

**Responses to Comments in Local Agency Letter 1 from Derald Gaidos, Fire Marshal
Kittitas County Community Development Services**

Note: The responses listed below are numbered to correspond to the numbers shown in the right-hand margin of the comment letter.

1. Thank you for your comment. The Draft EIS acknowledges that the project is in an area considered a high fire danger (see Section 3.13.1, Fire Protection).
2. The Applicant sponsored a communications study undertaken by Comsearch. The Comsearch study investigated potential project impacts on telecommunication services in the project area, including microwave links (point-to-point stations), off-air television services, and wireless telephone services (e.g., cellular). With the exception of off-air television reception, the study concluded that the proposed turbines would not obstruct telecommunication services in the area, and therefore would not degrade or reduce communications by emergency responders in the project area.
3. The Federal Aviation Administration (FAA) has not reviewed the final project plans and therefore has not approved a lighting plan for the final turbine site layout. . 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.

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 Figure 3.9-15 of the Final EIS. As stated in Section 3.9.3 of the Draft EIS, after reviewing the final project plans, the FAA would determine the exact number of turbines that would require lights to minimize the potential for aircraft hazards.

4. There is no need to have an environmental cleanup company under contract during construction. As discussed in Section 3.4.2 of the Draft EIS, the type of accidental leak or spill that could occur during project construction would not create a risk to health and safety or the environment because of the limited quantities of the materials involved and/or the specific design features built into the project. Details of how lubricating oils and other hazardous 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 construction. Appropriate spill prevention and control measures would ensure that the risk of an accidental release of hazardous materials remains low throughout construction.

Project operations would not require the use or storage of large quantities of fuel or other materials that could cause a spill or other accidental release. The only materials used

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during project operations that may present a potential for accidental spills are lubricating oils and hydraulic fluids used in the wind turbine generators and transformers. All operations staff will be trained in appropriate handling and spill prevention techniques to avoid accidental spills. Because only small quantities of fluids are transported, added, or removed at any one time and are stored for short periods of time, the potential for an accidental spill during routine maintenance is low. Nonetheless, it is anticipated that an operation spill prevention control plan will be submitted and approved by EFSEC prior to project operations.

5. As presented in Table 3.4-3 of the Draft EIS, water tank sprayers would be installed at multiple locations along site roadways during fire season. Additionally, a minimum of one water truck with sprayers would be present at each turbine string under construction during the fire season.

As stated in Section 3.13.4 of the Draft EIS, Mitigation Measures Proposed by the Applicant, Fire Protection, a fire protection and prevention plan would be developed and implemented in coordination with the Kittitas County Fire Marshal and other appropriate agencies. Specific identification of water supply sources for firefighting is a necessary component of this plan. The specific details of this plan, including requirements for water supply outside of the contracted fire district such as those identified in Table 3.4-3 of the Draft EIS (Fire and Explosion Risk Mitigation Plan), will be developed through further coordination with the County. Detailed fire protection plans are not usually prepared during SEPA review but are typically prepared after project approval and before construction.

6. A site address plan would be developed as part of the project's fire protection and prevention plan. The Applicant plans to give detailed maps showing all project access roads to appropriate fire districts and emergency service providers. Also, keys would be given to a master lock system that would enable emergency personnel to unlock gates that would otherwise limit project site access. The Applicant will work with the appropriate Kittitas County agency(ies) to ensure that the address plan meets applicable County standards.
7. As stated in Section 3.13.4 of the Draft EIS, the Applicant would contract with the applicable fire districts for protection services during project construction. The specific details of these contracts will be developed through further consultation with the County and Fire Districts as applicable. Tax revenues generated by the Applicant's project would mitigate for potential additional demand on fire protection and emergency medical services. If construction impacts require additional staffing levels during construction or if other impacts or costs related to services would not be covered in a timely manner by tax revenues, the Applicant would enter into an agreement with the appropriate local governmental agency to prepay taxes for mitigation of the cost impacts. This would include impacts on fire and emergency service providers.
8. Several of the specific elements of a fire prevention plan identified in this comment, such as requirements for designated smoking areas and fire extinguisher and hand tool

equipment onsite, are part of the Applicant's proposed fire and explosion risk mitigation plan (see Section 3.4.3 of the Draft EIS, Table 3.4-3). The specific details of this plan will be developed through further coordination with the County. Detailed fire protection plans are not commonly prepared during SEPA review but are typically prepared after project approval and before construction.

9. The specific details of the proposed fire protection and prevention plan, including requirements for signed agreements to provide for emergency and fire protection services during project operations, would be developed through further coordination with the County and Fire Districts as applicable. Detailed fire protection plans are not commonly prepared during SEPA review but are typically prepared after project approval and before construction.
10. Please refer to Response 8 of this letter. A fire protection and prevention plan, which would include a long-term plan for fire risk reduction, would be developed and implemented in coordination with the Kittitas County Fire Marshal and other appropriate agencies to address all aspects of project operations.
11. As identified in Section 3.13 of the Draft EIS, the Applicant would provide all local police, fire, and emergency medical agencies with emergency response information for the project, including employee contact information. Section 3.13.3 of the Final EIS has been revised to specify that employee contact information will be reviewed and updated annually and any changes will be provided to the appropriate agencies.

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**Responses to Comments in Local Agency Letter 2 from Clay White, Planner II
Kittitas County Community Development Services**

Note: The responses listed below are numbered to correspond to the numbers shown in the right-hand margin of the comment letter.

1. Please refer to Key Issue A in Section 2 of this volume regarding project definition.
2. While Kittitas County does have the authority to permit wind power projects in its jurisdiction, it does not have permitting authority over the proposed KVVPP because the Applicant chose to pursue project approval through EFSEC rather than at the local level. The Fact Sheet in the Final EIS has been revised for clarification.
3. The Fact Sheet in the Final EIS has been revised to indicate that the Date of Final Lead Agency Action is expected in late 2006/early 2007.
4. Please refer to Key Issue A in Section 2 of this volume regarding project definition.
5. The referenced statement means that EFSEC's independent consultant did not undertake any additional, original studies of the project, such as onsite wildlife observation studies or noise modeling. This statement is not intended to imply that the consultant did not study and analyze the project. The responsibility of EFSEC's independent EIS consultant is to review and analyze the Applicant's Application for Site Certification (ASC) and supporting documents for adequacy and compliance with EFSEC regulations. The consultant used the ASC and other relevant and available information to prepare the EIS but did not conduct any studies on its own.
6. Power produced by the project would be delivered to the regional power grid and transmitted to load centers. The location of those load centers would depend on the terms of the power sales agreements executed by Sagebrush Power Partners LLC. Possible purchasers of the project's output include public utilities and/or investor-owned utilities in the Northwest, the Bonneville Power Administration (the federal power-marketing agency serving the Northwest), and/or private-sector power-marketing entities.

The Applicant is currently marketing the electricity that would be produced by the KVVPP to local and regional utilities and power markets. It is not possible to predict at this time where the output would be delivered or how much of the electricity might be used in the local area. Wind power developers are not able to execute a power sales agreement until after project land use approvals have been obtained. However, the power produced at the KVVPP would most likely serve a portion of the needs of the Northwest power pool.

7. Sections 1.1 and 1.3 of the Final EIS have been revised to clarify that EFSEC has jurisdiction over all of the evaluation and licensing steps for siting major energy facilities in the state of Washington that have applied for site certification pursuant to WAC 463-42.

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Pursuant to WAC 463-28-040, the Applicant filed a request with EFSEC for preemption of the local land use and zoning ordinances of Kittitas County on February 7, 2004 (after this comment letter was written), and a second request in June 2006.. If this second request were approved, Kittitas County would not be an agency with jurisdiction over the proposed project.

8. Please refer to Key Issue A in Section 2 of this volume regarding project definition.
9. EFSEC has single permit authority over all Washington State and local permits. EFSEC contracts with other state and local agencies to monitor compliance with regulatory requirements (e.g., erosion control, noise limits, building permits) that will become part of the Site Certification Agreement (SCA) governing construction and operation of the project.
10. The statement that the Applicant’s proposal for the KVVWPP identified only the proposed project area for development is factually correct. However, in response to public comments on the subject, EFSEC issued a Draft Supplemental EIS in August 2004 that considers and evaluates several offsite alternatives in greater detail than the December 2003 Draft EIS. These offsite alternatives included the Swauk Valley Ranch and Springwood Ranch sites, and the Desert Claim Wind Power and Wild Horse Wind Power projects already formally proposed for wind development in the County. The Final EIS continues to include discussion of the Swauk Valley Ranch and Springwood Ranch sites. These two offsite alternatives are described in greater detail in Section 2.6 of the Final EIS. The impacts associated with constructing and operating a wind power project at these alternative sites are presented in Chapter 3 of the Final EIS to facilitate a comparative evaluation of the alternatives with the proposed action.
11. Please refer to State Agency Letter 3, Response 5 regarding a redefined No Action Alternative.
12. Please refer to Response 6 of this letter.
13. Your comment is noted.
14. Thank you for your comment. Section 1.5 of the Final EIS has been revised to acknowledge that both the Applicant and EFSEC have coordinated with the County throughout the Application for Site Certification and EIS development phases of the project.
15. Issues raised in Section 1.7.1 of the Draft EIS (Unresolved Issues, Wetland Impacts and Mitigation) have been clarified, as summarized below, and this section has been revised in the Final EIS.

Section 3.2.3 of the Draft EIS clearly identifies the amount of impact the proposed action would have on wetlands (see impact summary Table 3.2-5). The specific requirements

that the Corps or Ecology may impose as a condition of the required permits were unknown at the time the Draft EIS was published. The actual replacement, enhancement, or creation ratio for wetlands will be determined through the permitting process, which would take into account wetland function, area, category, and location. This includes the requirements of the Kittitas County Critical Areas Ordinance, as codified in Kittitas County Code 17A.04.050.

The impact to the 0.03 acre of wetlands would be mitigated by preserving and enhancing 8.0 acres of riparian land in the proposed 550-acre mitigation parcel. Although this parcel has been determined to be in “fair” to “good” condition, there are several opportunities for enhancement that would raise the quality of habitat even further. Among these is management and control of cattle grazing within the parcel, especially within the riparian zone. A grazing management plan will be developed to eliminate cattle pressure on the most sensitive portions and reestablish native vegetation in specific problem areas (O’Neill, Prefiled Testimony, Exhibit 27).

Please refer to State Agency Letter 3, Response 29 regarding additional consultation with the Corps and updated wetland and stream crossing impact calculations.

16. Sections 1.7.2 and 3.7.2 of the Final EIS have been updated with construction and operational employment numbers as well as in property tax impacts for the 330-foot and 410-foot turbine scenarios. Because this data is primarily influenced by the number of turbines to be constructed, and the Applicant proposes to construct no more than 65 turbines, there is no change based on the size of turbine ultimately selected.
17. Issues raised in Section 1.7.3 of the Draft EIS have been clarified, as summarized below, and this section has been revised in the Final EIS.

Visits to the KVVPP area by tourists can be expected. This conclusion is supported by data collected at operating wind power projects. As stated in Section 3.7.2 of the Draft EIS, the Stateline Wind Power Project near Walla Walla had more than 1,600 visitors who took guided tours in its first three months. The types of tourists visiting the Stateline project include groups from energy organizations, such as the American Wind Energy Association and Peninsula Light of Gig Harbor. Peninsula Light labels its trip a “wind and wine tour” by combining a tour of the Stateline project with visits to the valley’s wineries.

The degree of visitation to a wind farm depends on several factors. Many wind farms do not experience a large tourist interest because they are in remote locations. Others, however, are marketed as tourist attractions and provide a range of services to accommodate visitors. For example, Wind Mill Tours of Palm Springs, California, provides large parking lots with the ability to accommodate multiple tourist buses and recreational vehicles. An estimated 10,000 to 12,000 tourists visit Wind Mill Tours every year (Kittitas County 2004). A number of factors determine the level to which these projects provide accommodations for visitors including proximity to heavily traveled

roadways, proximity to large population centers, proximity to other tourist attractions, and the type of tourists visiting the area.

Given that the KVVPP would be visible from portions of I-90 and US 97, it is likely that the project would generate some amount of tourist interest. The level of future tourist activity cannot be specifically predicted. However, it is reasonable to assume that potential visitation to the KVVPP would be considerably less than the 10,000 to 12,000 annual visitors reported for the Wind Mill Tours operation in Palm Springs because that operation is specifically developed and marketed to serve tourists visiting a heavily developed wind energy area. This additional information has been included in Sections 3.7.2 and 3.10.2 of the Final EIS.

A formal tourism management plan is not required for the proposed project. If the project were approved, the Applicant would consult with the County and WSDOT to identify the best location for the proposed information kiosk/public viewing area and appropriate signage. These measures would ensure that tourists visiting the area are safely accommodated on county roadways.

18. Issues raised in Section 1.7.4 of the Draft EIS have been clarified, as summarized below, and this section has been revised in the Final EIS.

In October 2002, Lithic Analysts conducted an archaeological survey at the locations of the proposed turbine strings, proposed and existing access roads, proposed underground and overhead electrical lines, proposed O&M facility, and proposed substation where ground disturbance could occur. (Section 3.8.2 of the Draft EIS outlines the areas that were surveyed during the fieldwork). Subsequently, in July 2004 Lithic Analysts prepared a cultural landscape and historic property investigation of the Area of Visual Dominance for the project. At the time the Draft EIS was completed, sections of the cultural and historical reports pertaining to the North Branch Canal were still under review by the State Office of Archaeology and Historic Preservation (OAHP). Lithic Analysts has since found that the section of the North Branch Canal in the project area is not eligible for inclusion in the National Register of Historic Places. OAHP concurred with these findings in its letter to EFSEC dated August 10, 2004. Because this is not an eligible resource, the project will not affect historic properties.

Sagebrush Power Partners LLC has attempted to involve the Yakama Nation in the development and review of the proposed project since environmental and cultural resources studies began in March 2003. The company invited tribal representatives to participate in the cultural resource surveys and gave copies of draft versions of the cultural resource studies that had been completed for the project to Johnson Meninick and the Yakama Nation's Cultural Resources Department. The project development manager has offered numerous times to meet in person with representatives of the Yakama Nation to discuss the project and organize a visit to the project site. Approximately 550 acres has been set aside at the Kittitas Valley Wind Power Project for permanent protection. Sagebrush Power Partners LLC intends to offer members of the Yakama Nation the use of this parcel for cultural and spiritual practices, including the gathering of traditional

foods and medicines, throughout the lifetime of the project. Consultation with the Yakama Nation is ongoing. Also, please refer to Section 3.8 of the Final EIS.

19. Thank you for your comment. Based on new information presented as an attachment to Organization Letter 5, Sections 1.7.6 and 3.13.2 of the Final EIS have been revised accordingly to include an analysis of the project’s impact on local radio operations.

With respect to impacts on television interference, if the process established in the mitigation measure explained in Section 3.13.3 of the Final EIS is not sufficient to remedy the situation, affected residents have the possibility to seek action directly from the Council. If the Council deems that the Applicant has not met the letter of their offers for mitigation, the Council can initiate enforcement action. The Applicant also proposes to adjust tower locations to avoid line-of-sight interference if the results of final field surveys identify that the proposed turbines interfere with or obstruct communication microwave paths. These studies may also result in the removal of certain towers.

The detailed requirements of the Applicant’s proposed mitigation, such as how long the Applicant plans to consult with affected parties and the role of EFSEC in resolving issues with individual landowners, would be determined through consultation with affected homeowners through the Council’s enforcement actions established in WAC 463-70-070.

20. Your comment is noted.
21. Thank you for your comment. Sections 1.9.6 and 3.14.10 of the Final EIS have been revised to clarify that under the EFSEC review and permitting process (WAC 463-26-110) the project must also demonstrate that the proposed project site complies with Kittitas County land use plans or zoning ordinances.
22. Please refer to State Agency Letter 3, Response 5 regarding a redefined No Action Alternative.
23. Please refer to Key Issue A in Section 2 of this volume regarding project definition and revisions to Section 3.9 of the Final EIS.
24. Your comment is noted.
25. The number and proposed locations of meteorological towers are described and illustrated in Chapter 2 of the Draft EIS. See Figure 2-1, which shows nine possible locations of the proposed permanent meteorological towers, of which only five would be ultimately chosen.
26. Please refer to Local Agency Letter 1, Response 3 regarding the status of Federal Aviation Agency (FAA) review of the project’s lighting plans.

Section 3.10.2 of the Draft EIS acknowledges that the FAA’s Determinations of No Hazard to Air Navigation were based on the number, sizes, and dimensions of turbines

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- proposed for the middle scenario (i.e., 1.5 MW turbines approximately 350 feet tall). According to the FAA permits, “any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.” It is understood that prior to construction, a final FAA application will be submitted reflecting the final turbine locations and exact turbine heights for FAA review. The Applicant would also secure any additional Determinations of No Hazard to Air Navigation, as warranted (see Section 3.10.4 of the Draft EIS). This ensures that the appropriate level of lighting will be incorporated into the final layout design.
27. Please refer to State Agency Letter 3, Response 5 regarding a redefined No Action Alternative.
 28. Please refer to Response 6 of this letter.
 29. Please refer to Response 10 of this letter. Section 2.5.2 in the Final EIS has been revised to indicate that other alternative sites to the Applicant’s proposal were considered. Offsite alternatives are described in further detail in Section 2.6 of the Final EIS.
 30. Since the issuance of the Draft EIS, the Wild Horse Project has received approval from Washington State, and was subsequently purchased and constructed by Puget Sound Energy. The Wild Horse site is therefore no longer available to Horizon Wind. Section 2.6 of the Final EIS has been revised with information from the August 2004 Draft Supplemental EIS.
 31. Please refer to Response 6 of this letter. SEPA rules (WAC 197-11-440[5][c][vii]) require that the alternatives section of an EIS discuss the benefits and disadvantages of reserving the proposal for some future time compared with possible approval at this time. Section 2.8 of the Final EIS has been revised for clarification.
 32. Please refer to State Agency Letter 3, Response 5 regarding a redefined No Action Alternative.
 33. A permit from the County for rock-crushing activities is not required for the proposed project. The paragraph referenced in this comment clearly states that the Applicant does not propose to bring a rock crusher onsite. Instead, cobbles and boulders too large for reuse as backfill at the project site would be transported to the permitted quarry just north of turbine F1 for crushing prior to reuse.
 34. Please refer to State Agency Letter 3, Response 5 regarding a redefined No Action Alternative.
 35. Please refer to Response 6 of this letter.
 36. The information included in Table 3.2-1, Summary of Habitats Associated with the Proposed Turbine Strings of the Project, is applicable to both proposed action scenarios. Table 3.2-1 presents a qualitative description of habitat types along the 9 proposed

- turbine strings. As stated in Section 2.2.1 of the Draft EIS, the length of the 9 turbine strings would be the same under all scenarios; with a maximum 65-turbine project the density of turbines sited within each string would also not change significantly depending on the size of turbine selected. Temporary and permanent impacts on specific vegetation communities at the project site are quantified for both scenarios, as shown in Tables 3.2-6 and 3.2-7 of the Draft EIS.
37. Please refer to Response 36 of this letter.
 38. Section 3.2.1 of the Final EIS has been revised to include Kittitas County Critical Areas Ordinance (Chapter 17A).
 39. Please refer to Response 15 of this letter.
 40. Section 3.2.1 of the Final EIS has been revised to include Kittitas County Critical Areas Ordinance (Chapter 17A).
 41. Section 3.2.1 of the Final EIS has been revised to include Kittitas County Critical Areas Ordinance (Chapter 17A).
 42. Please refer to State Agency Letter 3, Response 5 regarding a redefined No Action Alternative.
 43. Please refer to State Agency Letter 3, Response 5 regarding a redefined No Action Alternative.
 44. Please refer to State Agency Letter 3, Response 5 regarding a redefined No Action Alternative.
 45. Please refer to State Agency Letter 3, Response 5 regarding a redefined No Action Alternative.
 46. The Applicant's proposed fire and explosion risk management plan includes measures that would be implemented during both the construction and operational phases of the project. A recommendation that the Kittitas County Fire Marshal and affected fire districts should approve the fire and explosion risk management plan prior to construction of the facility has been added to Section 3.4.3 of the Final EIS.
 47. Please refer to Response 46 of this letter.
 48. Turbine tower collapse is rare (see Jorgensen, Prefiled Testimony, Exhibit 37) and there is no definitive information on how far parts of the turbine tower would be thrown. At a minimum, a tower could fall anywhere within a radius equal to the turbine tower tip height (height of the tower at the turbine hub plus half the diameter of the rotor). The area directly affected, however, would be much less than the total area of the circle (i.e., the fallen tower would only be located within a small portion of the circle). For the tallest of

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the turbines under consideration (410-foot tip height), a tower could fall anywhere within a 12.1-acre circular area. For the smallest of turbines considered (330-foot tip height), a tower could fall anywhere within a 7.9-acre circular area..

The proposed safety setbacks for the KVVWPP are consistent with setback distances at other wind power projects across the country. For example, Benton County, Washington, the site of the Stateline Wind Energy Center, prescribes similar setback requirements for wind turbines, which are considered allowable uses in the County's Agricultural Protection Zone (APZ) District. Within the APZ District, wind turbine tower bases must be set back at least 1,000 feet from dwellings not located on the same parcel. In addition, all wind turbine tower bases must be set back from all property lines a distance equal to the associated wind turbine height (Benton County, no date).

Similar setback distances are prescribed in the zoning ordinance for Emmet County, Michigan. In Emmet County, commercial wind turbines proposed in the Farm Forest-1 or Farm-Forest 2 zoning districts must be set back from all property lines and offsite roads a distance equal to the height of the tower (including the top of the blade in its vertical position) (Emmet County 2003).

Based on this information, the Applicant decided to use turbine tip height to define the minimum setback distance to protect against tower collapse because if a tower were to fall it would land within that distance. Applying some safety factor greater than the tip height distance (such as that proposed for the Desert Claim Wind Power Project) could be used to further reduce the safety risk from potential tower collapse. However, as noted above, the Applicant's proposed setbacks are consistent with setback distances applied at other operating wind farms in the U.S.

49. A modern, well-designed turbine has a probability of less than one in a million of losing a full blade or having part of a blade come loose or collapse. According to a representative from Vestas Wind Systems in Denmark, there are approximately 10,000 Vestas turbines operating worldwide. There has been only one noted occurrence with a Vestas V39-500kW turbine in Denmark in 1992 where a blade was thrown 50 to 75 meters (approximately 165 to 245 feet) (for more information please refer to Jorgensen, Prefiled Testimony, Exhibit 37). Based on this information, the Applicant decided to use turbine tip height to define the minimum setback distance to protect against blade throw.

Applying some safety factor greater than the tip height distance (such as that proposed for the Desert Claim Wind Power Project) could be used to further reduce the safety risk from potential blade throw. However, as noted in Response 48 of this letter, the Applicant's proposed turbine setback distance of 1,320 feet from residences and the distance of the turbine tip height from public and private roadways is consistent with setback distances applied at other operating wind farms in the U.S.

50. Please refer to Responses 48 and 49 of this letter regarding the maximum hazard area of tower collapse and justification for setbacks to protect against blade throw impacts.

Please refer to Key Issue A in Section 2 of this volume regarding definition and analysis of the proposed action scenarios.

51. Please refer to State Agency Letter 3, Response 5 regarding a redefined No Action Alternative.
52. Please refer to Response 46 of this letter regarding the project's fire and explosion risk mitigation plan.

A recommendation that the Kittitas County Fire Marshal and affected fire districts should approve a fire protection and prevention plan prior to project operation has been added to Section 3.4.3 of the Final EIS.

The level of discussion of the fire and explosion risk mitigation plans presented in the EIS is appropriate. The specific details of this plan, including how it relates to the selected and approved proposed action scenario, will be developed through further coordination with the County. Detailed fire protection plans are not commonly prepared during SEPA review but are typically prepared after project approval and before construction.

53. Thank you for your comment. Please refer to Responses 48 and 49 of this letter regarding proposed setbacks to minimize the risk of tower collapse and blade throw, respectively.

Establishing setbacks for turbine tower collapse that are 110% of the tip height may further reduce the risk over the minimum suggested safety setbacks suggested in the Draft EIS. If the governor approves the project, setback distances will be finalized by EFSEC in developing the SCA.

54. Decommissioning or moving specific turbine towers that cause shadow-flicker is not warranted for a phenomenon that has not been shown to cause adverse health or safety effects and is of a short daily duration even for the most affected receptor. Furthermore, no regulatory requirements prevent shadow-flicker from falling on private or public property; therefore, a “zero effect” setback threshold is not warranted. Nevertheless, the Applicant has committed to turning off those turbines that cause shadow-flicker annoyance effects during the times the annoyance occurs. This mitigation measure would be implemented for non-participating landowners whose residence falls within 2,500 feet of a turbine and has a line of sight view of the turbine in question.

Section 3.4.2 of the Final EIS has been modified to include updated information on shadow-flicker impacts for all a 65-turbine project. Section 3.4.3 of the Final EIS has been revised to indicate that the recommended shadow-flicker mitigation measures, if used, should be established prior to turbine operations.

Appendix B of the Final EIS includes maps showing areas of shadow-flicker exposure per year (in hours) relative to turbine and receptor locations for a 65-turbine project..

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55. Section 3.4.4 of the Final EIS has been revised to indicate that no unavoidable adverse health and safety impacts would occur if the recommended mitigation is implemented.
56. Thank you for your comment. The proposed recommendation to set up telephone hotlines to address local grievances regarding shadow-flicker or other project issues is not warranted based on the EIS impact analysis. The viability of this option with respect to project operational costs, logistical feasibility, and flexibility is uncertain at best and therefore has not been included in the Final EIS.
57. The statute directs EFSEC to regulate the construction and operation of the facility. EFSEC is the state's regulatory agency that determines compliance with state laws and the terms set in the SCA. The SCA has all of the environmental, social, economic, and engineering conditions the Applicant must meet for construction and operation throughout the life of the project (including SEPA mitigation measures). EFSEC has the regulatory authority to enforce compliance with state laws and the conditions in the SCA through fines or by ceasing construction or operation of the project (WAC 463-54). Compliance determination procedures include consideration of onsite inspections, data analyses, and/or reporting activities as prescribed by EFSEC and performed by other state agencies pursuant to annual interagency agreements. EFSEC continues this oversight responsibility through restoration of the site after the project is terminated.
58. Please refer to Response 6 in this letter.
59. Please refer to State Agency Letter 3, Response 5 regarding a redefined No Action Alternative.
60. Please refer to State Agency Letter 3, Response 5 regarding a redefined No Action Alternative.
61. Thank you for your comment. Section 3.6.1 of the Final EIS has been revised to include a bullet item that lists rural residential houses to the list of existing land uses within 1 mile of the proposed turbine strings.
62. The information regarding the Wenatchee National Forest boundary presented in Figure 3.6-3 of the Draft EIS was obtained from the Washington Department of Natural Resources in the vector file Washington State Non-Department of Natural Resources Major Public Lands). This file is an ArcInfo Coverage, or Geographic Information System (GIS) layer, which provides information on ownership parcels for federal, state (excluding WDNR), county, and city lands within the state of Washington. To the best of the Applicant's knowledge, this information is accurate.
63. Please refer to State Agency Letter 3, Response 5 regarding a redefined No Action Alternative.

64. Thank you for your comment. Section 3.6.3 of the Final EIS has been revised to specify that the Applicant submitted a rezone application on June 16, 2003, to Kittitas County. The Final EIS also references a second rezone application submitted in September 2005.
65. Pursuant to WAC 463-28-040, the Applicant filed a request with EFSEC for preemption of the local land use and zoning ordinances of Kittitas County on February 7, 2004. This request was withdrawn in July 2005. A second request for preemption was filed with the Council in June 2006. EFSEC is currently reviewing this request. Section 3.6.3 of the Final EIS has been revised to describe this request and proposed change in the permitting process.
66. Please refer to Response 65 of this letter.
67. Please refer to Response 65 of this letter.
68. Please refer to Response 64 of this letter.
69. Please refer to State Agency Letter 3, Response 5 regarding a redefined No Action Alternative.
70. Please refer to Response 18 of this letter. The details of the archaeological survey fieldwork have been outlined in the report (*Archaeological Survey of the Kittitas Valley Wind Power Project, Kittitas County, Washington*) written by Lithic Analysts. Further detail regarding the specific field methodology has been added to Section 3.8.2 of the Final EIS.
71. Thank you for your comment. Potential cultural resources and appropriate mitigation measures to minimize impacts on these resources have been identified in Section 3.8 of the Draft EIS. Although rare, due to the buried nature of archaeological sites a formal field survey can occasionally fail to identify all cultural activities that have taken place in an area. DAHP has recommended that a professional archaeologist monitor ground disturbance (see Section 3.8.5 of the Draft EIS). This monitor will be onsite as a precaution to ensure that undiscovered sites are not affected.
72. Please refer to Key Issue A in Section 2 of this volume regarding project definition and Section 3.9 of the Final EIS for a description of additional visual impact analyses undertaken as part of the Final EIS. The information originally contained in matrices embedded in the title block of simulation figures presented in the Draft EIS has been summarized in Table 3.9-2 of the Final EIS.
73. Please refer to Response 72 of this letter.
74. Nighttime construction activities may take place later than 10 p.m. If EFSEC recommends and the governor approves the project, the specific requirements for late evening construction work would be governed by the terms and conditions set forth in the SCA. The Applicant proposes to limit blasting activities to the periods of 7:00 a.m. to

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10:00 p.m. Construction noise would comply with applicable requirements of WAC 173-60-040 during the hours of 10:00 p.m. and 7:00 a.m.

75. Please refer to Local Agency Letter 1, Response 3 regarding the status of FAA review of the project's lighting plans and Response 26 of this letter regarding lighting impacts for the three proposed action scenarios.
76. Please refer to State Agency Letter 3, Response 5 regarding a redefined No Action Alternative.
77. Thank you for your comment. Please refer to Local Agency Letter 1, Response 3 regarding the status of FAA review of the project's lighting plans and Response 26 of this letter regarding lighting impacts under the proposed action scenarios.

Much of the testimony and written comments received on the proposed project reflect a perception that the visual character of the Kittitas Valley will be greatly altered by the presence of lighted towers. No further study of lighting impacts is warranted.

78. Evaluating the number and sensitivity of viewers is a basic part of a widely accepted method used to evaluate visual impacts. Part of mitigating for visual impacts is siting facilities so that the fewest number of most sensitive viewers are affected. It follows, therefore, that the proper siting of facilities with regard to sensitive populations is a logical form of offsetting or mitigating impacts. For example, if no one sees a visually obtrusive facility, there is no visual impact. If a lot of people see that same visually obtrusive facility, it is an undeniably larger impact. Most of the more notable visual impacts from the KVVPP would not be experienced by people in the highest population areas and on the most traveled roadways.
79. Additional setbacks could help to mitigate visual impacts in some instances depending on topography, vegetation, viewer's orientation, and other factors. There probably is not, however, a universal setback distance that would make a meaningful difference in the impact. The current setback of 1,320 feet from residences of neighboring landowners (i.e., those without signed agreements with the Applicant) allows for a basic visual buffer to be established.
80. This comment is not sufficiently explicit regarding which aspect of the No Action Alternative requires further discussion.
81. The proposed action scenarios that are examined are a comprehensive means of examining visual impacts as opposed to narrowing in on the impact of individual towers. The towers would be arranged in groups following the ridgelines with roughly equidistant spacing. The visual analysis did not find that there are proposed turbines that could be singled out as having a disproportionate visual impact. Similarly, none of the strings of turbines appears to have either too many or too few turbines in the groups.

82. Please refer to Response 26 of this letter regarding lighting impacts for the three proposed action scenarios.
83. Please refer to Response 26 of this letter.
84. Thank you for your comment. Please refer to Response 26 of this letter.
85. Please refer to State Agency Letter 3, Response 5 regarding a redefined No Action Alternative.
86. Please refer to State Agency Letter 3, Response 5 regarding a redefined No Action Alternative.
87. Please refer to State Agency Letter 3, Response 5 regarding a redefined No Action Alternative.
88. The Applicant's plans to conduct additional field measurements of communication microwave paths once the final turbine design and siting plan have been selected is an adequate and reasonable approach to evaluating this potential impact that depends on the final site plan. The results of these surveys may require the relocation of selected turbines to avoid line-of-sight interference, but these siting adjustments would not result in new impacts not already disclosed in the Draft EIS. This approach is consistent with the approach taken by the County in its assessment of microwave communication interference for the Desert Claim project. According to the August 2004 Desert Claim Final EIS, the County plans to conduct a study prior to final placement of the wind turbines to investigate possible blocking of microwave signals by individual turbines (Kittitas County 2004).
89. Please refer to Response 19 of this letter regarding the project's impact on radio interference. Please refer to Response 88 of this letter regarding study of the proposed action scenarios.
90. Please refer to State Agency Letter 3, Response 5 regarding a redefined No Action Alternative.
91. Thank you for your comment. Please refer to Response 52 of this letter.
92. Thank you for your comment. Section 3.13.4 of the Final EIS includes a mitigation measure to indicate that all rescue and emergency response information should be relayed to the appropriate agencies prior to project construction.
93. Flat areas, approximately 30 feet by 60 feet, adjacent to each turbine will be cleared, compacted, and graveled as necessary for use as a crane pad to facilitate construction of the wind turbines and towers. Gravelling of these areas is not intended to provide mitigation for fire emergencies. Although a larger surface of gravel might create a fire-break, it would also mean that more native habitat would be permanently destroyed. The

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mitigation measures proposed are consistent with good practice for minimizing the occurrence of fires in the Project Area.

94. Please refer to Response 19 of this letter regarding new information on radio interference and proposed and additional recommended mitigation measures, and to Response 88 of this letter regarding study of the proposed action scenarios.
95. Please refer to Response 19 of this letter regarding proposed and additional recommended mitigation measures.
96. Please refer to Responses 19 and 88 of this letter.
97. Thank you for your comment. Since issuance of the KVVPP Draft EIS, the Wild Horse Wind Power Project has been permitted, sold to Puget Sound Energy, and constructed. Section 3.14.3 of the Final EIS has been revised to reflect this different status.
98. The process for project decommissioning is described in Section 2.2.6 of the Draft EIS. The means for decommissioning rests with the Applicant. As stated in ASC Section 7.3.2, “the Applicant will provide adequate financial assurances to cover all anticipated costs associated with decommissioning. In all cases final financial responsibility for decommissioning will rest with the Applicant.” If EFSEC recommends and the governor approves the project, the specific terms of project decommissioning, including financial assurances from the Applicant, would be governed by the terms and conditions set forth in the project’s SCA.

The impacts attributable to decommissioning under the project’s proposed action scenarios are described in Chapter 3 (under the heading “Decommissioning Impacts”) and are summarized in the impact summary tables presented for each element of the environment.
99. If EFSEC recommends and the governor approves the project, the specific terms of project decommissioning, including the procedures for decommissioning individual turbines that are not being used (if warranted), would be governed by the terms and conditions set forth in the project’s SCA.
100. Thank you for your comment. Please refer to Response 7 of this letter.

**Responses to Comments in Local Agency Letter 3 from Paul D. Bennett, P.E.
Director of Public Works, Kittitas County Department of Public Works**

Note: The responses listed below are numbered to correspond to the numbers shown in the right-hand margin of the comment letter.

1. Please refer to Local Agency Letter 2, Response 17 for a more detailed discussion of potential tourism impacts.

One of the closest comparisons for the KVVPP in terms of tourism is the Stateline Wind Energy Center located near Walla Walla (commissioned in 2001) and the Vansycle Ridge Wind Farm near Pendleton, Oregon (commissioned in 1998). Applicant inquiries to Walla Walla County and to the Stateline project operators indicate that no mitigation was imposed on these projects to accommodate for an increase in tourist traffic on any of the county roads in or around the project site. After three years of operation of the Stateline project and six years of operation of the Vansycle Ridge Wind Farm project, nearby county roads have not required any improvement due to these two wind power projects. Furthermore, there have been no complaints or otherwise visible degradation of any county road as a result of these two wind projects.

Current average daily traffic (ADT) counts on Hayward Road are 25 at the south end near State Route 10, and 35 at the north end near Bettas Road. In a meeting between the Applicant and Kittitas County Department of Public Works on May 15, 2003, the County mentioned that, according to the American Association of State Highway and Transportation Officials (AASHTO), the trigger point before a road upgrade is required is an ADT count of 150 or higher. Based on information from the Stateline and Vansycle projects, traffic on Hayward Road would not likely increase 500% from an average ADT of 30 to 150 because of this project. It should also be noted that the access turnoff from State Route 10 to the southern end of Hayward Road is small and not highly visible, especially from a vehicle passing by at 50+ mph.

Although tourist traffic-related impacts are not anticipated on county roads due to the project, the Applicant has proposed mitigation for possible impacts. As described in Section 3.10.4 of the Draft EIS, mitigation measures include constructing a visitor kiosk at the O&M facility, which would provide tourists a safe place to view and learn about the wind turbines, and placing signs in key locations to direct tourists to the viewing area and away from Hayward Road. These measures would minimize potential tourist-generated traffic impacts.

The Applicant also proposes to monitor traffic levels before and after project construction to determine if the project results in a traffic increase above the 150 ADT level on Hayward Road. If the project boosts local tourist traffic above 150 ADT, as measured by a third party, the Applicant would try to reduce this amount of traffic below 150 ADT within the first year after project operation. If it is not possible to achieve a reduction to below 150 ADT through signage or other means, the Applicant would pay a prorated share of the costs to improve Hayward Road. The cost would be based on the amount of

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- additional new traffic introduced solely by the project above the 150 ADT level on this road. Please refer to Section 3.10.3 of the Final EIS.
2. The Applicant understands that local fire districts are not responsible for the county road system and do not have authorization to make decisions regarding upgrades to county roads. Please refer to State Agency Letter 3, Response 23 regarding the status of upgrades to Hayward Road.
 3. As clarified in Section 3.10.2 of the Final EIS, the Applicant has no plans to upgrade the southern portion of Hayward Road. The Applicant does not propose to use the southern portion of Hayward Road for project construction or operations, and there is no evidence to suggest that traffic levels on this road would increase from 30 to 150 ADT. The Applicant will, however, measure ADT counts on Hayward Road before and after construction to determine if the project results in local tourist traffic above 150 ADT and will mitigate, as appropriate, as described in Response 1 of this letter. Also, please refer to revisions to Section 3.10 of the Final EIS.
 4. Transporter routes are roads used to bring in equipment, materials, and staff from outside the project area to the project site. State Route 10 and the southern portion of Hayward Road are not designated transporter routes to the project site. There is only one main transporter route proposed to access the KVVWPP site; this route is eastbound I-90 followed by northbound US 97. As part of all large construction contracts, it shall be required that only the designated transporter routes be used for construction. Because State Route 10 and the southern portion of Hayward Road would not be used during project construction or operations, impacts on these routes are not expected. As an additional cautionary measure, the Applicant proposes to place signs in key locations to direct construction and tourist-related traffic away from State Route 10 and the southern portion of Hayward Road. ADT counts would be taken on Hayward Road before and after construction to determine if the project results in local tourist traffic above 150 ADT, and mitigation would be implemented, as appropriate, and as defined in Response 1 of this letter.
 5. Thank you for your comment.
 6. Thank you for your comment.
 7. The Applicant proposes to perform a joint inspection with the County Department of Public Works to photograph and video record Hayward Road conditions before and after construction. The purpose of this inspection is to ensure that after construction is complete this road is reinstated in a good or better condition than existed prior to construction. Specifically, at the intersection of Hayward and Bettas roads, the Applicant proposes to widen the radius and build out this section of gravel road at the expense of the project to allow large construction vehicles to safely maneuver around this corner. After construction is complete, the Applicant proposes to reinstate this gravel intersection to comply with Kittitas County road standards, also at the expense of the project. This information has been incorporated into revisions to Section 3.10.3 of the Final EIS.

8. Upgrades to the northern portion of Hayward Road located north of turbine B1 would likely be necessary to support the safe transportation and delivery of some of the larger turbine components such as the towers, blades, and nacelles. It is anticipated that Hayward Road would be upgraded to a 20- to 24-foot-wide gravel surface with adequate drainage and compressive strength to handle construction loads without failure.

The Applicant is willing to assume maintenance responsibilities for the northern portion of Hayward Road north of turbine B1 (approximately 1 mile of the road) during project construction and operation to ensure that any damage caused by the project is repaired. During construction, the Applicant would not restrict the flow of traffic for more than 20 minutes. Impacts during project operations are not expected because traffic would be minimal, consisting of one to two pickup truck trips daily. The Applicant would apply for a permit to access county road right-of-way. These access points would be wide enough to accommodate large loads during construction. The Applicant would also be responsible for maintaining turbine string access roads, rights-of-way, and other roads built to construct and operate the project.

If snow removal is required to support project construction or operations, it would be performed only by snow removal equipment operators with a valid county permit and conducted to ensure that it is performed safely and in a manner that does not degrade road conditions.

The Applicant acknowledges that as a county road, Hayward Road is never closed to public use, despite the fact that the County does not plow this route in the winter. This referenced sentence has been deleted in the Final EIS.

9. In February 2004, Aviation Systems Inc., the aviation consultants who worked on the Desert Claim EIS, undertook a study of the KVVPP's relationship to visual flight rule air traffic patterns at Bowers Field (Aviation Systems Inc. 2004). The results of this study were sent to the Kittitas County Department of Public Works in March 2004.

Aircraft are defined as Categories A, B, C, or D based primarily on their design speed range for approaching airports. Figure 3.10-2 in the Final EIS shows that the proposed KVVPP would not affect protected airspace for Categories A through D traffic patterns at Bowers Field. All air traffic using existing approach and departure procedures to and from Bowers Field would stay well clear of the KVVPP area. Therefore, the proposed wind turbines would not conflict with arriving or departing aircraft operating under either instrument flight rule or visual flight rule procedures. The study also agreed with the Federal Aviation Administration's (FAA's) issuance of no hazard determinations for the proposed project (Aviation Systems Inc. 2004).

10. Please refer to Local Agency Letter 2, Response 26 regarding lighting impacts and FAA review for the three proposed action scenarios.
11. The 121 Determinations of No Hazard to Air Navigation letters from the FAA, dated October 28, 2003, indicate whether lighting is required or not required on each individual

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turbine. The lighting plan included in the EIS is based on these letters from the FAA. Please refer to Local Agency Letter 1, Response 3 for more information on turbine tower lighting requirements.

12. Please refer to Local Agency Letter 2, Response 26.
13. Potential impacts of the turbines on air traffic communications have been examined in FAA's evaluation of the project. The Frequency Management Group in the Airway Facilities Division of the FAA has reviewed the project. The FAA Determinations of No Hazard to Air Navigation letter indicates that the turbines do not interfere as a physical obstruction to flight traffic or to air traffic communications.
14. Please refer to Responses 1 and 8 of this letter.
15. Thank you for your comment.
16. The Applicant submitted a revised project site layout at a smaller scale, including close-ups of the locations of underground cables and overhead lines that cross county roads, to the County as part of a written communication dated May 12, 2004. Detailed construction plans will be prepared as part of final project design and submitted to EFSEC prior to construction. A detailed topographic design has not yet been completed for the proposed project.
17. Thank you for your comment.
18. Thank you for your comment.
19. Thank you for your comment.
20. The County will not have any obligations or responsibilities regarding project decommissioning. EFSEC has jurisdiction and responsibility for decommissioning. A development agreement would not have to wrestle with that responsibility.

See Section 3.1.3 of the Final EIS for a discussion of project decommissioning plans. The amount and type of financial assurances that would be required for decommissioning are not known at this time. The Applicant has proposed several types of financial securities in their final briefs to EFSEC. If EFSEC recommends and the governor approves the project, the specific terms of project decommissioning, including financial assurances from the Applicant, would be governed by the terms and conditions set forth in the project's Site Certification Agreement.

21. Please refer to Response 8 of this letter.

**Responses to Comments in Local Agency Letter 4 from Les Ornelas,
Air Pollution Control Officer, Yakima Regional Clean Air Authority**

Note: The responses listed below are numbered to correspond to the numbers shown in the right-hand margin of the comment letter.

1. Thank you for your comment. If EFSEC were to recommend approval of the project to the governor, and if the governor in turn were to approve the project, EFSEC project certification would be given in lieu of any permit, certificate, or similar document that might be otherwise required (WAC 463-14-050). EFSEC would approve dust control measures for site preparation, construction, and landscaping at the certified facility in accordance with the requirements of Chapter 463 WAC and RCW Chapter 80.30.
2. Please refer to Response 1 of this letter. No demolition or renovation of existing structures at the project site is proposed to construct the project. Prior to project 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 materials has occurred. A review of all facilities would be performed to determine if hazardous or dangerous materials, such as asbestos (as defined by regulations at that time), are present in construction materials or materials used in the operation of any facility components. The Applicant will comply with all applicable regulations enforced at the time decommissioning takes place.