing**

YES/NO

2.20

The pump must be plumbed with a pump by-pass line. Valve is to be installed on the discharge side of the pump to circulate water back into the tank for cooling the pump. The by-pass line must have a automatic check valve to eliminate pump from cavitation while in draft mode. This pump by-pass line shall also include a ¼ turn shut-off valve.

YES/NO

2.24

All valves shall be labeled as to its use and/or operation.

YES/NO

2.26

The pump shall be mounted in such a fashion as to accommodate ease of removal and with no obstructions.

YES/NO

2.27

Drains shall be installed to permit pump and all apparatus body lines to be drained completely.

**Section 3: Gated: Suction Inlets, Discharges, & Preconnects.**

3.00

YES/NO

**Akron Swing-Out Style Ball Valves:** All quarter turn valves shall be brass and be full flow swing out type with positive self lock. Each valve shall be plumbed with galvanized iron pipe or high pressure hose with stainless steel fitting. All suction intakes and discharge fittings to be chrome plated with national standard threads. All lines to have Victaulic couplings or hose installed where flex may occur to prevent cracking of the piping. All valves 1" or larger shall be Akron Tork-Loc valves. All plumbing must be secured to the vehicle utilizing heavy duty pipe clamps.

3.02

YES/NO

**One (1) 3" Akron tank to pump valve** will be plumbed and valved to allow the operator to take draft from an open source of water while discharging. This valve shall have a the valve controlled at the rear of the apparatus body for ease of operation from ground level. Waterous 511

3.10

YES/NO

**Gated suction inlet** shall have a 2 1/2" Akron valve control at the rear of apparatus for the ease of operator to control from the street level. This suction line shall be valved to allow the operator to take draft from an open source of water while discharging. This overboard inlet shall have 2 1/2" male NST threads and an Akron TS style control handle.

3.11

YES/NO

**One (1) 2 1/2" chrome cap w/chain** attached to the 2 1/2" gated rear inlet.

3.20

YES/NO

**Rear Mounted Preconnects And Hosebed.**

3.21

YES/NO

**There shall be two (2) 1 1/2" rear preconnected discharges** installed under the rear hosebed area. The rear preconnects shall have a Akron TS style discharge handle and 1 1/2" NST male discharge.

3.24

YES/NO

**Two (2) aluminum hose storage rack** shall be mounted inside the left side of apparatus body side compartments. Hose bed rack shall be constructed of aluminum and open to the rear for the a preconnected single stack 1 1/2" fire hose.

3.25

YES/NO

**Hosebed compartment** shall be provided on the apparatus. The hosebed compartment shall be provided with 6063T6 aluminum extrusions properly spaced for adequate ventilation of the fire hose listed above. The flooring shall be removable for cleaning and servicing.

3.25A

YES/NO

**One rear lift out tail gate** at the rear of the hosebed shall be provided. The tailgate will

be easily removable and have a handrail installed on the upper rear area to assist in removal. This tail gate will enclose the center hosebed storage to allow storage of hose and or large equipment in the rear center of the apparatus body.

3.26 YES/NO

300 ft. of 1 ½" double jacket fire hose coupled in 50 ft. lengths shall be included and installed in the preconnected racks listed above.

3.27 YES/NO

Two (2) Make: Akron Model: 1715 1 ½" NST nozzle shall be included.

3.28 YES/NO

One (1) Make: Akron Model: 766 1 ½" NST Foam Tube shall be included to fit the above listed nozzles

3.51 YES/NO

Front Mounted Remote Control Monitor

3.53 YES/NO

There shall be a remote controlled turret monitor for use in wildland fire fighting operations. The turret monitor shall be constructed of durable lightweight aluminum. The turret monitor shall have a minimum flow efficient 2" vaned waterway with stainless steel worm gears fully enclosed for protection from the elements. The turret monitor shall have a vertical travel of 150 degrees, (90 degrees above to 60 degrees below horizontal). The turret monitor shall have double ball races with stainless steel bearings and an electric gear motors totally enclosed and sealed. There shall be manual override in the event of power failure with an operating voltage of 12 VDC with maximum draw of 4 amps. A 2" NPT female inlet with a 1 1/2" NST male outlet. The turret monitor shall finish painted red acrylic urethane enamel. Make: Elkhart Model: 8494101 Sidewinder

3.54 YES/NO

There shall be a 2" electric remote operated valve to control the water supply to the remote controlled wildland monitor. The remote control valve switch shall be mounted in the chassis cab. Make: Elkhart #8494

3.55 YES/NO

The front mounted turret shall have a 180 degrees of horizontal travel.

3.56 YES/NO

The turret monitor shall be equipped with a constant flow electric remote control nozzle sized to flow 15, 30, or 45 GPM. Make: Elkhart Model 5000-04

3.57 YES/NO

The monitor shall include a joystick control box that is weather tight for inside or outside mounting. The joystick control box shall include control water supply, on/off; monitor, up/down and right/left; and nozzle pattern, straight/fog. The control module shall be complete with waterproof connectors, solid state circuitry, and is completely

encapsulated in epoxy for maximum protection.

3.58 YES/NO  
The chassis front bumper will be extended to accommodate the proper operation and installation of the above front monitor system.

3.59 YES/NO  
There shall be a remote pump start/stop and indicator light installed in the chassis cab, with a pump engine throttle to allow easy pump operations when using the Elkhart front monitor.

3.60 YES/NO  
A Class One water level indicator shall be positioned in the chassis cab.

3.64 YES/NO  
Foam System "Injection System"

3.65 YES/NO  
The apparatus shall be equipped with an electronic, fully automatic, variable speed, direct injection discharge side foam proportioning system and shall be furnished and installed on the apparatus. The system shall be capable of Class A foam concentrate. The foam proportioning operation shall be based on an accurate direct measurement of water flows, and remain consistent within the specified flows and pressures. The foam system shall be installed in accordance with the manufacturer recommendations. The system shall be equipped with a control module. It shall be installed on the pump operators panel and enable the pump operator to perform the following functions. Incorporated within the motor drive shall be a microprocessor that receives input from the system flow meter, while also monitoring foam concentrate pump output, comparing values to ensure that the operators preset proportional amount of foam concentrate is injected into the discharge side of the fire pump. The foam system shall have a 12 volt, 1/3 hp electric motor driven positive displacement piston type foam concentrate pump with a rated capacity of .1 - 1.7 GPM @ 200 PSI with operating pressures of up to 400 PSI. System shall include full flow check valve shall be provided in the discharge piping to prevent foam concentration of the fire pump and water tank. A 5 PSI opening pressure check valve shall be installed in the concentrate line.

3.66 YES/NO  
Foam System shall be Make Hypro/Foam Pro Model: 1600.

3.67 YES/NO  
The foam pump, motor, calibration/injection valve, capacitor and control module shall be installed in an enclosed and ventilated compartment at the rear of the apparatus body. The enclosed compartment shall be accessible for easy inspection of the foam system controls.

3.76 YES/NO  
A 2" paddlewheel type flow meter shall be installed in the discharge specified to be

foam capable.

3.77

The control module shall enable the pump operator to due the following. Activate the foam proportioning system. Change foam concentrate proportioning rates from 0.1% to 1.0% of concentrate. Low concentrate warning light when the foam concentrate tank runs low of concentrate and in two minutes if foam concentrate is not added to tank sensor will shut the foam concentrate pump down.

YES/NO

3.78

Make: Hypro/Foam Pro Model: 1600

Total components of the completed system shall include:

Operators control module shall be located at the rear of apparatus for the ease of operator to control from the street level.

Paddle Wheel flow meter

Pump and electric motor/motor drive

Wiring harness

Low level tank switch

Foam injection check valve

The foam controls shall be mounted on the rear of the apparatus at the main fire pump controls.

YES/NO

3.79

Foam concentrate shall be discharged to the following discharges: booster reel, the front mounted monitor, and the two 1 ½" preconnect discharges.

YES/NO

3.85

12 gal. Single Foam Tank: will be plumbed into the foam systems. The foam tank shall be vented. It shall be marked "CLASS A FOAM". The foam tank shall be a clear to allow easy sight level of the foam remaining in the foam cell.

YES/NO

3.90

There shall be a ½" quarter turn shutoff valve installed on the foam tank supply to allow regular required foam system maintenance.

YES/NO

3.91

Reel

YES/NO

3.92

There shall be a 1" Akron valve installed to supply the 1" booster reel located at the rear of the apparatus body. Valve shall be controlled by a Akron ¼ turn TS style control handle. The reel and controls shall be located at the rear of apparatus for the ease of operator to control from the street level.

YES/NO

3.93

One electric rewind booster hose reel with a reel capacity of 150 feet of ¾" inch 800 PSI test booster hose. Reel to be controlled from the apparatus body rear center compartment and mounted to pay off either the right or left side of the apparatus body.

YES/NO

The booster reel shall be installed behind the chassis cab, left side.

3.94 YES/NO  
150 feet of 3/4" inch 800# test booster hose to be included with reel set.

3.96 YES/NO  
One (1) Make: Akron Model: 1702 1" NST nozzle shall be included with the reel set

3.97 YES/NO  
One (1) Make: Akron Model: 755 1" NST Foam Tube for the above nozzle.

3.98 YES/NO  
Two (2) set of each vertical and horizontal chrome hose roller guides. Located above the right and left side apparatus body compartments to allow the booster hose to pay-off either apparatus body sides.

3.99 YES/NO  
There shall be two electric rewind buttons mounting on each side of the apparatus body side and one rewind button on the reel.

**Section 4: Booster Tank Valves, Piping and Accessories**

4.00 YES/NO  
One (1) 2 1/2" chrome NST swivel female connection with 2 1/2" replaceable strainer and 2 1/2" chrome plug and chain attached to inlet. The direct tank fill inlet shall be plumbed with a 2" Akron valve with a TS style control handle. The valve shall be located at the rear of apparatus for the ease of operator to control from the street level.

4.30 YES/NO  
One (1) 1" booster tank refill/re-circulation Akron ball valve shall be controlled by a push/pull or TS style handle and plumbed with flexible hose from pump to tank to allow flex between the pump and tank systems. The valve shall be located at the rear of apparatus for the ease of operator to control from the street level.

4.34 YES/NO  
The booster tank refill/re-circulation valve shall be controlled at the rear of the apparatus body.

4.40 YES/NO  
One pump auxiliary cooling line shall be provided to discharge water to the tank while no water is being discharged from the main outlets. Line shall be 3/8" in size.

**Section 5: Booster Tank And Lower Body Compartments**

5.00 YES/NO  
The vertical and horizontal center of gravity will not exceed the chassis manufactures recommendations. The bidder must including in the bid the total chassis curb weight with and including the following features: chassis specified cab to axle dimensions, the

completed apparatus body, booster tank and water, fire pump, plumbing as well as all options listed in these specification. (No Exceptions).

5.03 YES/NO  
The booster tank shall have a capacity of 500 Gallons.

5.05 YES/NO  
The booster tank shall be integral with the side of the body and well as the lower side body compartments. The booster tank design shall maintain a horizontal center of gravity for the complete apparatus as specified by the chassis manufacturer for the rated GAWR. The vertical center of gravity of the completed apparatus at GAWR must not exceed 48" when measure from the ground. This will allow the maximum amount of allowable weight and maintain a true "Low Profile" balanced load.

5.06 YES/NO  
Sufficient clearance shall be allowed for use of tire chains even if the chassis is at the full jounce and on a side angle with the apparatus fully loaded. The tank shall be constructed of 10 gauge #304 stainless steel, baffles, bottom and top. The stainless steel tank shall be sufficiently baffled to prevent excessive sway when apparatus is in motion. The booster tank shall be designed, engineered low profile, and balanced for severe duty off road use.

5.10 YES/NO  
The tank will be mounted in such a way as to allow the chassis frame to twist and flex under the tank without undue strain applied the main booster tank. Bidder shall be required to provide specifications as well as blueprint drawing of the proposed method of hold down and the complete booster tank and lower compartment design in the bid proposal. (No Exceptions.)

5.20 YES/NO  
The tank will a low profile and center of gravity designed with the following dimensions of 93" wide that will provide a low center of gravity.

5.25 YES/NO  
The booster tank shall be equipped with a stainless steel NPT connections for all suction and tank fill fittings.

5.30 YES/NO  
The tank top shall have an access opening to the tank, allowing future tank inspection. The tank will be sealed to prevent water seepage when tank is tipped at an angle during all off road operations. NO EXCEPTIONS.

5.31 YES/NO  
The top of the stainless steel booster tank shall be treated to allow safe egress for access to the upper storage areas, tank inspection port as well as the tank refill towers for water and foam. The stainless steel tank top shall be coated with a heavy spray on lining material. The lining material shall dry to form an impervious one piece covering to also protect the tank top from damage. The lining material shall be dark gray in color.

5.33 YES/NO  
A sump to be 12" wide x 12" long with a 1 1/2" inch clean out plug in bottom of sump. Sump shall have anti-whirlpool baffles.

- 5.37 YES/NO  
The tank refill / recirculating tower shall be at least a 8" stainless steel opening. The fill tower will be installed on the booster tank and shall include an easy fill/re-circulating system for fire ground operations. The tank refill tower shall have a stainless steel screen to reduce objects from dropping into the main stainless steel booster tank. The tower shall have an overflow that allows the tower to overflow under the apparatus body.
- 5.38 YES/NO  
The stainless steel tank shall include a life time warranty against any manufacturers defects. Bidders warranty document shall be included in bid.
- 5.39 YES/NO  
Bidders shall include in their proposal scaled drawings of there proposed booster tank design.
- 5.40 YES/NO  
Lower Apparatus Body Compartments
- 5.41 YES/NO  
The vertical and horizontal center of gravity will not exceed the chassis manufacturers recommendations. (No Exceptions).
- 5.42 YES/NO  
Apparatus fenders shall be stainless steel and integral with the side of the body compartments. Fender wells shall have sufficient clearance shall be allowed for use of tire chains with the apparatus fully loaded. The wheel well shall be designed and engineered to allow for the chassis complete jounce motion either left or right side when fully loaded on a side hill operation.
- 5.46 YES/NO  
A stainless steel rub-rail shall be bolted on both sides of the body below and above the lower compartmentation system to protect the body from minor scrapes. The rub rail system shall be bolted to the body sides to accommodate easy removal in case of damage or repair and body component replacement.
- 5.47 YES/NO  
Apparatus body builder to install single Cast Products fuel fill guard on apparatus body.
- 5.49 YES/NO  
Doors shall be double paneled, and constructed of 1/8" 5052H32 aluminum with a 3003 bright aluminum diamond plate inner panel. Doors to have a full length continuous type polished stainless steel hinge. Hinge bolt shall be locked in place to eliminate slipping. All doors and hinges shall be bolted to body, and adjustable.
- 5.50 YES/NO  
All lower compartments shall be sweep out design and to be water and dust proof. All compartments shall be made to the maximum practical dimensions to provide maximum storage capacity.

- 5.81 YES/NO  
Low Left And Right Side Stainless Steel Body Compartments Behind Chassis
- 5.82 YES/NO  
Low Compartment Ahead of Rear Wheels Left And Right Side
- 5.83 YES/NO  
Low compartment extending in depth of the booster tank with a single vertically hinged door.
- 5.85 YES/NO  
High Stainless Steel Compartment Behind The Rear Wheels Left And Right Side
- 5.86 YES/NO  
High compartment extending in depth of the booster tank with a single vertically hinged door.
- 5.87 YES/NO  
There shall be four (4) SCBA brackets installed on the rear wall of the left side rear high compartment. The brackets shall be for the storage of two (2) complete SCBA packs and two (2) spare cylinders.
- 5.88 YES/NO  
There shall be one (1) adjustable shelf installed in the right side rear high compartment.
- 5.98 YES/NO  
Bidders shall include in their proposal scaled drawings of there upper body design. (No Exception)
- Section 6: Upper Apparatus Body & Components*
- 6.00  
Upper Aluminum Body
- 6.01 YES/NO  
The vertical and horizontal center of gravity will not exceed the chassis manufacturers recommendations. (No Exceptions).
- 6.05 YES/NO  
Complete upper apparatus body to be module in construction and built separately from chassis and lower apparatus body.
- 6.11 YES/NO  
After complete construction of the upper body it shall be fastened to the lower apparatus body.

- 6.22 YES/NO  
The 60" C.A. apparatus body shall be mounted on the lower apparatus body and its designed subframe.
- 6.24 YES/NO  
The overall height of the apparatus body will be approximately the same overall height of the commercial chassis cab.
- 6.25 YES/NO  
Upper aluminum Body shall be constructed with Extrusions for framing purposes. Aluminum Treadplate shall be used for walkways, high maintenance areas, and for decorative purposes. The Extrusions alloy shall be 6061 with a temper rating of T6. Extrusions shall have a tensile strength of 45,000 PSI and a yield strength of 40,000 lb. The extrusions are to be used in general framing of compartments, and the body itself. The extrusions are to include 3" tubing with a 3/16" radius on the corners. The smooth aluminum sheets shall be 1/8" thick aluminum, alloy to be 5052 with a temper strength rating of H32. This alloy to have a minimum tensile strength of 33,000 PSI and a yield strength of 28,000 lb. This alloy gives excellent formability with out sacrificing strength and is to be used in compartment and door construction. Aluminum Treadplate is to be 1/8" thick and be a 3003 alloy with a temper strength rating of H22. This alloy is to have a minimum tensile strength of 30,000 PSI and a yield strength of 28,000 lb. Treadplate is to be used in all compartment floors. These three alloys are to be welded together using the latest Mig Spray Pulse Arc welding system.
- 6.41 YES/NO  
All upper body compartments to be fabricated of 1/8" 5052H32 aluminum sheets, 6061T6 aluminum extrusions 3003 bright aluminum treadplate, 6063T6 aluminum tubing, and 6063T6 aluminum trim channel. All areas in body construction where dissimilar metals come into contact, shall have a mounting system that allows separation of each dissimilar metal junction. All fasteners used in the construction of the aluminum and or the stainless bodies shall be stainless steel.
- 6.43 YES/NO  
All compartments shall be sweep out design and to be water and dust proof. All compartments shall be made to the maximum practical dimensions to provide maximum storage capacity.
- 6.55 YES/NO  
All upper body side compartment doors shall be double paneled, and constructed of 1/8" 5052H32 aluminum with a 3003 bright aluminum diamond plate inner panel. Doors to have a full length continuous type polished stainless steel hinge. Hinge bolt shall be locked in place to eliminate slipping. All doors and hinges shall be bolted to body, and adjustable.
- 6.57 YES/NO  
All upper and lower door latches shall be stainless steel recessed D-ring type handle. A one point rotary automotive type latch shall be standard on all doors.

- 6.68 YES/NO  
All upper and lower vertically hinged doors shall have spring loaded door holders assist in hold the doors in the open or closed.
- 6.79 YES/NO  
All horizontally top hinged doors shall be furnished with #8 stainless steel sill cap and two (2) per each door pneumatic cylinders style hold open devices.
- 6.80 YES/NO  
All upper and lower exterior compartments shall have drip moldings installed above the doors where necessary to prevent water from entering into compartments.
- 6.82 YES/NO  
All upper and lower interior surfaces of all compartments are to be painted with a light colored splatter, scuff resistant paint.
- 6.90 YES/NO  
The complete apparatus body structure shall be free from nuts, bolts, and other fasteners. On completion of all weldment, the apparatus body shall be completely sanded and deburred that will remove all sharp edges.
- Section 7: Upper Apparatus Body Compartments*
- 7.01 YES/NO  
Upper Left And Right Side Body Compartments Behind Chassis
- 7.17 YES/NO  
Upper Compartments Above The Left And Right Side Lower Side Compartments and Wheel Wells.
- 7.20 YES/NO  
Full height compartment extending in depth to center hosebed compartment with a single horizontally top hinged door on each side of the apparatus body.
- 7.22 YES/NO  
There shall be two Unistrut brackets installed horizontally on the back wall of the right side compartment. The body builder will provide six (6) spring and nut mounting hardware for above.
- 7.30 YES/NO  
Rear Of The Apparatus Body Between The Upper And Lower Side Compartments.
- 7.32 YES/NO  
The rear center in front of the rear step shall house the fire pump, plumbing, and related suction and discharges.
- 7.35 YES/NO  
There shall be two heavy duty tow hooks installed at the rear of the apparatus body

under the rear step. The heavy duty tow hooks shall be attached directly to the chassis frame rails. The tow eyes will be heavy enough to support rugged fire truck load requirements.

7.42 YES/NO  
Open Compartment In Rear Of Body

7.43 YES/NO  
Open rear center compartment ahead of rear bumper step between the side compartments.

7.44 YES/NO  
Ladders to be mounted behind the side compartment with a single aluminum door. The ladder shall be designed to allow easy loading and unloading of the ladders from the rear of the apparatus body ground level.

7.45 YES/NO  
One (1) Duo Safety Series 701 "Fresno" 2 section 14' extension ladder shall be supplied by body builder. Ladder to be mounted right side See 7.44.

7.46 YES/NO  
One (1) Duo Safety series 585A 8' folding ladder with safety shoes shall be supplied by body builder. Ladder to be mounted right side See 7.44.

7.47 YES/NO  
There shall be a compartment installed behind the side compartment as large as practical for the storage of backboards. This compartment shall be constructed of smooth aluminum and be stored next to the ladders.

7.98 YES/NO  
Bidders shall include in their proposal scaled drawings of there upper body design.

*Section 8: Aluminum Tread Plate*

8.84 YES/NO  
Aluminum tread brite shall be installed on the following areas.

8.85 YES/NO  
All rear vertical faces below the fire pump and booster reel.

8.89 YES/NO  
Left side upper side compartments extending down over side 2" to the compartment doors then forming a drip rail above doors.

8.90 YES/NO  
Right side upper side compartments extending down over side 2" to the compartment doors then forming a drip rail above doors.

8.95 YES/NO  
Upper side compartment floors.

*Section 9: Apparatus Body Handrails and Grab Rails*

9.00 YES/NO  
Railings shall not be less than 1 1/4" diameter extruded aluminum with rubber grip inserts.

9.04 YES/NO  
All railing escutcheons and brackets shall be stainless steel or chrome, and bolted with stainless steel bolts. Hand railing to be provided in the following areas:

9.08 YES/NO  
Grab rails shall be installed in the follow locations:

*Section 12: Hard Suction.*

12.20 YES/NO  
The suction hose shall be stored in an enclosure provided below the main stainless steel booster tank. Access to the suction hose compartment shall be through a bottom hinged drop down door at the rear of the apparatus body.

12.24 YES/NO  
Two (2) 2 1/2" x 8' PVC lightweight hard bore suction to be furnished by body builder.

*Section 14: Electrical Equipment & Battery System*

14.00 YES/NO  
One combination stop, tail, turn signal light and backup light on each side at the rear of the apparatus body above the tailboard surface.

14.03 YES/NO  
All apparatus body rear mounted lighting that is recess into the rear compartments shall have a rear light guard installed inside the body compartment to protect the rear fixture of each light. The rear light guard shall be installed for ease of removal if service of light is necessary.

14.04 YES/NO  
The rear tail, turn, stop lights as well as the side and rear markers and running lights shall conform to federal standards in effect at the time. There shall be 2 body side markers one red and one amber mounted on each upper side edges of apparatus body. There shall be three (3) rubber mounted 2" DOT lights recessed in the apparatus rear step.

14.07 YES/NO  
Each enclosed compartment shall have one compartment light and shall be activated by an automatic door switch.

14.08 YES/NO  
There shall be a red open door indicator light installed in chassis cab.

- 14.09 YES/NO  
All electrical equipment to have resetting circuit breakers and mounted in an enclosed and ventilated aluminum tread brite panel box with each circuit labeled.
- 14.10 YES/NO  
Wiring shall be high temperature, copper, multi-strand SXL cross link coated wire. Wire shall be color coded for ease of maintenance.
- 14.11 YES/NO  
All wiring to be protected with automotive type loom with a temperature rating of -30 degree to +300 degree Fahrenheit. Grommets shall be used when wiring through body.
- 14.12 YES/NO  
"As Built" wiring schematic of the apparatus body shall be supplied in the operations and maintenance manuals for the completed apparatus body.
- 14.14 YES/NO  
Furnish and install an on board battery conditioner and manual style connection to a shore line w/plug in for same. Make: Kussmaul Model: Auto-Charger 12.
- 14.15 YES/NO  
There shall be a manual A/C shoreline fitting installed at the front of the apparatus body.
- 14.16 YES/NO  
There shall be an A/C plug in installed in the upper drivers side compartment. The power shall be provided by the manual A/C fitting and include a 4 standard A/C outlets.
- 14.30 YES/NO  
A license plate light to be provided on the rear of the apparatus body.

**Section 15: Fuel System**

- 15.04 YES/NO  
The body builder shall supply the pump engine fuel supply line that shall be run into the main chassis fuel tank and will utilizing a separate fuel line complete with automatic electrical fuel pump.

**Section 16: Emergency Signal & Lighting**

- 16.01 YES/NO  
Electronic Siren with microphone and light controls shall include the following feature and controls in one compact master control system: A full featured 100 watt siren, hard wired microphone for radio rebroadcast functions, an electronic air horn, all emergency lighting functions, Three (3) position progressive control switch, and a minimum of four (4) push On / Off buttons. The siren shall be installed in the chassis cab providing easy access to the drivers position. All emergency flashing lights as well as the specified lightbar shall to be controlled from the cab with individual 20 amp. lighted switches.

**Make: Code 3 Model: 3892 L4**

**16.02**

**YES/NO**

**All Alternating flashing lights mounted on fire apparatus shall be controlled by. Make: Code 3 Model: 710 Multi Mode Flasher that flashes two loads up to 8 amps (100 watts) each for halogen lighting package.**

**16.03**

**YES/NO**

**Electronic Speaker mounted behind the front bumper facing forward. Make: Code 3 Model: PH-100U Watts: 100**

**16.05**

**YES/NO**

**Emergency light bar mounted on the chassis cab. Code 3 Model: 647NFPA1.**

**16.06H**

**YES/NO**

**Front side intersection alternating and flashing lights shall be mounted on each side of the chassis cab forward position. Make: Code 3 Model: 41 BZX Color: Red.**

**16.09**

**YES/NO**

**Rotating lights mounted on the upper rear outer edges of the apparatus body. Make: Code 3 Model: 550 Color: one red and one amber.**

**16.13**

**YES/NO**

**A 12 volt solid state backup alarm with a minimum rating of 97 decibels to be installed.**

**16.33**

**YES/NO**

**Two (2) work light device consisting of three (3) individually aimed sealed beam lamps capable of being spots or floods. All three lights are to be mounted on a bar housing with telescoping pole. The bulbs must develop a minimum 200,000 beam cp. (600,000 cp. total) in the spotlight mode and 50,000 beam cp. (150,000 total in the flood mode. The telescoping light plant shall be wired on a separate circuit breaker. Mounting location shall be: on the front of the apparatus one each side. The telescoping lights shall not hit the body when in the down position**

**16.34**

**YES/NO**

**5 ground lights shall be mounted below the apparatus, two below chassis cab to activate automatically with chassis door is in the open position, two below side compartment and one below rear step.**

**16.54**

**YES/NO**

**Two (2) work lights installed in the center rear work area with an On/Off switch mounted in chassis cab.**

***Section 18: Painting, Printing, Decorating, Lettering, & Signs.***

**18.02**

**YES/NO**

**Apparatus body shall be thoroughly cleaned and etched before painting of the primer coats. Two (2) epoxy primer and two (2) finished coats single stage polyurethane paint**

will be applied to the fire apparatus. All surface irregularities are to be sanded smooth prior to the finish coat. The finish paint shall match the cab and chassis.

18.04  
Color:

YES/NO

18.06  
Apparatus to be painted to match Chassis color: Color #

YES/NO

18.13  
A 4" Scotchlite reflective stripe shall be installed on the right and left sides of the apparatus body and chassis cab. Style: shall run the full body length on each side of the apparatus, and shall angle down to the bottom of the chassis door and end at the front wheel wells. Standard color shall be white

YES/NO

18.15  
Lettering shall be as follows: Two (2) computer generated door decals mounted on the chassis doors.

YES/NO

18.16  
One (1) touch up paint and container with applicator shall be furnished to match each exterior finish color.

YES/NO

18.23  
A permanent plate shall be installed in the driver's compartment specifying the maximum number of personnel the vehicle is designed to carry per NFPA standards. It shall be located in an area visible to the driver. An accident prevention sign stating "DANGER", personnel must be seated and seat belts must be fastened while vehicle is in motion, or "DEATH OR SERIOUS INJURY MAY RESULT" shall be provided. It shall be visible from each seating position.

YES/NO

***Section 20: Chassis Modification & Miscellaneous:***

20.01  
Stainless steel wheel covers with nut and hub covers will be installed on the front and rear wheels.

YES/NO

20.09  
Mud flaps shall be mounted behind rear wheels. Mud flaps shall be black rubber.

YES/NO

20.26  
Apparatus body builder shall not upgrade commercial chassis. The commercial chassis will include dual alternators and heavy duty dual batteries. Body builder shall provide a battery disconnect switch installed in the chassis cab. There shall be a main control center installed in apparatus body for all electrical D/C operations.

YES/NO

***Section 21: Loose Equipment And Services Supplied by Body Builder.***

21.05  
One 2 ½" basket strainer.

YES/NO

- 21.31 YES/NO  
Two (2) wheel chocks mounted in a readily accessible location. Aluminum wheel chock shall be Make: Worden rated for the total chassis GAWR.
- 21.36 YES/NO  
The body builder shall provide and install a heavy duty DOT approved Fire Extinguisher bracket as per the Fire Chief's instructions.
- 21.38 YES/NO  
Body builder shall install chassis entrance running boards
- 21.45 YES/NO  
The body builder shall install six (6) hand holds as per the Fire Chiefs instructions
- 21.46 YES/NO  
The body builder shall install two (2) heavy duty folding steps as per the Fire Chiefs instructions
- 21.50 YES/NO  
The body builder shall provide and install one (1) Red Head two spanners and one adjustable hydrant wrench with the brackets as per the Fire Chiefs instructions.
- 21.51 YES/NO  
Four (4) shovel handle tulip brackets mounted as per the Fire Chief.

*Section 50: New Ford F-550 Regular Cab & Chassis*

- YES/NO 50.01  
2003 Ford F-550 4 x 4 Regular Cab Chassis
- YES/NO 50.04  
Two Door Cab and Chassis
- YES/NO 50.06  
60" CA (141" wheelbase)
- YES/NO 50.10  
17950# GWV
- YES/NO 50.13  
40 gallon aft fuel tank
- YES/NO 50.15  
AM/FM Stereo radio w/clock
- YES/NO 50.17  
4 wheel anti-lock brakes with four wheel disc brakes

YES/NO 50.33  
Manual front hubs

YES/NO 50.35  
2 speed transfer case

YES/NO 50.38  
Four wheel drive (4X4)

YES/NO 50.45  
Manual telescoping trailer tow mirrors, manual glass

YES/NO 50.48  
Driver and passenger air bag (passenger side shall be able to be turned off)

YES/NO 50.50  
6.0L Power Stroke diesel engine

YES/NO 50.52  
5 speed Torque Shift automatic transmission

YES/NO 50.54  
All terrain tires (6)

YES/NO 50.57  
4.88 Limited slip rear axle

YES/NO 50.59  
Chrome front bumper

YES/NO 50.60  
Dual alternators

YES/NO 50.65  
Dual batteries

YES/NO 50.72  
Auxiliary idle control

YES/NO 50.85  
Air Conditioning

YES/NO  
40, 20 40 Split Bench Seating in the cab

**EXHIBIT B**  
**Fire Protection Services**

THE DISTRICT SHALL PROVIDE FIRE PROTECTION SERVICES TO THE PROJECT ON THE SAME BASIS AS THE REST OF THE FIRE DISTRICT. IF MORE THAN ONE FIRE IS OCCURRING AT ONE TIME, THE DISTRICT WILL DECIDE WHICH CALL WILL BE ANSWERED FIRST AND WHICH ASSETS TO BE ALLOCATED.

AT LEAST ONE ENGINE WILL BE DISPATCHED TO THE PROJECT, WHETHER IT BE A DISTRICT 1 APPARATUS OR A MUTUAL AID APPARATUS.

**EXHIBIT C**  
**Washington State Mobilization and Equipment rates**

**Washington - Oregon Interagency Rate Schedule**  
**Amended and Adopted by**  
**Washington State Association of Fire Chiefs**  
**Amended April 2002**

**EQUIPMENT CHARGES**

**Pump Rate, GPM      Tank Capacity      Hourly Rate**

<b>ENGINES</b>				
			<b>2 x 4</b>	<b>4 x 4</b>
ICS Type 1 (Class A)	1,000	400	121.00	138.00
ICS Type 2 (Class A)	500	400	97.00	110.40
ICS Type 3	120	300	51.00	61.20
ICS Type 4	70	750	45.00	54.00
ICS Type 5	50	500	41.00	49.20
ICS Type 6	50	200	36.00	43.20
ICS Type 7	20	125	30.00	36.00
Interface Attack	250	500	72.00	86.00
Foam: If used, add:			3.30 *	

\* Does not include cost of foam product, the cost of which must be claimed separately as an expended supply.

**WATER TENDERS**

<b>WATER TENDERS</b>				
			<b>2 x 4</b>	<b>4 x 4</b>
ICS Type 1	300	5,000	71.00	85.20
ICS Type 2	200	3,500	65.00	78.00
ICS Type 2	200	2,500	57.00	68.40
ICS Type 3	200	1,000	39.00	46.80

**AERIAL LADDER**

<b>AERIAL LADDER</b>				
< 75 feet			180.00	
75+ feet			200.00	

**OTHER UNITS**

Support	Air supply unit, rehab unit	29.40
Plow	Single disk on 4x4 (jeep), to trail wildfire	29.40
Hazardous Materials	Special hazmat response unit	185.00
Crash	Aircraft crash unit	185.00
Rescue	Special rescue operations unit	110.00
EMS, Non-Transport	BLS EMS unit (WAC 246-975 license)	36.50
	ALS EMS unit	46.00
EMS, Transport	BLS ambulance unit	49.00
	ALS ambulance unit	60.00
	Patient transport mileage	9.00 per mile
Command Unit	Car: Mileage at prevailing rate	
Incident Command Post Unit	ICP Bus / Trailer (self-sustaining)	360.00 per day

**Rates**

All rates are "wet rates". All fuel, oil, insurance, repairs, and other costs are the responsibility of the owner.

**Unlisted Rates**

Refer to the *Washington - Oregon Interagency Rate Schedule* ("pink pages") for the rates on other equipment not listed above (e.g., dozers).

*Rates for specialized equipment not listed either above or in the Washington - Oregon Interagency Rate Schedule shall be negotiated by the Finance Section Chief.*

*The Finance Section Chief for the Fire Mobilization Incident Management Team shall have the authority to negotiate payment rates for specialized resources, including that with nominally listed (published) rates, provided that such negotiated rates, with reasons and facts in support, are documented and a copy attached to the claim(s).*

**Compensable Time: Equipment**

In 24 hour period:

- *Travel time* between the home jurisdiction and the incident (both ways).
- *Assigned Work (Line) Time:* All hours worked are compensable, from time of departure from incident base to time of return. Time required for fueling and maintenance is not compensable.
- *If assigned work time in 24 hour period is less than five (5) hours, then the minimum daily equipment time of five (5) hours may be claimed. This "non-work" time may be either assigned standby / staging or unassigned time.*

**MILEAGE RATES**

	2 x 4	4 x 4
Car	0.45	0.50
Sport / Utility	0.50	0.55
Pickup, 1/2 ton	0.55	0.75
Pickup, 3/4 ton	0.65	0.80
Pickup, 1 ton	0.70	0.85
1 - 1/2 ton	0.90	1.16

**Mileage**

Mileage rate is paid for units not eligible for hourly rate compensation.

Mileage rates above are paid only for *mobilized* vehicles, i.e., vehicles mobilized for and used on incident assignment.

The mileage rate for vehicles used for *personal transportation* to the incident is the standard applicable state rate for vehicle use. Mileage to and from the incident will be paid only once for the incident for any individual.

**Haul Vehicles**

Units used to tow or haul fire apparatus are paid mileage only. Refer to *Washington - Oregon Interagency Rate Schedule* for rate.

**Washington - Oregon Interagency Rate Schedule**  
**Amended and Adopted by**  
**Washington State Association of Fire Chiefs**  
**2002**  
**Amended April 2002**

**PERSONNEL RATES**

	Regular	Overtime
<b>SUPPORT PERSONNEL</b>		
Driver (shuttle)	9.50	14.25
Truck Driver (over 4 tons)	10.45	15.70

<b>FIREFIGHTERS</b>		
Firefighter	11.50	17.25
Engine Company Officer - Single Resource Boss	16.80	25.80
Strike Team Leader	18.05	27.10
Task Force Leader	19.75	29.65

<b>EMS</b>		
EMT	17.65	26.50
EMT-ILS	18.45	27.65
Paramedic	19.30	28.95
Medical Unit Leader	19.75	29.65

<b>OPERATIONS</b>		
Staging Manager	16.80	25.20
Division / Group Supervisor	19.75	29.65
Structural Protection Specialist	23.50	35.25
Section Chief	22.70	34.05

<b>LOGISTICS</b>		
Dispatcher	10.45	15.70
Radio Technician	11.90	17.85
Mechanic	11.90	17.85
Equipment Manager	16.80	25.20
Unit Leader: Communications - Facilities - Food Supply - Ground Support	19.75	29.65
Section Chief	22.70	34.05

## PERSONNEL RATES

(continued)

Regular Overtime

PLANS		
Check-In Recorder	9.50	14.25
Unit Leader: Resource - Situation - Demob	19.75	29.65
Section Chief	22.70	34.05

FINANCE		
Timekeeper - Clerk - Typist - Office Assistant	9.50	14.25
Payment Team Fiscal Tech	16.80	25.20
Unit Leader: Time - Cost - Compensation/Claims Procurement - Payment Team Accountant	19.75	29.65
Section Chief - Payment Team Leader	22.70	34.05
Incident Business Advisor	23.50	35.25

COMMAND STAFF		
Training Specialist - HR Specialist	19.75	29.65
Safety Officer - Incident Info Officer	22.70	34.05
Liaison Officer	23.50	35.25

COMMAND		
Incident Commander	25.20	37.80
Area Commander	26.10	39.15

OVERHEAD		
County Coordinator	19.50	29.20
Region Coordinator	20.00	30.00

### Compensable Time: Personnel

Personnel assigned to unit are paid for all hours of assigned time. Personnel assigned to unit are not paid for unassigned time. Minimum paid time is 8 hours in 24 hour period.

Compensable time includes travel to and from incident, related waiting time, and/or other travel necessary for the performance of work (e.g., fire camp to fire line), and actual hours worked, including assigned standby/staging.

### Non-Compensable Time

Includes sleeping time, "off-shift" time and unassigned time. Travel time is not allowed from residence to mobilization point.

This rate schedule is based on the *Washington - Oregon Interagency Wildfire Rate Schedule*, amended by the Washington State Association of Fire Chiefs.

**EXHIBIT D**  
**Washington Department of Natural Resources rates**



WASHINGTON STATE DEPARTMENT OF  
**Natural Resources**

For D.J.

**WAGE & EQUIPMENT RATES**

**FOR**

**WILDFIRE RESOURCES**

**2004**

**UPDATED JULY 2, 2004**  
**PAGE 21 DAILY SHIFT RATE**

April 20, 2004

## 2004 INTERAGENCY WILDFIRE RESOURCE WAGE RATES

### WASHINGTON STATE

Refer to the Payment Provisions Section when completing the Emergency Firefighter Time Report, Form OF-288

FIRELINE	HOURLY RATE REGULAR	HOURLY RATE OVERTIME
Firefighter 1 and 2	11.50	17.25
Single Resource Boss	16.80	25.20
<b>SKILLED LABOR</b>		
Cook - Head Camp Cook	12.30	18.45
Computer Technical Specialist	20.20	30.30
Dozer/Heavy Equipment Operator	12.30	18.45
Kitchen or Camp Helper	8.40	12.60
Radio Operator (Dispatcher)	10.80	16.20
Time Recorder/Receptionist	9.85	14.80
Truck Driver (under 1 ton)	9.85	14.80
Truck Driver (under 4 tons)	10.80	16.20
Truck Driver (over 4 tons or CDL required)	12.30	18.45
Faller Class A (up to 12" DBH)	10.80	16.20
Faller Class B ( up to 24" DBH)	12.30	18.45
Faller Class C (24" DBH or greater)	20.20	30.30
<b>SUPERVISORY</b>		
Aerial Observer	17.65	26.50
Air Tactical Group Supervisor	20.20	30.30
Air Ops Branch Director	21.85	32.80
Air Support Group Supervisor	20.20	30.30
Air Tanker Coordinator	20.20	30.30
Base Camp Manager	16.80	25.20
Command Staff (T1)	24.40	36.60
Command Staff (T2)	21.85	32.80
Coordinator (Expanded Dispatch)	21.85	32.80
Crew Boss	16.80	25.20
Crew Representative	17.65	26.50

	HOURLY RATE REGULAR	HOURLY RATE OVERTIME
Division Group Supervisor	20.20	30.30
Emergency Medical Technician Basic	17.65	26.50
Emergency Medical Technician Intermediate	18.50	27.75
Emergency Medical Technician Paramedic	18.50	27.75
Equipment Manager	16.80	25.20
Fire Behavior Analyst	20.20	30.30
Fire Investigator	20.20	30.30
Fireline Explosives Advisor	24.40	36.60
Fireline Explosives Blaster In-Charge	18.50	27.75
General Staff (T1)	24.40	36.60
General Staff (T2)	21.85	32.80
Helibase Manager T1	20.20	30.30
Helibase Manager T2	17.65	26.50
Helicopter Coordinator	18.50	27.75
Human Resource Specialist	18.50	27.75
Incident Medical Specialist Manager	18.50	27.75
Incident Medical Specialist Technician	17.65	26.50
Information Officer T2	21.85	32.80
Information Officer T3	17.65	26.50
Infrared Interpreter	17.65	26.50
Interagency Contract Rep.	20.20	30.30
Interagency Resource Rep	20.20	30.30
Ordering Manager	10.80	16.20
Security Manager	12.30	18.45
Staging Area Manager	12.30	18.45
Strike Team Leader	17.65	26.50
Structural Protection Specialist	18.50	27.75
Task Force Leader	17.65	26.50
Unit Leader	20.20	30.30
Water Handling Specialists	17.65	26.50
Weather Observer	10.80	16.20

For positions not listed above, use the Federal to State Conversion Table on page 3 to determine the DNR rates.

**FEDERAL TO STATE CONVERSION TABLE**

<b>FEDERAL CLASSIFICATION</b>	<b>FEDERAL HOURLY RATE</b>	<b>EQUIVALENT STATE REGULAR RATE</b>	<b>EQUIVALENT STATE OVERTIME RATE</b>
AD-1	\$9.96	\$8.40	\$12.60
AD-2	11.68	9.85	14.80
AD-3	12.84	10.80	16.20
AD-4	14.60	12.30	18.45
AD-5	20.00	16.80	25.20
AD-5	21.00	17.65	26.50
AD-5	22.00	18.50	27.75
AD-5	24.00	20.20	30.30
AD-5	26.00	21.85	32.80
AD-5	29.00	24.40	36.60
AD-5	30.00	25.20	37.80

**INMATE LABOR RATES**

Adults and Juveniles - \$3.60 per hour is to be used on all fire reports and fire billings.

**DOC/DSHS SALARY INFORMATION**

**These rates are for cost accounting purposes only.**

For all DOC/DSHS employees \$35.00 per hour

Command Post for DOC Staff \$50.00 per day

## 2004 EQUIPMENT RATES

Refer to the Payment Provisions when completing the Emergency Equipment Use Invoice, OF-286.

### DOZERS AND SKIDDERS

1. Use the horsepower class table and the equipment lists on the following pages to determine the appropriate rate. For equipment not listed, compare similar equipment in higher and lower power classes to assist in determining the rate.
2. Net Flywheel Horsepower is for an engine operating under SAE conditions, with standard engine accessories: muffler, blower fan, air cleaner, and water pump, lubricating pump, fuel pump and alternator. SAE Conditions: Sea level to 500 feet, 29.38" barometer (at sea level) and 35 API gravity fuel oil at 60 degrees F.
3. Do not increase the listed pay rate unless the machine is so unique that it will not be adequately compensated by that horsepower class rate. You must write memo to the Resource Protection Division Manager that explains why the rate increase was made. Attach a copy of the memo to Emergency Equipment Use Invoice and note the situation in your unit log.

#### DOZER POWER CLASS

POWER CLASS	HP RANGE	DAILY SS With Op	DAILY DS With Op	DAILY SS Without OP	DAILY DS Without OP
1	35 - 75	\$874	\$1,516	\$410	\$920
2	76 - 125	\$1,044	\$1,856	\$580	\$1,160
3	126 - 175	\$1,234	\$2,236	\$770	\$1,540
4	176 - 225	\$1,404	\$2,576	\$940	\$1,880
5	226 - 275	\$1,594	\$2,956	\$1,130	\$2,260
6	276 - 350	\$1,794	\$3,356	\$1,330	\$2,660
7	351 - 425	\$2,084	\$3,936	\$1,620	\$3,240
8	426+	Negotiate	Negotiate	Negotiate	Negotiate

## DOZER W/ BLADES

### *Standard Method of Hire*

1. All operating supplies, including fuel
2. Daily work rate
3. One operator
4. Service Vehicle included in rate

When a lowboy and another piece of equipment, such as a dozer, etc. are hired, and both pieces of equipment utilize the same operator, daily payment for the lowboy will be deducted by \$390.00 for a single shift, and \$624.00 for a double shift.

MAKE	MODEL	FWHP	POWER CLASS
Caterpillar	D3B	62	1
	D3C	75	1
	D4D (83J)	65	1
	D4E	75	1
	D4H	95	2
	D4H HT	95	2
	D5 (98 S)	105	2
	D5B	105	2
	D5H	120	2
	D5H HT	120	3
	D6C (10K)	140	3
	D6D	140	3
	D6H	165	3
	D6H HT	180	4
	D7F(73&74)	180	4
	D7G	200	4
	D7H	215	4
	D7H HT	270	5
	D8H (46A)	270	5
	D8K	300	6
	D8L	335	6
D8N HT	305	7	
D8R HT	305	7	
D9G (66A)	385	7	
D9H	410	7	
D9N	370	7	
D9H HT	460	8	
D10	520	8	
D11	770	8	

MAKE	MODEL	FWHP	POWER CLASS
Flat Allis	FD5	70	1
	FD7	84	2
	8B	88	2
	FD9	107	2
	10C	122	2
	14C	150	3
	FD14E	168	3
	16B	195	4
	FD20	223	4
	21C	300	6
	FD30	300	6
	31	400	7
	FD40	455	8
	FD40B	475	8
	41B	524	8
FD50	252/500	8	
John Deere	350	42	1
	450	65	1
	550	72	1
	750	110	2
	850	145	3

**DOZERS, continued**

MAKE	MODEL	FWHP	POWER CLASS
<b>Komatsu</b>	D31A	63	1
	D37E	75	1
	D45A	90	2
	D53A	110	2
	D58E	130	3
	D60P	140	3
	D65A	140	3
	D65E-6	155	3
	D65E-7/8	165	3
	D68E	180	4
	D85A	180	4
	D85E-12	200	4
	D85E-18	220	4
	D85E	225	4
	D135A	285	6
	D155A	320	6
	D355A	404	7
	D375A	525	8
	D455A-1	620	8
	D475A	770	8
<b>International</b>	500	44	1
	TD-6	48	1
	TD-7	65	1
	TD-8	75	1
	TD-9	78	2
	TD-12	110	2
	TD-15	140	3
	TD-20	210	4
	TD-25	310	6
<b>Allis</b>	HD-3	40	1
<b>Chalmers</b>	HD-4	50	1
	HD-6	72	1
	HD-11	115	2
	HD-16	150	3
	HD-21	275	5
	HD-41	525	8

MAKE	MODEL	FWHP	POWER CLASS
<b>Case</b>	350	44	1
	450	57	1
	750	63	1
	850	81	2
	1150	125	2
	1450	144	3
<b>Massey</b>	200	44	1
<b>Ferguson</b>	2244	39	1
	MF 300	65	1
	MF 3366	75	1
	MF 400	85	2
	MF 500	136	3
	MF D600C	144	3
	MF D700C	180	4
<b>Terex</b>	82-20	205	4
	82-30	260	5
	82-40	290	6
	82-50	370	7

# SKIDDERS

## SKIDDERS and SKIDGINES

### Standard Method of Hire

1. All operating supplies, including fuel
2. Daily work rate
3. One operator
4. Service Vehicle included in rate

## SKIDGINES

If a skidder is equipped as a skidgine add the rate as shown by tank size below. Skidgine must have a minimum of a 200-gallon tank and not exceed the manufactures load rating.

200 gal to 399 gal tank add \$86.00 to the rate whether worked as a SS or DS.

400gal to 799 gal tank add \$144.00 to the rate whether worked as a SS or DS.

800 gal tank and over add \$300.00 to the rate whether worked as a SS or DS.

No fiberglass tanks will be accepted. All tanks must be certified and baffled in compliance with NFPA or American Society of Mechanical Engineers standards or other industry accepted engineering standards.

POWER CLASS	HP RANGE	DAILY SS With Op	DAILY DS With Op	DAILY SS Without OP	DAILY DS Without OP
S-1	0 -74	\$834	\$1,436	\$370	\$740
S-2	75 - 99	\$894	\$1,566	\$430	\$860
S-3	100 - 139	\$1,034	\$1,836	\$570	\$1,140
S-4	140 - 199	\$1,184	\$2,136	\$720	\$1,440
S-5	200 - 274	\$1,584	\$2,936	\$1,120	\$2,240
S-6	275+	Negotiate	Negotiate	Negotiate	Negotiate

MAKE	MODEL	FWHP	POWER CLASS
John Deere	440	70	S-1
	440D	80	S-2
	448D	80	S-2
	540	90	S-2
	540A	94	S-2
	548D	100	S-3
	640	110	S-3
	640D/648D	120	S-3
	740	145	S-4
	740A	152	S-4
	360	117	S-3
	380D	126	S-3
	404	117	S-3
	450	126	S-3
	520	172	S-4
	550	178	S-4
550B	185	S-4	

MAKE	MODEL	FWHP	POWER CLASS
Timber Jack	208B	69	S-1
	208E	65	S-1
	225 Series	84	S-2
	230 Series	84	S-2
	330	84	S-2
	240D	102	S-3
	240E	112	S-3
	350A	110	S-3
	360	117	S-3
	380D	126	S-3
	404	117	S-3
	450	126	S-3
	520	172	S-4
	550	178	S-4
550B	185	S-4	

## SKIDDERS, continued

MAKE	MODEL	FWHP	POWER CLASS
FMC	180	118	S-3
	220CA	200	S-5
	220GA	200	S-5
Clark	664	96	S-2
Ranger	664B	84	S-2
	665	116	S-3
	666	126	S-3
	667	145	S-4
	668B	166	S-4
	668C	177	S-4
	668	187	S-4
	668 Turbo	212	S-5
	880	267	S-5
Caterpillar	518	102	S-3
	528	175	S-4

MAKE	MODEL	FWHP	POWER CLASS
Garrett	16	70	S-1
	21A	100	S-2
	21A Turbo	125	S-3
	22	135	S-3
	25A	155	S-4
	30	170	S-4
	30A	180	S-4
Massey Ferguson	320	80	S-2
Case	600	82	S-2
	800 Series	108	S-3
International	S 8A	92	S-2
Harvester	S 10	124	S-3

## HYDRAULIC EXCAVATORS

### Standard Method of Hire

1. All operating supplies, including fuel
2. Daily work-rate
3. One operator
4. Service Vehicle

When a lowboy and another piece of equipment, such as a dozer, etc. are hired, and both pieces of equipment utilize the same operator, daily payment for the lowboy will be deducted by \$390.00 for a single shift, and \$624.00 for a double shift.

MAKE	MODEL	FWHP	DAILY SS With OP	DAILY DS With OP	DAILY SS Without OP	DAILY DS Without OP
Cat	211	100 or less	\$874	\$1,516	\$410	\$820
Hitachi	EX100-3, EX150					
Cat	215	101-120	\$1,034	\$1,836	\$570	\$1,140
Hitachi	EX2001C-3					
Cat	225	121-160	\$1,194	\$2,156	\$730	\$1,460
Hitachi	EX220LC-3,					
	EX270LC-3					
Cat	235	161-200	\$1,434	\$2,646	\$970	\$1,940
Hitachi	EX300LC-3					
Komatsu	PC400	201-280	\$1,694	\$3,156	\$1,230	\$2,460
Hitachi	EX400LC-3					
Cat	245	over 280	\$2,454	\$4,676	\$1,990	\$3,980

## MOTOR GRADERS

*Standard Method of Hire*

1. All operating supplies, including fuel
2. Daily work rate
3. One operator
4. Service Vehicle

MAKE	MODEL	FWHP	DAILY SS With OP	DAILY DS With OP	DAILY SS Without OP	DAILY DS Without OP
AC	M-70	100-125	\$994	\$1,756	\$530	\$1,060
Austin	101, 200, 300					
Western						
Cat	112 Senes F, 120 Series F & G					
Galion	104, 11B, 160, T400, T500					
AC	M-100, 150-C	126-150	\$1,124	\$2,016	\$660	\$1,320
Austin	301, 400					
Western						
Cat	130, 140, 12 G 14-E					
Fiat Allis	100-C, 150-C					
AC	M-100, 200-C	151-200	\$1,164	\$2,096	\$700	\$1,400
Cat	14 Series G					
Fiat Allis	200-C					
Champion	D-565, 600, 680 740					
Cat	16, 16-G	over 200	\$1,244	\$2,256	\$780	\$1,560
Champion	D-686, 780					
Galion	T-700					
Huber	F-1700, F-1900					

## BACKHOES

*Standard Method of Hire*

1. All operating supplies, including fuel
2. Hourly work rate
3. One operator

FWHP	HRLY WORK RATE	Daily Guarantee
Up to 75	\$ 64	\$320

## DUMPTRUCKS

### *Standard Method of Hire*

1. All operating supplies, including fuel
2. Daily work rate
3. One operator

Min Capacity	DAILY SS With OP	DAILY DS With OP	DAILY SS Without OP	DAILY DS Without OP
5 yards	\$580	\$1,016	\$220	\$440
10 yards	\$745	\$1,340	\$370	\$740

For calendar days that a dump truck is used both as a dump truck and transport (provides a tilt bed trailer), add \$50.00 to the daily rate.

## WATER TRUCKS - for dust abatement

### *Standard Method of Hire*

1. All operating supplies, including fuel
2. Daily work rate
3. One operator

Min. Gallon	SPRAY TYPE	DAILY SS With OP	DAILY DS With OP	DAILY SS Without OP	DAILY DS Without OP
1000	All	\$630	\$1,116	\$270	\$540
2500	All	\$865	\$1,580	\$490	\$980
5000	All	\$975	\$1,800	\$600	\$1,200

A water truck for dust abatement is required to have, as a minimum, an eight (8) foot wide spray capability (pressure or gravity). They also must have a 100-gallon per minute (gpm) self-loading capability.

## HEAVY EQUIPMENT TRANSPORT

(Includes Truck Tractor and Trailer)

- **LICENSED Common Carrier:** Pay Tariff Rates or a pre-negotiated rate. A field order number should be issued to the UTC carriers.
- **Owner-Operated Transport Hauling Own Equipment to the Fire:** Use daily rental rates from table below.
- Agree on starting time at time of dispatch.
- Dump Truck rate applies if transport is used as a Dump Truck.

SIZE	DAILY SS With Op	DAILY DS With Op	DAILY SS Without Op	DAILY DS Without Op
Pickup with Trailer and Transports				
Under 10 Tons to be Negotiated	NEG	NEG	NEG	NEG
Transport (Dumptruck) and Tilt Bed				
All Tonnage	\$711	\$1,176	\$336	\$576
Tractors & Lowboys				
10 to 19.99 Ton	\$614	\$1,008	\$224	\$384
20 to 29.99 Ton	\$691	\$1,140	\$301	\$516
30 to 39.99 Ton	\$817	\$1,356	\$427	\$732
40 to 49.99 Ton	\$887	\$1,476	\$497	\$852
Over 50 Ton	\$1,013	\$1,692	\$623	\$1,068

# TRANSPORTATION VEHICLES

*Standard Method of Hire*

1. All operating supplies, including fuel
2. Mileage rate with 40-mile guarantee
3. Operator hired as a casual
4. Overhead Position (IIO, IACR, etc ) vehicles which do not require day to day use of the vehicle on the incident and the vehicle's primary use is to transport the individual from their place of dispatch to the incident, and from the incident back to their point of dispatch or to a new incident will be reimbursed for mileage by the hiring unit using the State travel process (2004 rate is \$.375).
5. Faller and Operations Line (DIVS, Safety, etc.) support vehicles are paid mileage rate from point of hire to the base camp; from base camp to the fire line and return; and from base camp to point of hire.

TYPE	4x2	4x2	4x4	4x4	
	per mile	Guar.	per mile	Guar.	
Overhead Positions (Other than Faller & Operation Line Positions) - All Vehicles	\$0.375	N/A	\$0.375	N/A	See Number 4 Above
Faller & Operations Line Positions - All Vehicles	\$0.45	N/A	\$0.45	N/A	See Number 5 Above
Car	\$0.45	\$18	\$0.50	\$20	Utility - S10 Blazer, Bronco II, 4Runner
Mid Size Truck	\$0.50	\$20	\$0.55	\$22	Truck - Dodge Dakota, Chev S10, Ford Ranger
Full Size Truck (1/2 ton)	\$0.55	\$22	\$0.75	\$30	Utility - Bronco, Blazer, Cherokee Chev C10, K10, Ford / Dodge 150
Full Size Truck (3/4 ton)	\$0.65	\$26	\$0.80	\$32	Chev C-20, K-20, Ford / Dodge 250
Full Size Truck (1 ton)	\$0.70	\$28	\$0.85	\$34	Chev C-30, K-30, Ford / Dodge 350
1 1/2 ton	\$0.90	\$36	\$1.16	\$46	
2 ton	\$1.05	\$42	\$1.30	\$52	
2 1/2 ton	\$1.25	\$50	\$1.50	\$60	
3 ton	\$1.40	\$56			
3 1/2 ton	\$1.60	\$64			
5 ton	\$2.15	\$86			
over 5 ton	\$2.31	\$92			

## BUS

*Standard Method of Hire*

1. Operating supplies may or may not be supplied by the vendor
2. Mileage rate with 40-mile guarantee
3. Operator hired as a casual

	Rate per mile	Daily Guarantee
Bus 6 to 12 Passenger	\$0.80	\$32
Bus 12 to 24 Passenger	\$1.10	\$44
Bus 25 + Passenger	NEG.	NEG.
Coach 39+	NEG.	NEG.

## WATER EQUIPMENT

1. Determine whether the unit is an engine or a tender.

Engine: Self-propelled unit with a suitable tank, pump, hose, nozzle, plus other accessories necessary to be a well-equipped independent unit, including minimum required hose and hand tools for fire protection. (See Engine/Tender Inventories/Accessories list on pages 23 & 24.)

Water Tender: Any ground vehicle capable of transporting 1,000 gallons or more of water. Tenders should be self-filling and have one of the following: 1) a transfer type pump; and/or 2) a quick dump valve.

2. Engine Type: Is determined by meeting both the minimum requirements (pump capacity [GPM] and tank capacity [gallons]). If an engine only meets one of the minimum requirements, engine is classified at the lowest minimum requirement met. For example: GPM is 70 and tank capacity is 200, the engine would be classified a Type 6; GPM is 20 and tank capacity 750, the engine would be classified Type 7; GPM is 70 and tank capacity is 750, the engine would be classified a Type 4.
3. All-Wheel Drive Allowances: Use the rate tables. Determine the appropriate rate by type of unit and tank capacity. If you specifically order 2-wheel drive units and all-wheel drive is not needed, do not pay the all-wheel drive rate.
5. No payment shall be made for structural firefighting equipment.
6. Staffing Requirements: (per shift)  
Type 6 and 7 engines require 1 engine leader and 1 firefighter.  
Type 4 and 5 engines require 1 engine leader and 2 firefighters.  
A tender requires one operator.

Engines and tenders are not normally hired with more than the required number of operators/firefighters.

# ENGINES AND TENDERS

*Standard Method of Hire*

1. All operating supplies, including fuel
2. Daily work rate - based on shift configuration
3. One operator/crew for a SS, Two operators/crews for a DS
4. No additional payment for foam use.

## ENGINES

TYPE 4 x 2	MIN PUMP GPM	MIN TANK GAL	DAILY SS With OP	DAILY DS With OP	DAILY SS Without OP	DAILY DS Without OP
7	20	125	\$1,005	\$1,752	\$360	\$720
6	50	200	\$1,077	\$1,896	\$432	\$864
5	50	500	\$1,137	\$2,016	\$492	\$984
4	70	750	\$1,185	\$2,112	\$540	\$1,080
3	120	500+	\$1,257	\$2,256	\$612	\$1,224

TYPE 4 x 4	MIN PUMP GPM	MIN TANK GAL	DAILY SS With OP	DAILY DS With OP	DAILY SS Without OP	DAILY DS Without OP
7	20	125	\$1,077	\$1,896	\$432	\$864
6	50	200	\$1,163	\$2,069	\$518	\$1,037
5	50	500	\$1,235	\$2,213	\$590	\$1,181
4	70	750	\$1,293	\$2,328	\$648	\$1,296
3	120	500+	\$1,379	\$2,501	\$734	\$1,469

114.92/hr

## TENDERS

TYPE	MIN TANK (GAL)	DAILY SS With OP	DAILY DS With OP	DAILY SS Without OP	DAILY DS Without OP
3	1000	\$828	\$1,512	\$468	\$936
2	2500	\$1,059	\$1,968	\$684	\$1,368
2	3500	\$1,155	\$2,160	\$780	\$1,560
1	5000	\$1,227	\$2,304	\$852	\$1,704

## PORTABLE PUMPS

There will be no payment for pumps unless the pump is hired through the resource order system.

### *Standard Method of Hire*

1. Dry
2. Daily/Weekly/Monthly
3. Without Operator

Payment is made for each day (24 hours) the pump is on the fireline – REGARDLESS of use hours.

Size		DAILY RATE	WEEKLY RATE	MONTHLY RATE
1 1/2" - 3.8 cm	Pressure pump	\$25	\$85	\$250
2" - 5.1 cm	Pressure pump	\$30	\$110	\$340
3" - 7.6 cm	Volume (trash) pump	\$45	\$130	\$380
4" - 10.2 cm	Volume (trash) pump	\$60	\$180	\$530
6" - 15.2 cm	Volume pump, trailer mounted	\$240	\$570	\$1,600

## POWER SAWS

### *Standard Method of Hire*

1. All operating supplies, including fuel
2. Daily Rate
3. Without Operator (operator/professional faller hired as a casual hire.)

Size Class	DAILY WET RATE
All Classes of Chainsaws	\$50

## MISCELLANEOUS EQUIPMENT

### ALL TERRAIN VEHICLES (ATVs)

### *Standard Method of Hire*

1. Daily/ dry
2. Without operator
3. Hire only ATVs with at least four wheels

DAILY RATE	\$70
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## MISCELLANEOUS EQUIPMENT, continued

### GATOR

Flat rate per day on the fireline regardless of hours operated.

*Standard Method of Hire*

1. Dry
2. Daily/Weekly/Monthly, dry
3. Without operator

DAILY RATE	WEEKLY RATE	MONTHLY RATE
\$95	\$260	\$775

### SHOP (SERVICE) TRUCKS

*Standard Method of Hire*

1. All operating supplies, including fuel
2. Hourly work rate with a 5 hour guarantee
3. One certified mechanic for single shift

Hourly Rate w/one Mechanic	Hourly Rate for Mech. Helper	Daily Guarantee
\$65	\$20	\$325

### MECHANIC WITH TOOLS & PICKUP

*Standard Method of Hire*

1. All operating supplies, including fuel
2. Hourly work rate with a 5 hour guarantee
3. One certified mechanic for single shift

Hourly Rate w/one Mechanic	Hourly Rate for Mech. Helper	Daily Guarantee
\$40	\$20	\$200

**FIRE REPORT AND BILLING RATES**  
**DNR EQUIPMENT**

<u>ITEM</u>	<u>RATE</u>
Supply Unit Trailer	\$540 day
Command Post	\$360 day
Shower Unit	\$360 day
Finance Unit	\$125 day
Fuel Truck	\$250 day
LAN Van	\$350 day
Potable Water Truck (wet rate)	\$250 day
Kitchen Unit (does not include crew)	\$650 day
Refrigeration Unit	\$275 day
Helicopter – DNR	\$2,500 flight hour
King Air – (includes pilot's regular time & fuel)	\$500 flight hour
PBY – Federal Agencies	\$675 flight hour
PBY – Non-Federal/Incident Cost Recovery	\$950 flight hour
Foam – All Users	\$73 per load (5 gal)
Probeye, Thermovision, GPS	\$20 hour
Hose (Lost) 1" Angus (cotton jacket)	\$130 per 100'
1-1/2" Angus (cotton jacket)	\$160 per 100'
Toy Hose	\$40 per 100'
Hose Repair	\$25 per break

# RESOURCE PAYMENT PROVISIONS

## PERSONNEL

All fire resources serving at the request of the Department of Natural Resources (DNR) will be paid the 2004 Interagency Wildfire Wage and Equipment Rental Rates as adopted by the Washington Department of Natural Resources. Any changes in rates must be accompanied by written justification from the Incident Commander, Division Supervisor, or Finance Section Chief to the Resource Protection Division Manager.

## TIMEKEEPING

All personnel time is documented on the Emergency Firefighter Time Report, form OF-288. Time for mobilization and demobilization must be kept separate from on fire time. Time must be recorded on a shift basis. Employees may not approve their own time worked. Division Supervisors and Section Chiefs must document time worked for subordinates on a Crew Time Report and turn time reports in daily to the Time Unit. Meal break and personal breaks must be recorded on Crew Time Reports.

## AGENCY PERSONNEL

Personnel from all agencies and career firefighters take the original OF-288 from the incident and deliver it to their home unit.

**NOTE:** Other State and local agency services that fall within that agency's responsibilities are not reimbursable and shall not be a cost to the incident. Examples are activities such as WADOT providing general traffic control or assistance on State roads or a law enforcement agency providing services/aid within their jurisdiction. Other services related directly to the fire, such as specifically requested personnel or equipment may be eligible for reimbursement. An example would be security for fire camp or aviation resources. If payment is to be made, the resource must be ordered through the proper channels. A resource order number is to be assigned and shift tickets/CTRs submitted tracking time.

When an organized crew is hired by the Department and the company retains their employees on the company payroll, the crew boss will deliver the original OF-288 to the company. The company will bill DNR at the standard rates listed in the wage rate table.

## CASUAL HIRES

Personal data listed on the OF-288 including Social Security number, name, and mailing address (where check should be sent), must be completed before payment can be made. An I-9 and W-4 must be completed at the time of each hire. All personnel must sign the OF-288. The agency making payment keeps the original OF-288.

**Pay Rate:** Individuals and non-contract crewmembers will be paid the wage rates listed in the wage rate table.

**Compensable Time:** Employees are compensated for on shift time. On shift time includes travel to and from the point of hire, related waiting time, and/or other travel necessary for the performance of work (such as from base camp to fireline), actual hours worked, and time when an individual is held, by direction or orders, in a specific location fully outfitted and ready for assignment, excluding time spent eating.

Travel time from and to the point of hire is allowed for one round trip. While traveling to and from incidents, OFM travel regulations apply for meal periods and reimbursement.

No travel time will be paid for personnel traveling at their own choice between place of residence, base camp, and/or point of hire. If DNR management decides personnel must return to their official residences or point of hire, then written justification must be attached to payment document before additional travel time will be allowed.

Additional travel time and mileage allowances must be authorized by written justification from a Division Supervisor, Incident Commander or Finance Section Chief and must be attached to the pay document.

**Non-Compensable Time:** Consists of time when individuals are off shift, including eating and sleeping periods and time when the individual can, to a limited degree, pursue activities of a personal nature.

**Workweek Defined:** Seven consecutive 24-hour days, beginning at 0001 on the first day of hire and ending at 2400 on the seventh day. The employee must be informed of the scheduled workweek and the workweek must be recorded on the OF-288. The employee must be employed by the state for 40 hours in the workweek at regular time prior to being paid overtime.

**Subsistence Procedures:** Meals will be provided for individuals staying at camp. No pay deduction is made for fire camp meals.

**Commissary:** Casuals hired by the State and regular State employees are not entitled to payroll deductions for commissary.

#### **FIRE DISTRICT PERSONNEL**

**Volunteer personnel** from fire districts will be hired as Emergency Firefighters at the rates listed in the wage rate table and paid according to the procedures for paying casual hires.

#### **Career Personnel:**

The Finance Section will complete the OF-288. Personnel wage rates for career firefighters shall be actual labor expenses and overtime rates according to each responding agency's labor contracts and pay schedules. The fire district or department will submit a bill documenting their costs to their home DNR Region including the original OF288, OF286 and associated shift tickets and/or CTRs. Any repair orders and fuel usage slips deducted from OF286 must also be attached. The home DNR Region will process the bill and send a copy to the appropriate DNR fire Region.

Career personnel who elect to take leave from their district or department to work for DNR will be paid using the pay rates for casual hires. Note: When career personnel are hired while on leave from their district, they will be covered under DNR L&I, not their fire district insurance.

#### **INMATE LABOR**

Adults and Juveniles – \$3.60 per hour is used on all incident reports and billings.

# EQUIPMENT PAYMENT PROVISIONS

All equipment hired by the State will be paid according to the Interagency Incident Equipment Rates or by a rate established on an Interagency Equipment Rental Agreement. Any changes in rates that exceed those established must be accompanied by written justification, addressed to the Resource Protection Division Manager. If equipment is hired under contracted rates, a copy of the contract must be attached to the OF-286 - Emergency Equipment Use Invoice (EEUI). A W-9 form must be completed at time of initial hire.

## RENTAL RATES

PAY RATES are listed in the rate tables. Transports licensed as common carriers are paid based on the tariff schedule. Pay for equipment rented at hourly rates accrues only when the equipment is under hire and on shift.

EQUIPMENT NOT LISTED in the rate tables should be rented at a reasonable negotiated rate. Reasonable means a rate comparable to that paid for equipment listed that is similar in type, size or function. The Finance Section Chief or Incident Commander must document the negotiation. Rates in the rate tables are for new, or like new, equipment.

HIRE AT WET RATES. Wet means the owners furnish all necessary fuel, maintenance and repairs due to ordinary use on an incident. Time for servicing and repair work is non-compensable. No rental will accrue during any period when equipment is inoperable. If DNR fuels or services equipment, a deduction for these services must be made on the Emergency Equipment Use Invoice, OF-286. Fuel tickets and/or repair orders shall be attached to the OF-286.

## SALES TAX

DNR is required to pay sales tax on purchased goods and services. If a Washington state vendor or out-of-state vendor is not registered with the Department of Revenue (DOR) to collect sales tax, then DNR is required to collect Use Tax and remit it to DOR. If the vendor provided goods or services for an Oregon fire, no sales tax or use tax shall be paid.

### SALES TAX SHOULD BE ADDED IF:

- Payment is to any business (company or person registered with DOR that has a tax reporting UBI number) that is located in the state of Washington.
- Payment is to any fire department/district registered with DOR to collect sales tax. (If in doubt, call fire department/district.)
- Payment is to an out-of-state vendor who is registered with DOR to collect sales tax.

### WRITE "USE TAX" ON the PAY DOCUMENT IF:

- Payment for equipment hired is to an individual (not a registered business) no matter where he/ she resides.
- Payment is to a Washington company not registered with DOR to collect sales tax. Some types of business are exempt from collecting sales tax, such as farmers/agricultural businesses.
- Payment is to any out-of-state vendor that is not registered with DOR to collect sales tax.
- Payment is to any branch of the federal government.
- Payment is to any fire department/district not registered with DOR to collect sales tax. (If in doubt, call the fire department/district.)

**Note:** If a fire crossed county lines, use the county location code for the origin of the first fire. If the fire suppression activities qualify for a Fire Management Assistance Grant (FMAG), the coding is separated by project code, the sales tax/comp tax being divided accordingly between the two projects.

## TIME RECORDING

The State Agent responsible for ordering and/or directing use of each piece of equipment shall keep time on an Emergency Equipment Shift Ticket rounded as follows:

Hourly Rate - nearest half hour

Daily Rate - nearest half hour

Mileage Rate - nearest mile

Record all time periods where the equipment is inoperable or unavailable.

All mileage, hourly or flat rate rental amounts will be kept on a daily shift basis. Mobilization and demobilization mileage/hours will be recorded separately.

Use hours for all rented equipment shall be recorded on an Emergency Equipment Use Invoice, form OF-286. Make all entries on the OF-286 from a shift ticket signed by the Equipment Group Supervisor, Division Supervisor or Operations Section Chief. Hours worked shall be verified by contractor's or contractor's representative's signature.

## TIME UNDER HIRE

The time under hire shall start at the time the equipment begins traveling to the incident after being ordered by the State, and end at the estimated time of arrival back to the point of hire after being released, except:

- If equipment is brought to the fire, made available and subsequently hired, none of the travel is allowed.
- Equipment that fails the pre-use inspection and is not in safe and operable condition will not be reimbursed for travel and is not considered under hire.

No payment will accrue during any period that equipment is not in a safe or operable condition or when Contractor / Owner -furnished operator(s) is not available **for the assigned shift or portions of the assigned shift. Reimbursement will be based on the hours the equipment was operational during the assigned shift, as documented in the Incident Action Plan.**

### **Example:**

*The assigned shift in the Incident Action plan was from 0600 to 1800 hours (12 hours) and the equipment was broken down from 0900 to 1800 hours (9 hours) during the assigned shift. Therefore, the Daily Rate or Guarantee would be 3/12 or ¼ of the amount shown.*

If the owner withdraws equipment and/or operator(s) prior to being released by the State, no further payment shall accrue and the owner shall bear all costs of returning equipment and/or operator(s) to the point of hire.

After inspection and acceptance for use, equipment and/or furnished operator(s) that cannot be replaced or equipment that cannot be repaired at the site of work within 24 hours may be demobed. The State will bear the costs of returning equipment and/or operator(s) to the point of hire as promptly as emergency conditions will allow.

## **ON SHIFT**

On shift time for equipment hired by the hour includes time of actual work, time that equipment is held or directed to be in a state of readiness, and compensable travel (mobilization) that has a specific start and ending time. Transported equipment is not on shift while being transported and is not compensated for travel.

## **DAILY GUARANTEE**

Daily guarantee for equipment hired by the hour is noted in the rate tables. Daily minimum guarantee applies only to equipment hired at an hourly rate and on incidents that require extended attack. The daily minimum payment is used in lieu of standby rates for equipment rental. A daily minimum will be paid to provide fair compensation when an operator/owner makes equipment available for use, but the resulting use is less than expected during a calendar day. If compensated hours are more than the daily minimum listed, then actual hours worked are to be paid. If compensated hours are less than the daily minimum listed, then the daily minimum hours are paid. Daily guarantee is adjusted when equipment is under hire for less than 8 hours in a day. Interagency contracts may have a guarantee that is different from daily minimum listed in the rate tables. Read the contracts for detail.

## **DAILY RATE \*\*\*\*\***

\*\*\*\*\*Daily Rate payment will be made on a shift basis (24 hour period, updated from calendar days 0001-2400). For fractional days at the beginning and ending of time under hire, payment will be based on 50 percent of the Daily Rate for periods less than 8 hours under hire.

Daily Rate may be with or without operator

Daily Rate Single Shift - (SS) is staffed with one operator and/or one crew

Daily Rate Double Shift - (DS) is staffed with two operators or two crews (one per shift). The DS rate will apply any calendar day the DS was ordered and under hire, including travel.

Agency personnel at the Section Chief Level may, by written order, authorize a second operator or crew (Double Shift), if needed during the assignment.

## **SINGLE SHIFT**

More than 8 hours in a 24 hour period when equipment is operating, held or directed to be in a state of readiness, and conducting compensable travel. **Note:** Equipment ordered for a single shift but is on shift for more than 16 hours in a 24-hour period does not receive additional compensation.

## **VEHICLES BELONGING TO OPERATIONS LINE PERSONNEL, FALLERS & CASUALS**

Operational Line Personnel and Fallers are hired for their technical support. Line Personnel (DIVS, Safety, etc.) and Faller vehicles which are required to support their day to day operations on the incident will be paid at \$0.45 per mile from the point of hire to the base camp; from the base camp to the fire line and return; and from the base camp to the point of hire, upon release. There is no minimum guarantee for mileage each day. Payment is based on actual miles and paid on an OF286.

Overhead personnel who use their vehicles primarily to transport the individual from their place of dispatch to the incident and from the incident back to their point of dispatch or to a new incident, and do not need day to day use of their vehicle on the incident will be reimbursed for their vehicle mileage through a travel expense voucher (regular State employees) or an A-19 Invoice voucher (casuals) as specified in the state travel rules.

### **TRANSPORTATION VEHICLES WITH OPERATOR**

Vehicle with Emergency Firefighter Operators hired for the sole purpose for the use of the vehicle will be paid at the mileage rate or daily guarantee, which ever is greater, as published in the rate tables.

### **HEAVY EQUIPMENT/TRANSPORTS**

When a lowboy and another piece of heavy equipment, such as a dozer, are provided with a single operator to operate BOTH pieces of equipment, adjustments to the payment amount will be made as follows: Dozer or other heavy equipment will be paid at the actual rate, and the transport rate will be reduced by \$390.00 for a Single Shift, and by \$624.00 for a Double Shift.

### **SERVICE VEHICLES**

The rate of pay shown for heavy equipment includes service vehicles. No additional payment will be made for a service vehicle (or operator) that accompanies the heavy equipment to the incident.

### **PILOT/FLAG VEHICLE(s)**

The pay rate includes pilot/ flag vehicles. No additional payment will be made for pilot/flag vehicles or operators.

# ENGINE/TENDER INVENTORIES/ACCESSORIES

## ENGINES

Accessories required if the pump is operated by an auxiliary engine:

Sufficient extra spark plugs to replace all plugs in engine in any auxiliary pump engines used

- 1 - wrench, adjustable, 10"
- 1 - wrench, spark plug, unless the adjustable wrench is suitable for use with spark plugs
- 1 - pliers, slip joint, 6"
- 2 - quarts oil, crankcase, if engine is the type that requires crankcase oil
- 1 - screwdriver, blade type, 4"
- 1 - screwdriver, phillips type, 4"
- 2 - rope starters, if engine can be started with a rope
- 1 - gun, grease (filled), if the pump type requires periodic greasing

These accessories shall be stored on or near the pump in a suitable compartment or box. A list of the contents shall be posted inside the compartment or box and be visible when the storage compartment is open.

## PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING

- Boots, leather, lace-up type, minimum 8" high, with lug-type sole
- Hard Hat, PLASTIC, with chinstrap – 1 per person
- Gloves, leather - 1 pair per person
- Goggles – 1 pair per person
- Canteen, one-quart size - 1 per person
- Fire Shelters – 1 per person
- Flame Resistant Clothing (shirt and trousers)

## MANDATORY ACCESSORIES FOR ALL ENGINES

- Fuel to operate for 12 working hours
- 1 - suction screen to match capacity of pump
- 1 - spanner wrench, suitable to fit ALL sizes of hose supplied
- 1 - hose clamp
- 1 - compartment box for accessories with visible list of contents

## MINIMUM ENGINE INVENTORY

- Hose: 400' – 1-1/2"
- Nozzles: Combination Fog/Straight Steam – 4 each, 1"
- Suction Hose with Screened Foot Valve or Strainer: 24' of 2-1/2"
- Shovels: 2 each (size0)
- Pulaksi: 2 each
- Fire Hose Clamp: 1 each
- Spanner Wrench: Combination, 1 each, 1" to 1-1/2"
- Live Reel/Basket Hose: 200', 1" NPSH
- Adapters: 2 each, 1-1/2" NF Female to 1-1/2" NPSH Male
- Adapters: 2 each, 1-1/2" NPSH female to 1-1/2" NH Male
- Double Male: 1 each, 1-1/2" NH
- Double Female: 1 each, 1-1/2" NH
- Double Male: 1 each, 1" NPSH
- Double Female: 1 each, 1" NPSH
- Gated Wye: 4 each, 1-1/2" NH
- Reducers: 4 each, 1-1/2" NH to 1" NPSH Male
- Adapters: 2 each, ¼ turn to 1-1/2" NH (1 Female and 1 Male)

## ENGINE/TENDER INVENTORIES/ACCESSORIES (CONT.)

### MINIMUM ENGINE INVENTORY (CONT.)

BackPack Pumps: 2 each  
Drinking Water: 1 Gallon Canteen, filled  
First Aid Kit: 1 each, 5-person  
Head Lamps: 3 each (w/batteries)  
Fuel to operate pump and engine (minimum 5 gallons)  
Fire Shelter – 1 per person (NFPA Approved)

### TENDERS:

Pump GPM:		200gpm – all types
Discharge Outlets:	Type 1	2 each – 1-1/2" NH thread
		1 each – 2-1/2" NH thread
	Type 2 & 3	2 each, 1-1/2" NH thread
Hose:	All Types	200' – 1-1/2" NH thread
		30' – 2-1/2" NH thread
1" Combination Nozzle: All Types		1 each with 1-1/2" NH thread
Suction Hose w/Screened Foot Valve or Strainer	All Types	24'
Adapters:	All Types	2 each – ¼ turn 1-1/2" NH adapter (1 Female and 1 Male) 1 each – 1-1/2" NH Double Male 1 each – 1-1/2" NH Double Female 1 each – 1-1/2" NH Gated Wye 2 each – 2-1/2" NH to 1-1/2"NH Reducer 2 each – 1-1/2" NH Female to 1-1/2" NPSH Male Adapter
Firefighting Tools:		1 each – Shovel (size0)
		1 each – Pulaski
		1 each – Fire Shelter

### MANDATORY ACCESSORIES REQUIRED TO BE WITH EACH TENDER

Fuel to operate the pump and engine for 12 working hours  
1 (one) suction screen suitable to match the capacity of the pump  
1 spanner wrench, suitable to fit each size hose supplied, including suction hose  
1 hose clamp  
1 hydrant wrench

### THE FOLLOWING ARE SPECIFIC SAFETY ITEMS REQUIRED FOR VEHICLES:

Reflective flairs, 1 set of 3  
Fire extinguisher (4BC or better)  
Wheel chocks  
Warning Device

**EXHIBIT H**

**FAA LETTER AND DETERMINATION OF NON HAZARD  
CERTIFICATE**

**RAFT** \_\_\_\_\_

**From:** robert.van-haastert@faa.gov [mailto:robert.van-haastert@faa.gov]  
**Sent:** Tuesday, November 15, 2005 3:27 PM  
**To:** Valerie Schafer  
**Subject:** Re: County permit for Kittitas Valley

Valerie,

The Determinations will not change with slight changes (feet not miles) in the lat/long positions of this Wind Turbine project, as long as they are all within the same "box/geographical location." Any change in the number of wind turbines in this project will necessitate revalidation of lighting requirements but the overall Determinations won't change.

If the county would like me to call them, please pass me the contact information.

Robert van Haastert  
Anchorage OES / AAL-535  
work: (907) 271-5863; fax: (907) 271-2850



Federal Aviation Administration  
 Northwest Mountain Regional Office  
 1601 Lind Avenue SW-ANM-520  
 Renton, WA 98055-4056

Aeronautical Study No.  
 2004-ANM-1200-OE

Issued Date: 10/8/2004

ANDREW YOUNG  
 SAGEBRUSH POWER PARTNERS LLC  
 210 SW MORRISON ST SUITE 310  
 PORTLAND, OR 97204

**\*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\***

The Federal Aviation Administration has completed an aeronautical study under the provisions of 49 U.S.C., Section 44718 and, if applicable, Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure Type: Wind Turbine  
 Location: ELLENSBURG, WA  
 Latitude: 47-9-26.87 NAD 83  
 Longitude: 120-42-29.22  
 Heights: 410 feet above ground level (AGL)  
 3092 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that the enclosed FAA Form 7460-2, Notice of Actual Construction or Alteration, be completed and returned to this office any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

As a result of this structure being critical to flight safety, it is required that the FAA be kept appraised as to the status of the project. Failure to respond to periodic FAA inquiries could invalidate this determination.

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking and/or lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory Circular 70/7460-1 AC70/7460-1K.

This determination expires on 4/8/2006 unless:

- (a) extended, revised or terminated by the issuing office.
- (b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE POSTMARKED OR DELIVERED TO THIS OFFICE AT LEAST 15 DAYS PRIOR TO THE

EXPIRATION DATE.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission if the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (425)227-2538. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2004-ANM-1200-OE.

Signature Control No: 393386-316543

(DNE)

James D Lambert  
Specialist

7460-2 Attached