

BEFORE THE STATE OF WASHINGTON
ENERGY FACILITY SITE EVALUATION COUNCIL

In the Matter of Application No. 2003-1:

Sagebrush Power Partners, LLC;
Kittitas Valley Wind Power Project

APPLICANT'S OPENING STATEMENT

INTRODUCTION

Sagebrush Power Partners, LLC (the Applicant) proposes to construct and operate a wind powered electrical generation facility in Kittitas County, Washington. The Kittitas Valley Wind Power Project (KVVPP) would consist 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.

On January 13, 2003, the Applicant filed an Application for Site Certification (ASC No. 2003-01) with the Washington State Energy Facility Site Evaluation Council (EFSEC) in accordance with Washington Administrative Code (WAC) 463-42. The Applicant chose to seek certification of this KVVPP 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.

PURPOSE OF THE PROJECT

The purpose of the KVVPP is to construct and operate a new electrical generation resource using wind energy that will meet a portion of the projected growing regional demands for electricity produced from renewable resources. Recent national and regional forecasts predict increasing consumption of electrical energy will continue into the foreseeable future.

Many regional utilities 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 have all completed detailed studies and demand forecasts of their own systems as part of their Integrated Resource Plan (IRP) or Least Cost Plan (LCP) processes with oversight from the Washington Utilities and Transportation Commission (WUTC). As a result of their formal IRP or LCP processes, PSE, PacifiCorp and Avista have issued Requests for Proposals (RFPs) specifically for wind power and/or other renewable resources. Avista is seeking to acquire 50 MW, PSE is

seeking to acquire at least 150 MW, and PacifiCorp is seeking to acquire 500 MW. There is thus a regional demand for wind generated energy that greatly exceeds the existing regional supply.

According to testimony submitted by Tony Usibelli, Director of the Energy Policy Division of the Washington State Department of Community, Trade and Economic Development (CTED), it is the policy of the state of Washington to support the development of wind energy facilities. Guiding Principle #2 of the State Energy Strategy is to "Encourage the development of a balanced, cost-effective and environmentally sound resource portfolio that includes conservation, renewables (e.g., wind, geothermal, hydro, biomass, and solar technologies), and least-cost conventional resources." Mr. Usibelli has stated that the Applicant has proven through evidence to date, that the Kittitas Valley Wind Power Project will be a reliable, cost-effective, environmentally sound energy resource.

Testimony submitted by consulting meteorologist Ron Nierenberg states that economically viable and developable sites for wind power in Washington state are scarce. Subtle differences in wind speed have a profound effect on the amount of wind energy that can be generated. A difference of a few mph in the average long term wind speed can mean a difference of 30% in wind energy. This difference in wind energy accounts for the difference between a site that is viable versus a site that is not for a wind power project.

PREEMPTION

The Project has been determined by EFSEC not to be consistent with the Kittitas County zoning ordinance and comprehensive plan pursuant to WAC 463-28-030 and entered Order No. 776 on May 7, 2003. EFSEC entered an Order finding that the Applicant's proposal was not consistent with local land use plans and zoning ordinances and directed that the Applicant undertake further actions. The Applicant was ordered by the Council to make the necessary applications with the County and report back to the Council on the "status of negotiations" within 90 days concerning whether the efforts were successful or to file a request for preemption or extension thereof. The first 90-day period in which the Applicant was required to obtain consistency commenced to run. At the May 12, 2003 EFSEC meeting, the Applicant requested and received an extension of the time for filing a preemption request until September 1, 2004. Later the Applicant requested and EFSEC granted an extension to January 15, 2004 and subsequently to February 12, 2004.

The Applicant made a good faith effort to obtain consistency until it had no reasonable alternative but to file a request for preemption. The Applicant filed its request for preemption on February 9, 2004. As detailed in the Applicant's Request for Preemption and the testimony of Chris Taylor and Roger Wagoner, the fundamental reasons for the Applicant's request for preemption are the County's refusal to accept EFSEC's jurisdiction in the siting of the Project and the County's rejection of EFSEC's SEPA lead agency status and authority. The prehearing motions to stay filed by Kittitas County confirm the Applicant's assertion that Kittitas County does not recognize EFSEC's siting

and SEPA authority in this matter. Details of the facts and legal basis for the request for preemption are set out in the Applicant's Request for Preemption and the testimony of Chris Taylor and Roger Wagoner, and are thus not repeated here.

PROJECT DESCRIPTION

The Project will entail the construction of between 82 and 150 wind turbine generators with a total nameplate capacity of between 181.5 and 246 MW and associated components.

The final selection of the exact type and size of wind turbine to be used for the Project depends on a number of factors including equipment availability at the time of construction. The number of turbines and the resulting nameplate capacity of the Project would depend on the make and model of turbine used. Therefore, to capture a "reasonable range" of potential Project impacts, the following three Project scenarios have been analyzed:

- 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: The middle scenario represents the Project configuration that would be chosen based on current pricing and performance for wind turbine technology currently on the market. 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.

The Applicant's review and analysis of the impacts covers the range of impacts within each of the three scenarios. The Applicant is asking the Council's permission to construct and install turbines within this defined range.

The facilities, equipment, and features to be installed as part of the Project include:

- 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,
- one or two substations,
- one 5,000-square-foot operations and maintenance facility with parking, and
- up to nine permanent meteorological towers.

The KVVPP would be constructed across a land area of approximately 7,000 acres in Kittitas County, although the actual permanent facility footprint would comprise between 93 to 118 acres of land under the middle and lower end scenarios, respectively. (Note that the lower end scenario has a larger footprint because it would require wider roadways to accommodate bigger turbine towers.) The majority of the KVVPP 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 and operation. In June 2003, the Applicant executed a lease agreement for use of DNR property in the Project area.

IMPACTS OF THE PROJECT

Earth Resources

The EFSEC DEIS found no significant impacts on soil, topography, and geology resulting from construction of the Project.

Vegetation

Implementation of the proposed Project would result in the some minor loss of vegetation through clearing and ground disturbance. This includes approximately 100 acres of shrub-steppe vegetation in poor to good condition. Shrub-steppe habitat impacts have been fully mitigated, in accordance with WDFW guidelines, by the acquisition, enhancement and protection for the life of the Project of over 500 acres of suitable, on-site habitat. No federal or state listed rare plants were identified at the Kittitas Valley Project site.

Wetlands

The Project would disturb between approximately 135 and 185 square feet of one small potential wetland system at the Project site which will be mitigated by the acquisition of comparable wetland habitat within the mitigation parcel described earlier. Testimony submitted by Thomas Tebb of the Department of Ecology states that the Applicant's proposed mitigation measures for wetlands are adequate.

Wildlife

Extensive wildlife studies have been completed to characterize the existing wildlife present at the Project site and estimate potential impacts to wildlife from construction and operation of the Project. The Applicant contracted with CH2MHill, Western Ecosystems Technology, Inc. (WEST), and Northwest Wildlife Consultants, Inc. to develop and implement a survey protocol for a baseline study of wildlife and habitat in the Project

area. WDFW and USFWS personnel were actively involved in the development and review of the survey protocols, which are consistent with WDFW's wind power guidelines.

Ecological baseline studies were conducted from February 2002 through early November 2002 and consisted of point count and in-transit surveys for wildlife species with an emphasis on birds and big game. In addition, two aerial surveys within approximately two miles of the Project boundary were completed to identify raptor nests in the spring of 2002 and nine driving transect surveys were completed to estimate the number of wintering bald eagles in the Project vicinity.

Some bird and bat fatalities are anticipated from the Project. The impact analysis considered the three different scenarios for turbine sizes and numbers. Based on the avian use studies conducted at this site, and the results of studies at other projects, approximately 2 to 3 bird fatalities per turbine (for the range of turbine sizes, which may be utilized for the Project) per year are anticipated. A variety of species may be found as fatalities, and no individual species are expected to account for a large proportion of the mortality. No significant impacts to individual species populations are anticipated. The actual rates may be lower or higher, but the majority of raptor fatalities are expected to be American kestrels and red-tailed hawks, two very common raptor species. These fatality rates, or even significantly higher fatality rates, would not be expected to have population level consequences for the likely species impacted.

Based on the results of studies at other wind projects in the west, approximately 2 bat fatalities per turbine per year are anticipated, with most of the fatalities consisting of hoary and silver-haired bats. The significance of this impact is hard to predict since there is very little information available regarding bat populations. In response to increased interest in the effects of wind turbines on bats, a collaborative research effort on bat-wind turbine interactions has recently been launched. Many of the leading bat experts in the US and abroad are involved in this effort. Participants include the USFWS, Bat Conservation International, US Dept. of Energy, and the American Wind Energy Association (AWEA.) The Applicant has offered three years of financial support to this collaborative bat research effort to help identify strategies to avoid and mitigate impacts to bats.

Although estimated to be small, there is some likelihood of bald eagle mortality during the life of the Project. The Applicant, under section 10 of the ESA, is developing a Habitat Conservation Plan (HCP) to address the possible take of bald eagles. It is important to note that no bald eagle has ever been documented as a fatality at any existing wind power project, despite the fact that many of these projects are located in areas where bald eagles are known to be present.

Based on the available information from other wind power projects, it is probable that some displacement effects may occur to avian species occupying the grassland/shrub-steppe habitats within the study area. The extent of these effects is expected to be small (zero to several hundred feet) and would be consistent with effects from road

development in general. Given the low raptor nest density near turbines, few if any breeding raptors are expected to be displaced.

Some displacement impacts to wintering big game may occur in the Project area, although significant amounts of human activity have already occurred within the Project area. Because disturbance levels will not greatly increase beyond what was observed pre-project, impacts are expected to be very low or non-existent. Construction impacts to wintering big game are expected to be low, given that the heavy construction such as road and foundation construction will occur outside the critical winter months.

The Applicant proposes several measures, consistent with the WDFW's wind power guidelines, to minimize and mitigate impacts to wildlife. These include project design features, siting, and mitigation for habitat loss. The Applicant proposes to develop a post-construction monitoring plan for the Project to quantify impacts to avian species and to assess the effectiveness of mitigation measures implemented.

Monitoring data will provide direct measures to the mortality levels. The Applicant plans to convene a Technical Advisory Committee (TAC) to evaluate the mitigation and monitoring program and determine the need for further studies or mitigation measures. Proposed membership of the TAC will include representatives from EFSEC, Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, local interest groups Project landowners, and the Applicant. The role of the TAC will be to review information regarding mitigation measures, studies to monitor impacts to wildlife and habitat, and address issues that arise regarding wildlife impacts during construction and operation of the wind plant. The post-construction monitoring plan will be approved by EFSEC, based on the recommendations and in coordination with the TAC.

Approximately 90 acres of habitat will be recovered for the life of the Project, due to the footprint of the Project. Another 310 acres will be temporarily impacted during construction. The Applicant proposes to purchase, enhance and protect, for the life of the Project, a large area of habitat on-site to mitigate for direct and temporary loss of habitat. This privately owned parcel, which is located in Sections 22 and 27, Township 19 North, Range 17 East, and is adjacent to land owned by the Washington DNR, is currently under threat of development. This parcel is approximately 550 acres in size. The mitigation parcel is suitable according to the WDFW. Testimony by Ted Clausing, the Regional Habitat Program Manager for the WDFW, states that the mitigation measures proposed by the Applicant for the KVVPP are consistent with WDFW Wind Power Guidelines. Using these Guidelines, the Applicant would be required to mitigate for a maximum of 345 acres of suitable habitat, and the mitigation parcel is approximately 550 acres, far exceeding the requirement for habitat mitigation.

Fisheries

No impacts on fish habitat or fish species associated with construction and operation of the KVVPP are anticipated.

Water Resources

Precipitation could result in surface runoff from Project facilities during Project construction and operation. However, the Project site grading plan and roadway design will incorporate measures in line with the Storm Water Pollution Prevention Plan (SWPPP) and Best Management Practices (BMPs) to ensure that surface runoff will infiltrate directly into the surface soils surrounding Project facilities. The EFSEC DEIS has found there would not be a potential for significant impacts from the Project. According to testimony submitted by the Counsel for the Environment, Thomas Tebb, Section Manager for the Water Quality Program of the Washington State Department of Ecology, believes the Applicant has identified and addressed all of the foreseeable potential impacts associated with protection of surface and groundwater quality, as well as the necessary mitigation measures for erosion protection associated with the Project.

Health and Safety

Risk of Fire and Explosion

Unlike thermal power plants, wind power projects pose a minimal risk of explosion or fire potential, as there is no need to transport, store or combust fuel to generate power. As with any major construction undertaking, construction of the Project does present some fire risks. Fire risk minimization will be incorporated into Project design, especially with electrical design that complies with the National Electric Code (NEC). The Project site roads act as firebreaks and also allow for quick access of fire trucks and personnel in the event of a grass fire. EFSEC, as well as the appropriate local fire district will review and approve all plans developed for the Project before they are implemented. The Applicant is in the process of finalizing a fire protection contract with the local fire district. The Fire Protection and Prevention Plan will include specifics regarding range fire prevention and property protection and will be submitted to EFSEC for review and approval prior to commencement of Project construction.

Electromagnetic Fields (EMF)

EMF is associated with electric transmission and is not specific to wind power projects. Electromagnetic fields are only ever considered a possible issue when associated with the siting of high voltage (115kV+) overhead transmission lines in close proximity to residences. EMF is generally not an issue related to wind turbines, which have low voltage drop-cables (575 – 690V) contained within steel towers and have a predominately underground collection system also at a low voltage (34.5 kV). For this Project, potential for EMF exposure is very low because the collector lines pass over and through undeveloped land. The high voltage transmission feeder lines are less than ¼ mile long have been sited along a path that does not bring them close to nearby residences or developed areas where people spend time.

Releases of Hazardous Materials

Petroleum fuels are the only potentially hazardous materials that will be used in any significant quantity during construction of the Project. Fuel and lubricating oils from construction vehicles and equipment and the mineral oil used to fill the substation transformer(s) are the only potential sources for a spill. However, this type of leak should not create a risk to health and safety or the environment because of the limited quantities of the materials involved. Measures to prevent and contain any accidental spills resulting from this fuel storage and use will be implemented and approved by EFSEC prior to construction. Construction of the Project will not result in the generation of any hazardous wastes in quantities regulated by state or federal law.

Operation of the Project will not result in the generation of regulated quantities of hazardous wastes. As no fuel is burned to power the wind turbine generators, there will be no spent fuel, ash, sludge or other process wastes generated. Testimony submitted by Thomas Tebb of the Department of Ecology states that the mitigation measures for release of hazardous materials proposed by the Applicant are adequate.

Ice Throw, Tower Collapse and Blade Throw

While more than 55,000 wind turbine generators have been installed worldwide, there has been no reported injury from ice thrown from wind turbines. Studies of long-term weather data for the area by the Applicant's consulting meteorologist indicate that icing conditions occur on average 3 to 5 days per year. Minimum setbacks incorporated into the proposed Project layout together with an automatic shut down system for icing conditions would minimize the safety risks associated with ice throw and other safety and nuisance concerns.

The testimony of the Applicant will show that tower collapse is extremely rare and highly unlikely. Minimum setbacks, which meet or exceed Kittitas County building setback standards, are incorporated into the proposed Project layout and will reduce the already low safety risks associated with tower collapse and other safety and nuisance concerns.

According to testimony submitted by Daniel Kammen, professor and director of the Renewable and Appropriate Energy Laboratory of the University of California at Berkeley, the probability of a member of the public being killed or seriously injured as a result of blade throw, tower collapse or ice throw is less than 1 in 1 billion. Members of the public have a greater risk of being killed by common activities such as riding a bike, driving a car, or eating peanut butter.

Shadow Flicker

Shadow flicker, or strobe effects, can occur only if the turbine is located in close proximity to a receptor and is in a position where the blades interfere with very low-angle sunlight. The Project is not expected to result in any significant shadow flicker effects to any sensitive receptors, such as residences, due to the distance of more than 1,000 feet to

the nearest residence of any non-participating landowner. The Applicant conducted a shadow flicker analysis based on conservative assumptions which established that there would not be light flickering of significant intensity even to the nearest non-participating residence. There are no credible or scientific studies that document that shadow flicker adversely affects humans or animals.

Land Use

During Project construction, from 231 acres to 371 acres of land would be altered. Construction activities would temporarily interfere with existing rangeland uses. Temporary land use disturbance would result from construction of turbines, roads, substation(s), meteorological towers, overhead poles, and the O&M facility. Direct construction impacts are anticipated to be moderate but temporary, lasting less than one year, during which there may be some temporary disruption of grazing activities on portions of the Project site. Proposed Project facilities would result in the permanent conversion of 93 to 118 acres of land from open space/cattle grazing/rangeland to energy production. Permanently converted acreage would represent a small portion of the 7,000 acres of rangeland within the Project area and the 445,000 acres of pasture or unimproved grazing land in Kittitas County. In this context, loss of grazing land on the Project site would not likely adversely affect the productivity of cattle grazing operations

Socioeconomics

The effect on population would be small because the projected number of temporary immigrants for the construction period (177 employees) is small compared to the overall county population (33,362 in 2000), no significant impacts on population are anticipated. Because the Project would not generate additional development, no indirect impacts on population are anticipated.

No adverse impacts are expected to housing because surveys have shown there is an adequate local housing supply available to accommodate Project-related demand for temporary rental housing.

Project construction would result in increased employment in Kittitas County. It is estimated that about 30 to 50% of the direct construction employment impact (76 to 127 jobs) would occur within Kittitas and Yakima counties, with the remainder distributed among other local economies in the Northwest

Total direct income generated during the construction phase of the Project is estimated to be \$4,577,100 (in 2002 dollars) under the middle scenario. Total income consists of personal income in the form of wages, profits, and other income received by workers and business owners, plus income from other sources such as royalty payments to land owners who lease land for the turbines. The direct income impact from Project construction would be a temporary but beneficial effect to the Kittitas County economy.

While the KVVWPP is expected to create construction employment, economic impacts are not limited to those directly created jobs. Direct economic impacts produce a ripple effect through an economy in the form of indirect impacts and induced impacts. Indirect and induced impacts represent the second and third stages of job creation, respectively, as a result of any direct activity. The following is an estimate of the direct and indirect income resulting to the County during the construction phase.

Impact Type	Jobs	Total Income
Direct	40	\$4,577,100
Indirect	14	\$518,100
Induced	28	\$701,800
TOTAL	82	\$5,797,000

The Project is expected to generate well over \$1 million per year in property taxes which is more than the current top ten taxpayers in Kittitas County combined. This new source of revenue is expected to reduce property tax rates on other taxpayers and to help fund needed public services, such as schools and roads.

There is no credible evidence that the Project will have a negative affect on the property values in the County. The Applicant submitted the REPP study regarding the impact on property values related to wind farms, which find no evidence that wind development had harmed property values within the viewshed (REPP 2003) of wind power facilities. The Applicant submitted testimony of Barton DeLacy who reviewed and analyzed changes in property values throughout Kittitas County over a 6 year period; 4 years, before the announcement of the Kittitas Valley Wind Power Project, and the two years thereafter. Mr. DeLacy found no change in appreciation of property values between those properties which had a view of the Project or were in close proximity thereto, and those that were not. Furthermore, non-Project factors, including the presence of the existing BPA and PSE transmission line towers near the Project, along with other general market factors, indicate there will be no effect on property values. Therefore, no long-term impacts to property values are expected as a result of the Project.

Transportation

No adverse impacts to transportation have been identified that cannot be mitigated by the suggestions set out by the Applicant and the EFSEC DEIS. The Applicant has consulted extensively with both Washington State Department of Transportation and Kittitas County Public Works Department to develop adequate transportation mitigation plans.

Air Quality

Operation of the Project will not result in any direct air emissions. The Project will result in positive indirect impacts on regional air quality to the extent that the power generated from the Project displaces power which would otherwise be generated by the combustion of fossil fuels.

During construction, the types of direct impacts to air quality would be typical of those associated with any large construction project. Indirect impacts in the immediate vicinity are not anticipated because the Project is not expected to substantially induce regional growth to the extent that would result in significant changes to offsite air quality.

The primary type of air pollution generated during Project construction would be emissions from vehicle and equipment exhaust, and fugitive dust particles from travel on paved and unpaved surfaces. The fugitive dust particles occur when disturbed soils become airborne. Exhaust emissions and fugitive air emissions from construction sites are exempt from air emission permitting requirements. The Applicant has proposed adequate mitigation measures to minimize fugitive dust impacts.

Visual and Aesthetic

The Applicant carried out an extensive visual simulation analysis, which is set out in the ASC. For the Project, the primary concern is the potential aesthetic and light and glare impacts of the proposed wind turbines. The Project's aesthetic impacts during the operational period are summarized in the EFSEC Application in Table 5.1.4-2, and presented in more detail in Table 5.1.4-3. From 10 of the 16 viewpoints used for analysis, the visual impacts of the Project will be low. In most of these 10 areas, the impacts are low because the turbines are seen in the distance, where they tend to have a relatively low level of visual contrast with their surroundings, which reduces their noticeability and limits their apparent effect on landscape vividness, unity, and intactness.

From 7 of the 16 viewpoints, the Project's effects will be moderately low to moderate. In these areas, the turbines will be visible, but their degree of visual contrast with their settings will in many cases be relatively low and in some situations will appear to be in scale with existing transmission towers.

There are a few specific places where residences and heavily traveled roadways are located in close proximity to the turbines where the Project will be of more visual concern. According to the testimony of Dr. Thomas Priestley some viewers are likely to find that because the turbines have an attractive design and are sited along ridgelines in an orderly and uncluttered way, their presence will not necessarily create a change in the setting's existing moderate level of visual quality. However, to reduce the Project's visual effects in these areas, the Applicant has incorporated siting and design measures to minimize adverse visual effects. Some of these measures include painting the turbines with a neutral, low-reflectivity, gray finish to minimize reflections and contrast with the sky backdrop; keeping the number of exterior lights on the turbines to the minimum

required to meet FAA standards; and minimizing the amount of time that turbines appear to be non-operational, a condition that the public often finds to be unattractive.

It is important to note that visual impacts are ultimately a subjective and personal issue that depends on the viewer's location and sensitivity to views of wind turbines. As noted in the DEIS, "a project that significantly affects a small number of viewers may be offset by the fact that it may have a relatively low impact on a large number of viewers".

Noise

Noise generated by construction of the Project is expected to vary, depending on the construction phase (see Section 2.12.2, 'Construction Schedule, Activities and Milestones'). The Application for Site Certification lists the typical noise levels associated with common construction equipment at various distances. These levels range from 54 to 62 dBA at 1000 feet from the source. All noise-generating construction activities will be conducted between the hours of 7 a.m. and 10 p.m. and are therefore exempt from the State of Washington Noise Limits which are 60 dBA (daytime) and 50 dBA (nighttime) at residential properties (per 173-60-050 WAC). Blasting is anticipated for the foundations and potentially some road areas. Blasting will be conducted only between the hours of 7 a.m. and 10 p.m. and is anticipated to occur over a period of about eight weeks. Blasting activities are specifically exempted from the noise regulations (per WAC 173-60-050 (1)(c)).

Testimony submitted by Mark Bastasch of CH2MHILL states that the noise generated by the Project during operations is likely to be most noticeable at low wind speeds (8-10 mph) near the speed at which the wind turbines begin operating, when the background noise is at its lowest levels, particularly if constant or near constant speed turbines are utilized. Wind turbine noise tends to be masked by other background sources (i.e. the sound generated by the wind) at higher wind speeds. The turbines are expected to be warranted by the manufacturer not to exceed a maximum sound power level 104 dBA with a wind speed of 18 mph (8 meters per second) at 33-feet (10 meters) in accordance with the protocol established in IEC 61400. This is approximately equivalent to a sound pressure level of 66 dBA at 50 feet from the turbine. Measurements conducted by others at existing wind projects substantiate that the guaranteed sound power levels are realized under field conditions.

A three-dimensional noise model was developed using CADNA/A, a sophisticated noise modeling program developed by DataKustik, GmbH, Munich, Germany. The wind turbine noise emissions are required by 173-60 WAC not to exceed 70 dBA at all Class C EDNA (industrial/agricultural) property boundaries of non-participating land owners. The Project will comply with this requirement at property boundaries of all non-participating landowners. In fact, the predicted property line noise levels are less than 60 dBA. Non-participating residential daytime levels are required by 173-60 WAC not to exceed 60 dBA while nighttime levels are not to exceed 50 dBA. As shown in Exhibit 21-2, 'Noise Impact Zones', the Project will comply with the more restrictive nighttime

limit of 50 dBA at all existing residential structures owned by non-participating landowners. In fact, the Project is anticipated to comply with the residential nighttime noise limit at all existing residences, participating or non-participating.

With implementation of mitigation measures no significant unavoidable adverse impacts from noise associated with constructing, operating, or decommissioning the proposed Project would be anticipated. During the operations phase, the noise level will be monitored and EFSEC will review the monitoring and take appropriate action if necessary.

Public Services

Regarding law enforcement there could be additional calls for response during the construction phase, primarily because of increased traffic and associated accident potential. Other law enforcement concerns during construction include construction site security against theft and vandalism. However, because the construction period is short (less than one year), the increased service calls are not anticipated to be sufficient in number to require additional law enforcement staff resources in the Project area. The Applicant will provide its own security.

As stated previously, the Applicant is in the process of finalizing a fire protection contract with the local fire district.

During Project construction, the local demand for emergency medical services could increase slightly. With adequate safety measures in place, and considering the moderate size of the construction workforce (which would temporarily reach a peak of 160 workers under all three Project scenarios) it is expected that Project construction would generate few serious injury accidents requiring EMS response. Furthermore, the local hospital has capacity for additional patients and there are several ambulances available to service the Project site. Project operation would not have a significant effect on local long-term demands for law enforcement services, fire or emergency services. It is important to note that the Project will generate over \$1 million per year in property taxes (more than the current top 10 taxpayers in Kittitas County combined) which will more than offset any minimal increased costs for public services.

CUMULATIVE IMPACTS

The DEIS for the Project, as well as those for the Desert Claim and Wild Horse wind power projects, evaluated the potential cumulative impacts of all three wind power projects proposed in Kittitas County. These analyses were conducted by three different independent consultants (Shapiro and Associated, Huckell/Weinman Associates, and Jones and Stokes, respectively). The results of these analyses all concluded that, with the implementation of the proposed mitigation measures, no significant adverse cumulative impacts are anticipated to any element of the environment as result of the construction

and operation of all three proposed projects. The only potential exception is the issue of aesthetic impacts, which are, by definition, subject to the individual preferences and aesthetic tastes of every potentially affected viewer.

ALTERNATIVES

EFSEC conducted an independent analysis of alternative sites in conjunction with the DEIS prepared for the Wild Horse Wind Power Project (EFSEC, 2004), which is also currently under review for site certification by EFSEC. A total of six alternative sites were identified within Kittitas County, which were then screened against five major criteria for siting a wind power project. Two of the six alternatives did not meet the initial screening test. Four alternative sites were brought forward for further analysis. Of these, one was the Kittitas Valley site and another was the enXco Desert Claim site, which is not available to the Applicant as it is under the control of enXco. The Wild Horse site is not a viable alternative to the Kittitas Valley site as it does not have adequate capacity (in terms of land and transmission) to meet the Applicant's goal of generating approximately 350 to 400 MW (from the Kittitas Valley and Wild Horse sites combined) of wind generated electricity to meet demonstrated regional demand for new renewable energy

The environmental impacts of the Desert Claim and Wild Horse projects have been thoroughly evaluated and disclosed in the DEISs for those projects prepared by Kittitas County and EFSEC, respectively. The other two sites analyzed by EFSEC, Swauk Valley Ranch and Springwood Ranch, were evaluated for their suitability. Neither of these sites appears to present a viable alternative to the Kittitas Valley site. The Swauk Valley Ranch and Springwood Ranch alternatives appear to be capable of generating less than 65 MW of power each, using 1.5 MW turbines, given the constraints of the sites. This is only one third of the proposed capacity of the middle scenario for the Kittitas Valley Project.

CONCLUSION

The Applicant has demonstrated, and EFSEC's DEIS has confirmed, that the proposed Project will provide a significant quantity of non-polluting, renewable energy to meet growing regional demand. All of the region's privately owned utilities, and many publicly owned utilities are seeking to add new renewable energy resources, specifically wind power, to their respective portfolios. Unlike sites for fossil fuel burning energy facilities, sites for utility scale wind power projects are very rare in Washington. Ron Nierenberg, one of the country's leading experts in wind energy meteorology, has testified that there are a very limited number of sites (2) in the state of Washington with as much potential capacity as the Kittitas Valley Project. This site features a unique combination of a commercially viable wind resource, willing landowners, adequate on-site transmission capacity and absence of significant environmental constraints.

The environmental impacts of the Project, and the cumulative impacts of all three wind power projects proposed in Kittitas County (Wild Horse, Desert Claim and Kittitas

Valley), have been thoroughly evaluated and documented in the respective DEISs for each proposed project. Every conceivable issue has been raised, addressed and vetted by multiple third party experts. The results of this exhaustive analysis indicate that the Project will have a beneficial net impact on the regional energy supply, regional air quality, and the local economy. The potential negative impacts of the Project on the environment have been minimized through extensive pre-project analysis, design features, and a comprehensive package of mitigation measures. The relevant state agencies with jurisdiction over the affected elements of the environment (WDFW, Department of Ecology, Department of Transportation, etc.) have confirmed the findings of the DEIS, i.e. that the Project will not result in significant adverse impacts.

The Applicant conducted a year of detailed studies, using recognized experts, addressing all elements of the environment before submitting the Application for Site Certification in January 2003. The statutory direction given to EFSEC is to complete review of applications within 12 months. EFSEC has already been reviewing this Project for nearly 20 months, largely because of delays associated with the Applicant's attempts to seek local land use consistency from Kittitas County. After more than two years of studies, analysis, agency consultation, and extensive public involvement processes, no significant adverse impacts have been identified. Prominent environmental and economic development groups have expressed their strong support for this Project through their active intervention and public comments. The record in this matter is voluminous and the conclusion is clear, the Project should be approved as proposed, in a timely manner, so that the many tangible benefits it will create can quickly be realized.

