BEFORE THE STATE OF WASHINGTON

ENERGY FACILITY SITE EVALUATION COUNCIL

In the Matter of:

APPLICATION NO. 2004-01

WIND RIDGE POWER PARTNERS, LLC

WILD HORSE WIND POWER PROJECT

COUNCIL ORDER No. 814

Findings of Fact, Conclusions of Law, and Order Recommending Approval of Site Certification on Condition

Executive Summary: The Energy Facility Site Evaluation Council (EFSEC or Council) is the state agency charged with making a recommendation to the Governor as to whether a new major energy facility should be sited in the state of Washington. Chapter 80.50 Revised Code of Washington (RCW). The Council is aware of the region's need for energy and electrical generation capacity. The Council is also mindful of its duty to protect the environment and the public interest.

This matter involves an Application for certification of a proposed rural site in Kittitas County, approximately 11 miles east of the City of Kittitas and 13 miles northeast of Ellensburg, Washington, for the construction and operation of the Wild Horse Wind Power Project (Project or WHWPP), a wind-powered energy production facility consisting of a series of turbines as well as associated electric transmission lines and other supporting infrastructure. Approximately 8,600 acres of undeveloped land are associated with the Project. Up to 401 acres would be temporarily disturbed by construction activities; 165 acres would be permanently developed for placement of the turbine towers, access roads, substations, underground and overhead transmission lines, and an operations and maintenance facility. Wind Ridge Power Partners, LLC, (Wind Ridge or Applicant) seeks a Site Certification Agreement (SCA) to construct and operate between 104 and 158 wind turbines that would generate between 158 and 312 megawatts (MW) of wind power. The Project would also construct and employ one or both of two feeder lines, totaling approximately 13 miles in length, to allow interconnection with the BPA and/or PSE transmission systems.

The Council has reviewed Wind Ridge's Application for Site Certification (Application), No. 2004-01; conducted public and adjudicative hearings; and by this Order recommends approval of the Application to the Governor of the state of Washington. The Applicant has entered into stipulations and settlement agreements with two parties to the proceeding. The Council reviewed and approved each settlement agreement. Furthermore, pursuant to the requirements of the settlements and the evidence presented during the hearing, the Applicant will provide offset and mitigation measures such that the planned Project is expected to produce minimal adverse impacts on the environment, the ecology of the land and its wildlife, and the ecology of the state waters and their aquatic life.

Upon careful consideration of the state's need for energy at a reasonable cost and the need to minimize environmental impacts, the Council determined that this facility, with the proposed mitigation measures and with the agreed upon requirements of the various settlements, will provide the region with significant energy benefits while not resulting in unmitigated, significant adverse environmental impacts. Thus, the proposed Project with its mitigation measures as set forth in this document, in the Final Environmental Impact Statement, and as required in the settlement agreements meets the requirements of applicable law and comports with the policy and intent of Chapter 80.50 RCW.

The Council recommends that the Governor APPROVE the siting of this Project, as described in this Order and the accompanying draft Site Certification Agreement.

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MEMORANDUM

1. INTRODUCTION

The Applicant and the Project

The Applicant for the Wild Horse Wind Power Project (Project or WHWPP) is Wind Ridge Power Partners, LLC (Wind Ridge or Applicant), a wholly owned subsidiary of Zilkha Renewable Energy. Wind Ridge Power Partners, LLC, was created as a Delaware Limited Liability Company for the sole purpose of developing, permitting, financing, constructing, owning and operating the Wild Horse Wind Power Project.

The Applicant is proposing to build the Wild Horse Wind Power Project, a renewable energy generation facility with a maximum of 158 wind turbines and a maximum installed nameplate capacity of 312 megawatts (MW). The Project would be constructed in central Washington's Kittitas Valley on high open ridge tops between the towns of Kittitas and Vantage. Elements of the Project would be constructed consecutively, to include roads, foundations, underground and overhead electrical system collection lines, grid interconnection substation, step-up substation(s), feeder line(s) running from the on-site step-up substation(s) to the interconnection substation, meteorological stations, an operations and maintenance (O&M) facility, an informational kiosk, and associated supporting infrastructure. The entire Project area encompasses 8,600 acres, with approximately 165 acres required to accommodate the permanent footprint of the proposed turbines and related support facilities.

The Project area is currently zoned as Forest and Range and Commercial Agriculture. The majority of the WHWPP site and proposed interconnect points lie on privately owned land. Parts of the Project site lie on land for which the Applicant has secured a long term-lease with the Washington Department of Natural Resources (DNR). One portion of the proposed site is owned by the Washington Department of Fish and Wildlife (WDFW). That property is currently under review by WDFW for possible lease to the Applicant. The Applicant has obtained wind option agreements with landowners for all private lands within the Project site boundary and transmission feeder line corridors.

The Project would utilize a series of 3-bladed wind turbines on tubular steel towers to generate electricity. Turbines would range from 1 MW to 3 MW (generator nameplate capacity) with turbine rotor diameters ranging approximately from 60 to 90 meters (197 to 295 feet). Only one type and size of turbine would be used for the entire Project. For the Project's smallest contemplated turbines, each with a rotor diameter of 60 meters and nameplate capacity of 1 MW, up to 158 units would be installed for a total Project nameplate capacity of 158 MW. For the largest contemplated turbines, each with a rotor diameter of 90 meters and nameplate capacity of 3 MW, up to 104 units would be installed for a total Project nameplate capacity of 312 MW.

The Applicant has requested the latitude to select the turbine manufacturer prior to beginning Project construction. The size and type of turbine used for the Project would largely depend on such factors as safety, quality, price, performance and reliability history, power characteristics, guarantees, financial strength of the supplier, and the availability of a particular type of wind turbine at the time of construction. Regardless of which size of turbine is finally

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selected for the Project, the turbines would generally be installed along the access roadways identified in the Application. All construction activities would occur within the corridors identified in the Application, with any final adjustments to specific turbine locations made to maintain adequate spacing between turbines for optimized energy efficiency and to compensate for local conditions.

Water required for construction and operation of the Project will be purchased off-site from authorized sources, and transported to the Project area by truck. Sanitary waste water produced during construction will be disposed of off-site at facilities authorized to accept such wastes. Sanitary waste water produced during Project operation will be discharged to and treated in an on-site sanitary septic system constructed in accordance with Kittitas County requirements. The Project will not generate process wastewater during operation. Stormwater discharges generated during construction and operation of the Project would be managed in accordance with Washington State stormwater management practices and guidelines.

The Applicant is proposing to mitigate all permanent and temporary impacts on vegetation caused by the proposed Project, in accordance with the guidelines outlined in the WDFW Wind Power Guidelines for siting and mitigating wind power projects east of the Cascades, through protection of a 600 acre mitigation parcel within the 8,600-acre Project area. The mitigation parcel is located in T18N, R21E, Section 27, with the exception of the portion of this section that would be excluded from mitigation and developed as part of the Project. In addition to the mitigation parcel in Section 27, the Applicant proposes to protect several springs within the Project area to eliminate further degradation by livestock.

Electricity generated by the Project will be transmitted to either one or both of the Puget Sound Energy (PSE) or Bonneville Power Administration (BPA) electrical transmission systems. Although the Applicant anticipates that only one feeder line would be built, two alternate 230 kV transmission feeder lines are proposed for the Project, one to allow interconnection with the BPA transmission system and one to allow interconnection with the PSE transmission system. Power from the Project would be fed to step-up substations. The step-up substations would connect to the respective BPA or PSE feeder lines, which connect to the respective utility's interconnect substation. The BPA feeder line runs west from the Project site for approximately 5 miles to a point where it intersects with the existing corridor of BPA high-voltage transmission lines (the Schultz to Vantage 500 kV line corridor). The PSE feeder line runs approximately 8 miles south and west from the Project site to the PSE interconnection substation. The Applicant has requested permission to construct and operate the interconnect substation with the PSE transmission system. If needed, an interconnect substation with the BPA system would be reviewed, constructed and operated by BPA.

The Council and the EFSEC Review Process

EFSEC was created to advise the Governor in deciding which proposed locations are appropriate for the siting of new large energy facilities. Chapter 80.50 RCW. The Legislature recognized that the selection of sites would have a significant impact on the welfare of the population, the location and growth of industry, and the use of the natural resources of the state. It is the policy of the state of Washington to recognize the pressing need for increased energy facilities and to ensure, through available and reasonable methods, that the location and

operation of such facilities will produce minimal adverse effects on the environment, ecology of the land and its wildlife, and the ecology of state waters and their aquatic life. RCW 80.50.010.

The Council has a comprehensive mandate to balance the need for abundant energy at a reasonable cost with the broad interests of the public. The Council is also charged to protect the health of citizens and recommend site approval for power plants where minimal adverse effects on the environment can be achieved. RCW 80.50.010; *see also* Washington Administrative Code (WAC) 463-47-110.

The Council conducted its review of this Application as an adjudicative proceeding pursuant to Chapter 34.05 RCW, as required by RCW 80.50.090(3) and Chapter 463-30 WAC.¹

Pursuant to its statutory obligations, the Council reviewed Application for Site Certification No. 2004-01, conducted hearings to determine if the proposed Project complies with local land use regulations, issued a Draft Environmental Impact Statement (Draft EIS), adopted and issued a Final Environmental Impact Statement (Final EIS), and conducted formal adjudicative and public comment hearings.

Council representatives participating in these proceedings to consider the Application are: James O. Luce, Council Chair; Richard Fryhling, Department of Community, Trade and Economic Development; Hedia Adelsman, Department of Ecology; Chris Towne, Department of Fish and Wildlife; Tony Ifie, Department of Natural Resources; Tim Sweeney, Washington Utilities and Transportation Commission; and Patti Johnson, Kittitas County. Adam E. Torem, Administrative Law Judge, Office of Administrative Hearings, was retained by the Council to facilitate and conduct the hearings.

Potential Site Study and Application for Site Certification

The Applicant chose to obtain certification for the Project pursuant to RCW 80.50.060(2). On July 2, 2003, Wind Ridge requested that EFSEC conduct a Potential Site Study. (RCW 80.50.175). On November 18, 2003, EFSEC issued its Potential Site Study report.

On March 9, 2004, Wind Ridge submitted to the Council an Application for Site Certification to construct and operate the WHWPP in Kittitas County, Washington.

Compliance with the State Environmental Policy Act

The Council is also charged with the responsibility to apply the State Environmental Policy Act (SEPA), Chapter 43.21C RCW, which provides for the consideration of probable adverse environmental impacts and possible mitigation. WAC 463-47-140. Pursuant to SEPA, EFSEC is the lead agency for environmental review of projects under the jurisdiction of Chapter 80.50 RCW; the Council Manager is the SEPA responsible official. WAC 463-47-051.

In this proceeding, the Council complied with SEPA requirements by issuing a

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¹ The Council reviewed Application No. 2004-01 pursuant to the provisions of Title 463 of the Washington Administrative Code in effect on March 9, 2004, the date the Application was filed.

Determination of Significance and Scoping Notice, conducting a scoping hearing, issuing a Draft EIS for public comment, conducting a public hearing and accepting written comments on the Draft EIS, and adopting and issuing a Final EIS.

On March 30, 2004, the Council issued a Determination of Significance and request for comments on the scope of the EIS. The Council held a meeting with interested federal and state agencies as well as a separate public comment meeting on the scope of the EIS in Ellensburg, Washington, on April 22, 2004. Six people from six agencies attended the agency meeting and approximately 30 people attended the public scoping meeting. The Council accepted written comments on the scope of the EIS until April 30, 2004. In June 2004, the Council issued the Scoping Summary report.

On August 3, 2004, the Council issued a Draft EIS prepared by an independent consultant. The Council held a public hearing to accept oral comment on the Draft EIS on August 24, 2004, in Ellensburg, Washington. The Council heard oral comments from 17 members of the public. The Council accepted written comments through September 10, 2004 (postmark deadline); the Council received 32 written comment letters. A Final EIS was adopted and issued by the Council on May 16, 2005.

Adjudicative Proceeding

On August 3, 2004, the Council issued its Notice of Intent to Hold Adjudicative Proceeding, Notice of Opportunity and Deadline to File Petitions for Intervention by September 10, 2004, and Notice of Intent to Hold Prehearing Conference.

Statutory parties to the EFSEC adjudicative hearings include the Applicant and the Counsel for the Environment. The Washington State Department of Community, Trade and Economic Development (CTED) filed a Notice of Intervention in the matter; CTED is entitled to intervene under Council rules, therefore, the Council granted party status. WAC 463-30-050. Upon petitions being filed, the Council also granted party status to Kittitas County, Friends of Wildlife and Wind Power (FWWP), the Economic Development Group of Kittitas County (EDG) and Mr. F. Steven Lathrop.

The parties were represented in the various hearings as follows:

Applicant, Wind Ridge Power Partners, LLC: Darrel L. Peeples, Attorney at Law, Olympia, WA; Timothy L. McMahan, Attorney at Law, Stoel Rives, LLP, Portland Oregon; and Erin L. Anderson, Attorney at Law, Cone Gilreath Law Offices, Ellensburg, Washington.

<u>Counsel for the Environment</u>: John Lane, Assistant Attorney General, Office of the Attorney General, Olympia, Washington.

<u>Kittitas County</u>: James Hurson, Deputy Prosecuting Attorney, Kittitas County Prosecuting Attorney's Office, Ellensburg, Washington.

<u>Friends of Wildlife and Wind Power:</u> David Bricklin, Attorney at Law, Bricklin, Newman & Dodd, LLP, Seattle, Washington.

F. Steven Lathrop: Jeff Slothower, Attorney at Law, Ellensburg, Washington.

<u>Washington State Department of Community, Trade and Economic Development</u>: Tony Usibelli, Assistant Director, Energy Policy Division, Olympia, Washington.

<u>Economic Development Group of Kittitas County:</u> Debbie Strand, Executive Director, Ellensburg, Washington.

Prior to formal adjudicative hearings on the Application, the Council duly noticed, and conducted prehearing conferences on September 30, 2004, November 1, 2004, February 8, 2005, February 22, 2005, February 24, 2005 and March 7, 2005. The Council issued Prehearing Orders Numbers 1 through 6 (Council Orders Nos. 805, 806, 807, 808, 810, and 811).

Prior to the Adjudicative Proceedings, intervenor FWWP indicated its withdrawal, and intervenor Lathrop indicated his non-participation in further proceedings in this matter. The Council acknowledged these withdrawals at the prehearing conference held on March 7, 2005.

On February 18, 2005, prior to the adjudicative hearing, the Applicant entered into a Settlement Agreement with the Washington State Department of Fish and Wildlife (WDFW).² On March 7, 2005,³ prior to the adjudicative hearing, the Applicant entered into a Stipulation and Settlement Agreement with Kittitas County. The Council approved these stipulations and settlements on March 7, 2005, at a hearing held immediately prior to commencing the Adjudicative Proceeding in Ellensburg, Washington.

The Council held a formal Adjudicative Proceeding regarding Wind Ridge's Application, No. 2004-01, on March 7 and 8, 2005, in Ellensburg, Washington. On the evening of March 8, 2005, the Council held a public hearing in Ellensburg, Washington, at which 15 members of the public testified. The Council received 19 written comment letters regarding the Project.

Subsequent to the Adjudicative Proceedings, Counsel for the Applicant and Counsel for the Environment filed post-hearing briefs.

Land Use Consistency

The Council is required to hold a public hearing to determine whether a proposed Project's use of a site is consistent with local or regional land use plans as well as zoning ordinances in effect at the time the Application was submitted to the Council. WAC 463-14-030. A first land use consistency hearing was conducted on March 7, 2004, in Ellensburg, Washington. The Council received and entered into its record two land use exhibits, and heard from one witness appearing for the Applicant, one witness appearing for Kittitas County, and

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² Although the WDFW did not submit a formal notice of participation in this matter, it is a party of right pursuant to WAC 463-30-050.

³ The Applicant and Kittitas County entered into agreement on March 7, 2005; advance un-signed copies of the agreement were provided to the Council on March 4, 2005.

seven members of the public who testified on the issue of land use consistency. Upon considering both written and oral testimony presented at the hearing, the Council found the Project to be inconsistent with Kittitas County land use plans and zoning ordinances, and issued Council Order No. 791 to that effect. Pursuant to WAC 463-28-030(1) the Council directed the Applicant to make all reasonable efforts with Kittitas County to resolve the existing land use inconsistencies in the Project Application.

Council Order 791 gave the Applicant until August 30, 2004, to resolve the inconsistencies, ask for preemption of local land use law, or request an extension of the time period for requesting preemption pursuant to WAC 463-28-040. Upon timely requests received from the Applicant, the Council agreed to two extensions of this deadline, the first through November 14, 2004, and the second through April 1, 2005. The Applicant's efforts to achieve land use consistency delayed EFSEC processing of the Application for approximately five months.

The Council reconvened the land use hearing on March 7, 2005 in Ellensburg, WA. At this reconvened hearing, the Council accepted a Certification from Kittitas County declaring that the Project was consistent with local land use requirements. Certificates from local authorities attesting to the fact that the proposal is consistent and in compliance with county or regional land use plans or zoning ordinances are regarded as prima facie proof of consistency and compliance with such zoning ordinances or land use plans absent contrary demonstration by anyone at the hearing. WAC 463-26-090. No members of the public testified at this second hearing and no evidence was introduced contrary to the land use certificate.

After extended discussion and subsequent acceptance of the County's Certification of Land Use Consistency, the Council found and concluded that the Project's use of the site as proposed by Application No. 2004-01 was consistent and in compliance with all applicable county land use plans and local zoning ordinances.

Public Testimony and Comment

The Council is required to hold public hearings in which any person may be heard in support of, or in opposition to, an Application. RCW 80.50.090; *see also* WAC 463-14-030. The Council provided an opportunity for public witnesses to testify during the hearing on the Draft EIS, the hearings on land use consistency, and the public hearing on the proposed Project.

EFSEC provided public notices of the following events: receipt of the Application; public meetings; land use hearing; intent to hold adjudicative proceedings; notice for filing of petitions for intervention and deadline for filing such petitions; notice of adjudicative hearings; Determination of Significance and request for comments on scope of the Environmental Impact Statement (EIS); Draft EIS comment period and public comment hearings; notice of availability of a Final EIS; and notice of Special EFSEC Meeting. The Council duly published all required notices of these proceedings.

The Council received oral comments during these hearings, as follows: comment on the Draft EIS on April 22, 2004, in Ellensburg, Washington (17 members of the public); the land use consistency hearing on April 22, 2004, in Ellensburg, Washington (7 members of the public); the

reconvened land use consistency hearing on March 7, 2005, in Ellensburg, Washington (no members of the public); and at a public hearing on the proposed Project held March 8, 2005, in Ellensburg, Washington (15 members of the public).

The Council received 19 comment letters from members of the public regarding the Application, in addition to 32 letters on the Draft EIS, and two submissions regarding land use consistency.

The Council carefully considered both the specific comments of the witnesses and the topics they addressed as indications of matters significant to the public as well as the written comments submitted by the public. The Council expresses its appreciation for these witnesses' testimony and all written comments submitted.

Council Action on Recommendation to Governor

In accordance with the requirements of Chapter 34.05 RCW and Chapter 80.50 RCW, on May 25, 2005, at a duly noticed Special Meeting conducted in Ellensburg, Washington, the Council voted unanimously to recommend approval of the Project to the Governor of Washington state. The Council memorializes its action in this Order, Council Order No. 814 Findings of Fact, Conclusions of Law, and Order Recommending Approval of Site Certification on Condition.

2. SETTLEMENTS AND STIPULATIONS

In connection with Application No. 2004-01, the Council encouraged the parties to make all reasonable efforts to settle contested issues. Kittitas County and the Applicant worked to achieve settlement, and the Council acknowledges the professionalism, attention to detail, and advocacy underlying the resulting settlement. The Applicant also presented a settlement with WDFW. The Council considered the settlements on March 7, 2005. After review of each settlement document and consideration of testimony concerning the settlements, the Council approved both settlement agreements.

On March 7, 2005, prior to the adjudicative hearing, the Applicant entered into a Stipulation and Settlement Agreement with Kittitas County. A copy of this agreement was provided to the Council on March 4, 2005. This Stipulation and Settlement agreement will be attached to the Site Certification Agreement, and is incorporated herein by reference. The Stipulation and Settlement Agreement indicates that the Application is consistent with Kittitas County's applicable land use laws. It is supported by county ordinances amending the Kittitas County Comprehensive Plan to create a Wind Farm Resource Overlay District for the Project and rezoning the affected property. Further, it is supported by a Development Agreement which sets forth minimum requirements and Project development conditions that Wind Ridge and Kittitas County have agreed should be included in any Site Certification Agreement (SCA) issued for the Project. These requirements and conditions address, among other topics, environmental mitigation measures, county-provided fire protection services, decommissioning costs and procedures, and indemnification. So long as the requirements and conditions set out in the Stipulation and Settlement Agreement are included in the SCA, and the Project is approved by the Governor, Kittitas County fully supports the issuance of an SCA for the Project.

On February 18, 2005, prior to the adjudicative hearing, the Applicant entered into a Settlement Agreement with the Washington State Department of Fish and Wildlife (WDFW). A copy of the agreement was provided to the Council on March 4, 2005. On March 7, 2005, prior to the adjudicative hearing, the Applicant presented this Settlement Agreement to the Council; it will also be attached to the Site Certification Agreement, and is incorporated herein by reference. This Settlement Agreement with WDFW addresses mitigation of Project impacts on habitat, vegetation and wildlife, and conditions for post-construction site restoration. It sets forth minimum requirements and conditions that Wind Ridge and WDFW have agreed should be included in any Site Certification Agreement. So long as those requirements and conditions are included in the SCA, WDFW will not object to the issuance of an SCA for the Project.

The requirements and conditions agreed upon between the Applicant and the County and WDFW respectively have been incorporated into the Site Certification Agreement.

3. LAND USE CONSISTENCY

As noted above, Kittitas County presented a Certification of Land Use Consistency to the Council on March 7, 2005. At the reconvened land use hearing held on that date, representatives from Kittitas County testified that the Applicant requested approval from the County to develop the Wild Horse Wind Power Project pursuant to the Kittitas County Comprehensive Plan and Zoning Code. A complete consolidated Development Activities Application was filed with Kittitas County on June 25, 2004. The Planning Commission and the Board of County Commissioners conducted public hearings and the Board of Commissioners approved the Consolidated Development Activities Application on March 4th, 2005. The Board of County Commissioners adopted Ordinances No. 2005-08, 2005-09, 2005-10 and 2005-11, documenting consistency with all local land use plans and ordinance, approving a Wind Farm Resource Overlay Zoning District, and authorizing execution of a Development Agreement with Wind Ridge.

Following a thorough explanation and discussion of the above-noted actions, including each of the newly enacted county ordinances and the provisions of the Development Agreement, as well as the resulting Stipulation and Settlement Agreement, the Council accepted the County's Certification of Land Use Consistency. The Council notes that the existing uses of the Project's land area will not be permanently displaced or disturbed by operation of a wind farm. After consideration of all available evidence, the Council found and concluded that the Project was consistent with all applicable local land use laws and regulations.

4. ISSUES

Notwithstanding the two settlement agreements approved by the Council, and the resolution of some contested issues therein, the Council still had to consider issues such as air quality, noise, wetlands, wildlife, water quality and quantity, visual resources, health and safety/public services, seismic/volcanic hazards, traffic and transportation, cultural resources, site restoration and whether the Applicant made a prima facie demonstration that the Project met the requirements of law and was consistent with the legislative policy and intent of Chapter 80.50 RCW.

Additionally, EFSEC is responsible for applying the State Environmental Policy Act (SEPA), Chapter 43.21C RCW, which provides for the consideration and mitigation of probable significant adverse environmental impacts. WAC 463-47-140. Finally, the Council carefully considers all public comment received on proposed power facilities. RCW 80.50.090 and WAC 463-14-030.

Project Configuration and Construction

As indicated in the Draft and Final EIS, the Council reviewed the impacts of the Project on all elements of the environment for the range of turbine sizes and numbers proposed in the Application. The analysis performed in the EIS showed that, overall, the impacts from the various Project scenarios did not vary significantly from one scenario to the next. No scenario resulted in significant adverse environmental impacts on any element of the environment. The Council therefore finds that allowing the Applicant to select a suitable Project configuration from within the range described in the Application, and analyzed in the EIS, is appropriate.

The Applicant shall be required to construct the Project within the time frame anticipated in the construction schedule presented in the Application, approximately twelve (12) months from the beginning of construction (*see* Application, Section 2.2.6). However, the Applicant shall not be restricted from operating and generating power from those individual strings of turbines that are completed prior to the strings of turbines remaining under construction. Further, if the Applicant insists on the Project being constructed in phases over a period exceeding that presented in Application No. 2004-01 the Applicant may seek an amendment to the Site Certification Agreement at a later date, allowing for any required additional environmental impact analysis and confirmation of land use consistency at that time.

As stated above, parts of the Project would be constructed on lands to be leased from WDNR and WDFW. Because some of these leases have not been finalized at the time of approval of this order, the Site Certification Agreement limits site preparation and construction activities only to those lands for which leases have been obtained at the time Project construction activities begin.

Air Quality

Kittitas County is considered "in attainment" for particulate matter pollutants, meaning that ambient air concentration of particulate matter is below National and Washington state Ambient Air Quality Standards. No monitoring data for other criteria pollutants is available for this area. The Project will have a slight, but non-adverse, impact on local air quality during its construction phase, but little to no such impact upon commencement of operations.

During construction, the Project's emissions will consist of exhaust emissions from construction vehicles and equipment and a variety of sources producing "fugitive dust." These include construction-related road traffic on unpaved roads, construction-related blasting and excavation activities, as well as dust generated from the portable rock crusher and concrete batch plant. Mobile source emissions will be mitigated through encouraging carpooling for workers and rules to limit engine idling. Dust emissions will be mitigated through active dust suppression measures on unpaved roads and parking areas, seeding of disturbed areas to reduce

wind-blown dust, regular housekeeping of the rock crusher and batch plant, and use of emission control devices (i.e. water sprays and fabric filters) at those facilities. A temporary air quality permit issued by EFSEC (one year maximum) will govern operation of the rock crusher and batch plant.

The Council finds that the expected construction emissions associated with the Project will have no adverse affect on the ambient air quality in the Kittitas County airshed. The Project will not emit regulated air pollutants when operating, and is therefore not subject to federal or state emissions control requirements during operations. Fugitive emissions will continue to be mitigated using the same measures implemented during construction.

Water Resources

Creeks and springs are the primary naturally occurring surface water resources on the Project site. The Project is not located in any floodplains. There are no existing wells for extraction of ground water on the Project site.

Construction impacts to surface water resources could result from soils eroded by precipitation being transported into creeks and springs. The Applicant will implement mitigation measures to minimize these impacts: Best Management Practices (BMPs) for management of stormwater; setbacks of facility structures from creeks and springs; compliance with general National Pollutant Discharge Elimination System (NPDES) permits for construction activities and sand and gravel operations.

Excavation, drilling, and blasting activities for turbine foundations could provide temporary conduits for sediment-laden surface seepage, thereby temporarily increasing ground water turbidity. However, the duration of these construction activities is expected to be short (2 to 3 months), and these activities would occur primarily during the dry season. Therefore, significant adverse impacts to ground water resources are not expected to occur.

Operation of the Project is not expected to further impact water resources, given that BMPs used during construction will continue to be implemented, and water will continue to be imported from off-site.

Construction of the Project would require water for road construction, wetting of concrete, dust control and other activities. Water would be procured from an off-site authorized source and transported to the site in water-tanker trucks. No water would be used from the site. Estimated water consumption for all construction-related needs is 11 million gallons. Daily water requirements would be approximately 20,000 gallons per day, increasing to 220,000 gallons during periods of intensive road construction. The Applicant shall provide proof of a contract for all needed construction water supplies.

During operations the Project would require water only for the limited needs of the O&M facility. The estimated daily water use would be less than 1,000 gallons per day. This water would be stored in one or two 5,000 gallon storage tanks. The Applicant shall provide proof of a contract for all needed operation water supplies.

During operations the Project would not produce industrial waste water. Sanitary waste

water produced at the O&M facility would be discharged to an on-site septic system, constructed and operated in accordance with Kittitas County requirements.

Habitat, Vegetation, and Wetlands

The Applicant surveyed and mapped vegetation communities in the 8,600 acre Project area, and associated transmission feeder line corridors. More than 90 percent of the area was determined to be shrub-steppe, with smaller occurrences of herbaceous, Pine forest, woody riparian, rock outcrop, pasture and talus communities. Overall habitat quality ranges from "fair" to "good" along the proposed turbine strings. Shrub-steppe habitat is considered a priority habitat by WDFW.

The 1 MW turbine Project scenario would result in the largest temporary vegetation community impact with 364 acres of shrub-steppe out of a total of 401 acres impacted. Regardless of Project configuration, of the approximately 165 acres of permanent impacts, 139 acres would occur in shrub-steppe. Approximately 61 acres of permanent impacts are expected to occur on lithosols⁴.

The Applicant proposed to mitigate all permanent and temporary impacts on vegetation in accordance with the WDFW Wind Project Habitat Mitigation Guidance Document (WDFW Wind Power Guidelines 2003). An approximately 600 acre mitigation parcel has been identified within the 8,600 acre Project area. The parcel would meet or exceed the required habitat replacement ratios under WDFW Wind Power Guidelines for any of the Project scenarios considered. The parcel would be fenced to exclude livestock grazing if grazing practices continue on adjacent parcels during operation of the Project. Protection of the parcel would also result in the protection of a 1-mile segment of Whiskey Dick Creek near its headwaters, thereby providing additional benefit for water quality, wildlife and species diversity. Turbines would also be placed approximately 140 meters from the ponderosa pine forest on the site.

The Applicant would also implement BMPs to minimize introduction of weeds, implement a noxious weed control program, and would develop and implement a comprehensive post-construction restoration plan for temporarily disturbed areas, including habitat reseeding programs, in consultation with WDFW. Sensitive habitat areas near proposed areas of construction would be flagged and designated off-limits to construction activities and personnel. The Applicant would fence several springs within the Project area to eliminate further livestock degradation. The Applicant has agreed to install wildlife-friendly fencing. The Council will require that the fencing be maintained for the life of the Project.

The Council finds that with the mitigation measures proposed by the Applicant, and required in the Site Certification Agreement, mitigation is consistent with the WDFW Wind Power Guidelines, and as a result no significant adverse impacts to habitat are expected to occur.

The Council also acknowledges the Applicant's commitment to voluntarily place the

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⁴ Lithosol (shallow soil) habitats are associated with soils distinctive in physical or chemical properties and can support unique vegetation communities not necessarily associated with a particular vegetation zone. Lithosols are both sensitive to disturbance and difficult to replace.

entire 8,600 acre Project area into a conservation easement with a local land conservancy organization.

Known populations of federally or state-listed endangered, threatened, proposed or candidate plant species have not been identified in the Project area, or the corridors where transmission feeder lines would be constructed. No impacts to protected plants are therefore expected to occur. However, limited impacts may be anticipated to the hedgehog cactus, a species on the Washington State Review list. An estimated 10% of the individuals in the area could be directly impacted by the Project through facility construction activities. Indirect impacts may also occur if habitat degradation allows the introduction of competing weed species, and if collection of cacti continues on the site.

Because of the large number of cacti observed, and the likelihood that many more cacti occur in the areas adjacent to those surveyed for the Project, the level of direct impact to cacti described above is not anticipated to jeopardize the continued existence of the local population, or lead to the need for state or federal listing of the species. The Applicant would implement mitigation measures to prevent the spread of noxious weeds in the Project area during construction. During Project operation the Applicant would control access to the site, and would also post signs at the informational kiosk indicating that collection of cacti is prohibited on the site. Thus, the Council finds that with the implementation of these mitigation measures, no significant adverse impacts are expected to occur to the hedgehog cactus.

The Applicant has surveyed all areas where Project facilities are to be located, including a 100-foot buffer, for the presence of wetlands. No Class 1 or Class 2 wetlands were identified. There are a few Class 3 wetlands that occur as seeps and springs within the Project area, and a seasonal water body near turbine String "K". However, all Project facilities would be located a considerable way from these areas to prevent impacts to these wetlands, and will be located outside the designated buffers of any wetlands or streams, as required by Kittitas County Code Section 17A.04.020, "Buffer width requirements." There will be no turbines placed within 150 meters of any wetland. This significantly exceeds the most stringent wetland setback for Class 1 wetlands in the State of Washington.

The proposed feeder line that would interconnect with the BPA transmission system crosses one intermittent stream, Parke Creek, west of the main Project area. No wetlands were found to be associated with this location.

The Council finds that due to the lack of wetlands in areas where Project facilities would be built, and considering the Applicant's avoidance and buffering of Project facilities from Class 3 wetland areas present in the Project area, no significant adverse impacts to wetlands will occur as a result of construction and operation of this Project.

Fisheries and Wildlife

Within the Project area boundary there are no fish-bearing streams, but several of the Project wind turbine strings are within approximately 1/4 mile of several small creeks, their tributaries, and other unnamed ephemeral creeks. However, the majority of the streams within the Project area, which are mapped as intermittent, drain into fish-bearing streams and/or priority

fish-bearing streams. The nearest documented fish-bearing aquatic resource is located along Quilomene Creek approximately 1 mile north of the Project and will not be impacted by the Project. Downstream from the Project area, the lower ends of Whiskey Dick, and the North Forks of Whiskey Dick and Skookumchuck Creeks contain rainbow trout, and summer steelhead are identified along the lower end of Whiskey Dick Creek as well. These fisheries are more than 5 miles to the east of the Project. The two transmission feeder lines would cross several small drainages and one canal. All of the drainages have been identified as intermittent at the crossing locations and do not contain any sensitive fish species or provide habitat for sensitive species. No significant difference in potential impacts to fishery resources is expected under the different Project scenarios.

Given the lack of potential fish habitat for fish species with federal or state protected status within the Project area, no significant impacts on fisheries are anticipated to occur with the implementation of BMPs and applicable stormwater permits that would control runoff, erosion and sedimentation into water bodies during construction and operation of the Project. The construction methods and control measures proposed by the Applicant, and required in the Site Certification Agreement, will be adequate to protect all wetlands and riparian corridors, and will protect aquatic conditions downstream.

Project construction may affect wildlife through loss of habitat, potential fatalities from construction equipment (for smaller mammal, amphibian and avian species), and disturbance/displacement effects from construction and human occupation of the area. Potential mortality from construction equipment on site is expected to be quite low. Disturbance type impacts can be expected to occur if construction activity occurs near an active nest or primary foraging area. Wildlife displaced from these areas may move to areas with less disturbance; breeding efforts may be affected and foraging opportunities altered during the period of the construction.

Construction impacts to wildlife will be minimized through use of slow moving construction equipment, the relatively short window for construction that will affect only a single nesting season, and consideration of historical areas of sage grouse usage of the site.

The Council finds that mitigation measures implemented by the Applicant to protect habitat, as described previously, will compensate for these disturbance impacts.

Beyond the direct impacts to habitat related to construction and operation of the Project the Council has also given careful consideration to the particular impacts of wind projects on wildlife. Primary concerns voiced by the public and the Counsel for the Environment were: significance of avian mortality due to collisions with turbine blades and towers; adequacy of baseline avian studies used to estimate mortality; impacts to sage grouse; impacts to big game that use the Project area; and impacts to bats.

<u>Avian mortality.</u> To establish baseline information about wildlife use of the Project site against which to evaluate impacts, the Applicant's consultant conducted a variety of wildlife surveys, including surveys for avian use, raptor nests, sage grouse, and big game. The Applicant also reviewed unique and protected species lists and consulted with WDFW and the U.S. Fish and Wildlife Service to determine the potential occurrence of priority habitat and special and/or

protected species. Wind Ridge conducted and reported in its Application a thorough analysis of the potential impacts of the Project on wildlife in accordance with the study requirements of the WDFW Wind Power Guidelines.

Based on the habitat types available, the Project site would be expected to provide habitat primarily for species associated with shrub-steppe habitat, with some riparian and forest-dependent species also potentially occurring. The various springs on site also likely provide important water sources for avian species. The WHWPP site is located within an area identified by the Audubon Society as an important bird area (IBA), known as the Quilomene-Colockum Wildlife Area IBA. This area was identified as an important area for shrub-steppe dependent species and conservation issues identified for the area include invasion by non-native plants and disturbance to nest sites from recreational use. The Project area is also located within the Pacific Flyway, one of four principal north-south bird migration routes in North America. However, given the limited riparian and other important stopover habitat (water bodies), use of the Project area by migratory birds is likely low.

The Applicant identified a total of 53 species of birds during the avian point count surveys, sage grouse surveys, in-transit travel, and incidentally while conducting other field tasks at the Project. The Applicant calculated relative exposure indices (use multiplied by proportion of observations where bird flew within the rotor-swept area) by species in order to identify which species may be most susceptible to collisions with turbine rotors. Spatial use of the Project area was also analyzed to determine whether there were areas of concentrated use by avian species within the Project site. No large differences in use were apparent other than the higher use at one location from the large flocks of snow buntings, European starlings and Canada geese observed.

The Applicant also considered mortality rates for similar species and similar habitats for other recently constructed and operating wind power projects, including projects in the Pacific Northwest region. This entire analytical procedure resulted in the estimation of mortality rates for avian and resident bat species for the Project.

Bird fatality projections of 0.6 to 3.5 per turbine year are anticipated, with most of the fatalities involving resident songbirds such as horned lark, vesper sparrow, western meadowlark, and other common species. Avian mortality is expected to be 50 to 300 individuals per year if 136 turbines are constructed. Bigger turbines with a lower rotation speed and higher ground clearance may result in lower mortality rates for resident birds and other diurnal birds; therefore, mortality rates for these species may potentially be highest under the Project scenario with the smaller 1 MW turbines, and lowest for the scenario using the larger 3 MW turbines. Low raptor mortality is anticipated, with one to ten birds per year, and mortality of bald eagles is not expected because of their infrequent use of the Project area. In addition, installing bigger turbines with a lower rotation speed and higher ground clearance may result in lower raptor mortality rates. Mortality of other types of birds (upland game birds, occasional nocturnal migrating songbirds, waterfowl and other water birds) though expected, would be low.

The Applicant has incorporated several mitigation measures aiming at reducing avian mortality into the initial design of the Project. These measures include: siting turbines away from areas where bird use is expected to be high (streams, riparian zones, wetlands and forested areas); siting turbines away from prominent saddles along the main Whiskey Dick Ridge;

minimizing construction of new roads by improving existing roads and trails; choosing underground (versus overhead) electrical collection lines wherever feasible to minimize perching locations and electrocution hazards; choosing turbines with a low rotation speed and use of tubular towers to minimize risk of bird collision with turbine blades and towers; using unguyed permanent meteorological towers; equipping all overhead power lines with raptor perch guards; and spacing overhead power line conductors to minimize raptor electrocution.

<u>Baseline studies.</u> Several members of the public, representatives of the Audubon Society, and the Counsel for the Environment argued, however, that the one year term for baseline studies required by the WDFW Wind Power Guidelines was insufficient, and that baseline monitoring of existing avian populations should have been performed for a minimum of two years prior to construction of the Project. CFE's witness testified that a single season of bird sampling may not give an accurate picture of bird communities on the site, and if the number of existing birds is underestimated, so would be the mortality estimates. The commenters also indicated that other baseline monitoring, including nighttime migration studies, should have been performed. CFE, in his final brief to the Council, requested that the Council at a minimum incorporate the Applicant's proposed Technical Advisory Committee (TAC) commitment as presented in the Applicant's draft SCA, and that EFSEC commit to taking all necessary steps to correct unanticipated escalation of avian mortality.

The Council has given consideration to these issues, comments and requests. On the issue of avian morality, the Council finds that the Applicant conducted baseline monitoring and avian mortality analyses in conformance with WDFW's Wind Power Guidelines. The Applicant coordinated extensively with WDFW and EFSEC's WDFW contractor,⁵ and addressed all of their concerns, as witnessed by the Settlement with WDFW. Based on the analyses performed by the Applicant, and the review of relevant data presented in the Draft and Final EIS, the Council concludes that there is no evidence indicating that the mortality rates estimated by the Applicant would cause a significant adverse impact to existing bird populations in the Project area.

Implementation of a post-construction avian monitoring plan will be an important measure in assessing the accuracy of the mortality estimates. The plan would be used to quantify impacts to avian species and to assess the adequacy of mitigation measures implemented. The plan would include fatality monitoring involving standardized carcass searches, scavenger removal trials, searcher efficiency trials, and reporting of incidental fatalities by maintenance personnel and others, for a period of two years after the beginning of Project operation. The plan would also include a minimum of one breeding season's raptor nest survey of the study area (including a one mile buffer) to locate and monitoring active raptor nests potentially affected by the construction and operation of the Project. The protocol for the fatality monitoring study will be similar to protocols used at the Vansycle Wind Plant in northeastern Oregon and the Stateline Wind Plant in Washington and Oregon.

⁵ During the review of an Application for Site Certification, EFSEC routinely contracts with agencies with expertise in the areas of impacts associated with a proposal. EFSEC contracted with the WDFW for such services regarding this Project. WDFW Employees assigned to such a contract are considered EFSEC staff, and do not represent WDFW during their performance of contractual tasks.

On the issue of baseline monitoring, the Council defers to the Department of Fish and Wildlife in establishing guidelines consistent with and reflecting the Department's expertise in this area. However, the proposed SCA requires a number of mitigation measures that ensure that if avian mortality beyond the estimated values occurs, appropriate measures can and shall be taken to assess and address the situation. The Council has included in the SCA the Applicant's proposal for formation of a Technical Advisory Committee (TAC); however, the Council also requires that the TAC make recommendations to EFSEC if it deems that additional studies or mitigation are warranted to address unexpected impacts. Furthermore, the TAC would operate under Rules of Procedure to allow the TAC to function properly and efficiently. The Council retains ultimate authority to implement recommendations made by the TAC. The Council also commits to taking steps it deems necessary to impose specific conditions or requirements on the Certificate Holder as a consequence of situations where significant adverse impacts occur.

Sage Grouse. The Council has considered the large volume of information submitted by the public, and entered into the adjudicative record by witnesses, regarding the historic presence of sage grouse in the Project area, current attempts to reestablish the species in the area, and concerns that construction and operation of the Project would hamper sage grouse populations and recovery efforts. The Project area lies within the Washington State sage grouse recovery area and has been used historically by sage grouse, with most recent recorded observations having occurred between 1980 an 1994. The nearest historic lek, recorded by WDFW in 1983, is more than a mile southeast of the Project area and has not been active in recent years. No sage grouse or leks were observed during targeted surveys conducted by the Applicant and its consultants for this Project.

Currently, two populations of sage grouse remain in Washington; one within the Army's Yakima Training Center (YTC) in Yakima and Kittitas counties south of the Project area, and one within Douglas and Grant counties to the northeast of the Project area. The Project area is located on the western edge of the Colockum sage grouse management unit, as defined in the Washington Greater Sage-Grouse Recovery Plan. The recovery plan identifies the Colockum Management Unit as having significant potential as a corridor that may link the current Douglas-Grant and YTC populations, though a lack of high quality winter and breeding habitat and rugged terrain, much of which is unsuitable for sage grouse are limiting factors for resident sage grouse.

Impacts of the WHWPP on future breeding and nesting in the Project area are uncertain, but based on available evidence impacts are expected to be relatively low. It would appear the Project would not significantly impact connectivity between Douglas County populations and the Yakima and Kittitas County populations, given that relatively large blocks of intact shrub-steppe habitat still do exist, and would continue to exist after the Project was constructed, within WDFW and DNR lands to the east of the Project site and private lands to the east and west of the Project site.

Measures proposed by the Applicant to mitigate for vegetation and habitat loss would both indirectly and directly protect sage grouse use of the Project area. Within the Project area, an approximate 600-acre mitigation site would be established in which livestock grazing would be precluded, which likely would improve residual grass cover and potential nesting, brood-rearing, and wintering habitat for sage grouse. In addition, disturbance to sage grouse use of the

site would be minimized by prohibiting routine maintenance of the substation or Project facilities within ¼ mile of an active lek between the hours of sunset and 9:00 a.m. The Applicant would also limit recreational use of the site to the extent feasible; controlled access to the Project area during operations may reduce human disturbance levels compared to current levels. The Council finds that with the implementation of the above measures, the Project would not pose additional threats to sage grouse populations, and would not hinder sage grouse recovery efforts currently underway by WDFW.

<u>Big game.</u> The Project is located within habitats designated by WDFW as winter range for mule deer and elk, is located adjacent to the Quilomene migration corridor, and the northern boundary of the Project is approximately 0.5 mile (0.80 km) from the Colockum elk calving area. The WDFW section within the Project area is considered a Kittitas County Critical Area.

The BPA feeder line transmission route would start in an area identified as both elk and mule deer winter range, would then cross the southern boundary of the elk migration corridor discussed above, and would continue through mule deer winter range. The PSE route would be constructed within an area identified as both elk and mule deer winter range within the Project site and south to where the route would cross Highway 10 and then would not be within identified priority habitat for the remainder of the route.

The Project site appears to get some year-round use by mule deer and elk, but use is more concentrated in the winter. The Applicant's consultant recorded all sightings of mule deer and elk while conducting other field surveys of the Project. Big game likely move between the survey area, the state wildlife areas to the east, private range and agricultural lands to the west and south, and the forested lands to the north of the Project.

During the construction period, it is expected that elk and mule deer will be temporarily displaced from the site due to the influx of humans and heavy construction equipment and associated disturbance (e.g., noise, blasting). All heavy construction, including road and foundation construction and blasting, will occur between April 15 and November 15, outside the critical winter periods. Construction activities in the winter will include only survey and design activities, which may have some minor displacement impacts on big game and elk. These activities in the winter would likely cause a very minor reduction in the quantity and quality of big game winter range. During winter construction activities, elk moving to winter range east of the Project may avoid areas of human disturbances locally within the Project, but overall increases in distances needed to travel would be insignificant.

Following completion of the Project, the disturbance levels from construction equipment and humans will diminish dramatically and the primary disturbances will be associated with operations and maintenance personnel, occasional vehicular traffic, and the presence of the turbines and other facilities. Since the construction effort would be similar for all scenarios, impacts on big game would be expected to be similar for all scenarios.

A number of studies have been conducted to evaluate the impact of human activities on big game. Activities studied included installation of a single oil well, impacts of road transportation and traffic, and impacts of recreational activities. Avoidance of human activity was observed in all of the studies, though causes for avoidance, and reasons for changes in home

range and core use areas, were not clearly identified. In addition, mule deer that shared areas with elk might also avoid using areas when elk are present.

There is little information regarding the specific effects of wind projects on big game, and it is therefore difficult to predict with certainty the effects of the Project on mule deer and elk. A recent study in Oklahoma involved the monitoring of the behavior of Rocky Mountain elk in the vicinity of a wind farm. The elk had were to allow tracking their positions with respect to wind turbine locations, before, during and after construction of that project. Preliminary conclusions from the Oklahoma study indicated that elk did not abandon the project area in response to wind power project construction, but that the area used and elk distance from the turbines was affected by forage availability and human activity during construction.

Most turbines and roads in the proposed Project area will be located on ridges and will be visible over a fairly large area. While human-related activity at wind turbines during regular maintenance will be relatively infrequent, it is not known if human activity associated with regular maintenance activity will exceed tolerance thresholds for wintering elk. If tolerance thresholds during regular maintenance activities were exceeded, elk would likely permanently utilize areas away from the wind development. Access during construction and operation of the Project will be controlled by the Applicant, and disturbance during operation to big game may be minimized and actually less than that which occurred predevelopment.

WDFW has also expressed concern regarding the potential for wind projects to increase elk and mule deer damage claims on private agricultural lands near wind projects. Elk and mule deer, if displaced from the Project area, may increase their utilization of agricultural lands in the vicinity of the Project area. If elk and mule deer are not displaced from the Project, then WDFW is concerned that the Project may create a "sanctuary" if hunting is not allowed in the Project area, therefore limiting WDFW's ability to manage the herds. The Applicant has agreed to work with the WDFW to establish a hunting plan for the Project site.

With implementation of mitigation measures proposed, the potential for disturbance to big game appears to be low. Post-construction monitoring of Project impacts will allow identification of any unexpected shifts in big game use of the Project area.

<u>Bats.</u> The potential for bats to occur in the Project area is based on key habitat elements such as food sources, water, and roost sites. Potential roost structures such as trees are, in general, limited within the Project to "the Pines" area near Government Springs and within the riparian corridors along Whiskey Dick and Skookumchuck Creeks. The various springs within the Project area may be used as foraging and watering areas. Little is known about bat species distribution, but several species of bats could occur in the Project area based on the Washington GAP project and inventories conducted on the Hanford Site's Arid Lands Ecology Reserve located in Benton County to the south and east.

Impacts on bats or bat habitat on the site are unlikely during construction. During operation of the Project, bats would be susceptible to collisions with wind turbine blades and towers. Bat research at other wind plants indicates that migratory bat species are at some risk of collision with wind turbine blades and towers, mostly during the fall migration season. It is likely that some bat fatalities would occur during operation of the Project. Most bat fatalities

found at wind plants have been tree-dwelling bats, with hoary and silver-haired bats being the most prevalent fatalities. Both species may use the forested habitats near the Project site and may migrate through the Project. Some mortality of mostly migratory bats, especially hoary and silver-haired bats, is anticipated during operation of the Project.

Although potential future mortality of migratory bats is difficult to predict, an estimate can be calculated based on levels of mortality documented at other wind plants. Operation of the Project could result in approximately 100 to 400 bat fatalities per year. Actual levels of mortality could be higher or lower depending on regional migratory patterns of bats, patterns of local movements through the area, and the response of bats to turbines, individually and collectively. As described for birds, larger turbines with a lower rotation speed and higher tip clearance may cause lower mortality than smaller, faster turbines, which are closer to the ground.

The significance of this impact is hard to predict since there is very little information available regarding existing bat populations in the Project area. Hoary bat, which is expected to be the most common fatality, is one of the most widely distributed bats in North America. Preconstruction surveys to predict impacts on bats would have been relatively ineffective, because current state-of-the-art technology for studying bats does not appear to be highly effective for documenting migrant bat use of a site.

The Council finds that the mitigation measures implemented for protection of avian species will also protect bats. Implementation of a post-construction avian monitoring program and presence of a TAC will also allow identification of any unanticipated impacts.

<u>Unique and protected species.</u> The Applicant generated a list of state and federally protected species that potentially occur within the Project area to assess the potential for impacts on these species. Species were identified based on the WDFW Species of Concern list, which includes state listed endangered, threatened, sensitive, and candidate species; and the U.S. Fish and Wildlife Service (USFWS), Central Washington Ecological Services Office list of Endangered, Threatened, Proposed, Candidate and Species of Concern for Kittitas County, and consultation with the USFWS. Based on the habitat attributes present on the Project site and the habitats with which these species are associated, only bald eagle and western sage grouse have the potential to occur within the Project site.⁶

Impacts to all protected, unique and special species were assessed in the draft and Final EIS. The Project area may possess attributes for habitat for several species, and several species may occur at the Project site. However, it was determined that impacts due to construction and operation of the Project would not adversely impact the viability of these species.

Although no active nests were documented during nest surveys, golden eagles were observed during fixed-point surveys throughout the year and golden eagles have nested historically within 2 miles of the Project area. Overall use of the Project area by golden eagles is relatively low compared to other wind plants where golden eagle fatalities have been

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⁶ Since consultation was conducted, the USFWS has published a finding that, as of January 2005, listing of the sage grouse under the Endangered Species Act (ESA) is not warranted (FR 70 2244-2282). Sage grouse are listed as threatened by the State of Washington.

documented. While the potential exists for golden eagles to collide with turbines, overall risks to golden eagle populations are considered low, and only a few individuals at most are expected to collide with turbines over the life of the Project.

Only one bald eagle was observed during surveys within the Project area. The bald eagle was observed during the winter, and no bald eagle nests were observed during raptor nest surveys. Impacts to bald eagles are not expected. No disturbance or displacement impacts on raptor nests are anticipated, since no active raptor nests were identified within 0.5 mile of Project facilities.

Noise

The Project will be designed to meet applicable Washington State Environmental Noise Levels, Chapter 173-60 WAC. Kittitas County does not have noise ordinances requiring control beyond state Noise Levels.

Because of the remoteness of the Project area, noise resulting from construction of facilities on the Project site is not expected to have adverse impacts on residences. Furthermore, the Applicant has committed to implement work-hour controls to limit noisy activities and blasting to daylight hours only.

Construction haul truck traffic has been identified as a potential source of noise levels exceeding the Federal Highway Administration's noise impact criterion of 66 dBA for residences within 50 feet of street centerline along the haul route through the City of Kittitas. However, there are few homes this close to the haul roads, reducing the potential for adverse noise impacts from this temporary source.

The Applicant has extensively modeled the noise impacts from turbine operation using industry recommended models and procedures. The Applicant has assumed conservative noise emission values for the type of equipment being considered. The modeled noise resulting from operation of the wind turbine generator is less than background noise for the residences nearest the Project, roughly one-and-a-half miles away. Therefore, the operational noise from the turbine blades and nacelles should not be discernible from any local homes.

Audible noise from the high voltage feeder lines, substation transformers and high-voltage switching equipment would comply with levels specified in WAC 173-60-040. There are no existing dwellings within the right-of-way of the transmission lines, nor are there any residences in proximity to substation locations.

Geological Resources and Hazards

The 8,600 acre Project site will remain largely intact, with up to 401 acres temporarily impacted by construction activities and only 165 acres permanently altered to accommodate the turbine foundations, the substations, and the O&M facility.

Volcanic activity in the region is well known. However, the most direct risk to the site is from ash fallout, which was experienced most recently at significant levels in 1980. Further, the risk of earthquake is low at this site. Nevertheless, all Project buildings, structures, and

associated systems will be designed and constructed consistent with requirements including seismic standards of the Uniform Building code (UBC) or the International Building Code (IBC), but no less stringent than those found in the Uniform Building Code of 1997. Application of these codes in the Project design will provide adequate protection for the Project facilities and ensure protection measures for human safety.

Construction impacts on geological resources include establishment of temporary rock quarries, a rock crusher, and a concrete batch plant. Local earth resources will not be exported off-site. All materials excavated from the site will be used for on-site backfill as necessary.

The Gingko Petrified Forest State Park is located approximately 5 miles east of the Project. Although no deposits of petrified wood or any other unique physical or geological features have been identified at the site, any found during construction will be reported to the Office of Archaeology and Historic Preservation (OAHP) to allow coordination of an appropriate response.

Local soils are potentially vulnerable to runoff, depending on the slope. The Project will be issued a stormwater construction permit and required to follow a detailed Stormwater Pollution Prevention Plan (SWPPP) with appropriate BMPs to reduce such impacts. Site-specific BMPs will be implemented on steep slopes (21 to 30 degrees) to reduce erosion and prevent landslides during cut and fill activities. One existing landslide on the south side of Whiskey Dick Mountain has been mapped; turbine locations shall be set back at least 800 feet from the top of this slide area.

A NPDES general permit will be required for construction activities; a NPDES sand and gravel permit will also be issued for operation of the temporary rock crusher and concrete batch plant. All construction disturbances will be stabilized and habitat restored, reducing the risk of any further erosion during operation of the Project. Operational BMPs to include landscaping, grass, and other vegetative covers will minimize ongoing erosion and sedimentation.

After implementation of all proposed mitigation measures, there will be no significant unavoidable adverse impacts to geological resources.

Traffic and Transportation

Construction of the Project will result in significant traffic to and from the Project site during the several months of peak construction activities. These temporary increases in traffic would consist of construction truck deliveries of Project equipment and materials and approximately 160 construction workers commuting to the site. This traffic will primarily impact the Vantage Highway but will also affect Interstate 90. Vehicle parking will occur at the O&M facility and along access roads to the turbine strings.

The Applicant will prepare and follow a Traffic Management Plan approved by EFSEC to minimize construction traffic impacts. Landowners adjacent to transportation routes will be notified prior to construction activities. Warning signage and flaggers will be employed to minimize the risk of accidents when large equipment is entering or exiting a public road. Pavement conditions will be documented before construction begins, allowing Kittitas County and the City of Kittitas to monitor any road deterioration associated with the Project. The

Applicant will repair any such road damage. Workers will be encouraged to carpool, further reducing the number of trips.

No significant increase in traffic is expected to occur during the operational phase of the Project. No more than 18 full-time workers are expected to staff the Project.

All proposed turbines at the Project site would be below the Federal Aviation Administration (FAA) 4,000 foot above Mean Sea Level structure ceiling that covers the Project area. The FAA has issued Determination of No Hazard certificates for 127 of the proposed turbine locations. The FAA considered existing approach and departure procedures for the Kittitas County Airport (Bowers field), as well as procedures currently under development. Nine locations identified in the Application did not receive such certificates, and the Applicant has decided to remove these locations from the Project. The Site Certification Agreement reflects that turbines will no longer be constructed at these locations.

The Council finds that the Applicant's proposed mitigation measures will appropriately mitigate construction traffic and air navigation impacts.

Cultural and Archeological Resources

The Applicant conducted background research and an archaeological survey which covered the entire areas within the Project where ground-altering activities are proposed. Eight previously unrecorded prehistoric archaeological sites and one previously unrecorded historical site were identified during this survey. Four "isolated finds" of prehistoric artifacts, eight prehistoric archaeological sites, and one historic site were located and recorded during this archaeological survey. The archaeological sites are in good condition, but provided only minimal cultural information. In addition, the proposed PSE interconnect substation will be situated above the Highline Canal Project access roads, and road upgrades will be made so that they do not impact the Highline Canal. The archaeological and historical sites identified during this current cultural resource survey likely do not meet the standard qualifications for placement on the National Register of Historical Places (NRHP).

Under contract with the Applicant, the Confederated Tribes of the Colville Reservation (CCT) conducted a Traditional Cultural Properties (TCP) study in the Project area. The History/Archaeology Program staff reviewed contractor reports, site forms and maps from OAHP, ethnographic literature related to the Project area, and performed in-field documentation resulting in inventory. Tribal members with personal and family history in the general area were interviewed for input regarding TCPs that may be impacted by the undertaking. Their responses demonstrate archaeological features considered TCPs exist in and adjacent to the proposed WHWPP area. Their input enhances the understanding of the extent of the traditional territories of the Wenatchi people, the significance of traditional resources, and the relevance and importance of current property studies.

In response to notification of receipt of the Project Application by EFSEC, the Yakama Nation stated that it is particularly concerned with the regional effects of the wind farms on flora and fauna, especially as these resources relate to tribal cultural practices. They also expressed concerns about impacts to important food resources and medicines.

Following consultation with EFSEC, OAHP proposed appropriate mitigation measures in a letter dated April 27, 2004. The Applicant has also conducted a cultural landscape review of the Project. There are no historical properties located within the 2/3 mile Area of Visual Dominance for the Project, and this area does not constitute a cultural or rural historic landscape as defined by the NRHP.

As recommended by the Assistant Archaeologist at OAHP, the Applicant proposed to maintain 100-foot design and construction buffers around the archaeological and historical sites identified during this current cultural resource survey, even though they do not meet the standard qualifications for NRHP. A Project archaeologist would flag off or otherwise delineate the archaeological sites with a 100-foot buffer. Ground disturbing actions within a specified radius of any archaeological sites, either recorded during the initial survey or previously documented, would be monitored by a professional archaeologist to prevent damage or destruction to both known and unanticipated archaeological resources. If any archaeological materials, including but not limited to human remains, are observed, excavation in that area would cease, and OAHP, EFSEC, the affected tribes, and the Applicant would be notified. At that time, appropriate treatment and mitigation measures will be developed and implemented. If the Project could not be moved or rerouted to avoid resources, the resources would have to be tested for eligibility for listing in the NRHP. Any excavation or disturbance to the archaeological sites would require an excavation permit from OAHP per RCW 27.53.060. The archaeologist would remove any flagging tape or pin flags at the end of the construction-monitoring phase of the Project. If a tribe requested to have one of its representatives present during earth-disturbing construction activities, the Applicant would comply with their wishes.

The Council finds that with implementation of these mitigation measures no impacts on known culturally sensitive areas would occur under any of the proposed scenarios. Operation of the Project would not impact any of the archaeological or historical sites identified during this current cultural resource survey.

Visual Resources/Light and Glare

The Applicant hired qualified experts to carry out an extensive visual and aesthetic impact analysis which was based primarily on the Federal Highway Administration methodology for determining visual resource change and assessing viewer response to that change. The Applicant's expert used the photomontage module of the WindPro software program to create "before and after" visual simulation images to show the proposed Project from six simulation viewpoints (SVs) selected to be representative of views toward the Project from a range of locations, superimposing computer-rendered three-dimensional wind turbines on photographs of existing conditions.

Levels of visual impact were classified as high, moderate, and low. To minimize visual impact, the Applicant will undertake mitigation measures, such as painting the wind turbine towers with low reflective paints designed to blend into background colors. The Applicant's analysis and the Council's FEIS found that the overall visual impact of the Project would be low to moderate.

The Project is located in a remote and rural area of Kittitas County. Given the distances

from major highways and concentrations of residences, neither glare nor "shadow flicker" pose hazards with this Project (see below). Further, the turbine towers will not add significant ambient light to their immediate surroundings; however, they will be marked with flashing warning lights required by the Federal Aviation Administration to alert aircraft to their presence.

Health and Safety

The primary health and safety risks associated with the construction of the Project fall into three categories: fire risks; risks associated with the release of hazardous materials; and risks specifically associated with the operation of a wind generation facility.

<u>Fire.</u> The risk of fire is the primary health and safety concern associated with the proposed Project, regardless of which development scenario would be implemented. The incidence of fire or explosion during construction could be due to lightning strikes, terrorism, sabotage, vandalism, aircraft impact, or human activities associated with the construction work.

Because the Project site is generally arid rangeland with a predominant groundcover of grasses and sagebrush, the greatest risk of fire would be during the hot, dry summer season. Once started, a range fire could spread rapidly. Nearby residences, although more than 1.75 miles from the site, could be impacted by a wildfire.

The same causes of fires would exist during operation of the Project; however, risks associated with human activity on the site would be reduced in comparison with the construction phase. Even though the Project site is in an area of relatively low lightning flash density, because of the nature of the terrain and area vegetation, the occurrence of lightning strikes may increase due to the presence of proposed Project structures. The wind turbine generators and substation would include lightning protection systems. Fires could also occur in the turbines and the Project's electrical equipment as a result of equipment malfunction, lightning strike, electrical short, terrorism, sabotage, vandalism, or aircraft impact. Sensors installed in the turbines and substation transformers would detect conditions related to a fire and send an alarm signal to the central Supervisory Control and Data Acquisition (SCADA) system, which would notify Project operators of the situation.

In addition to the monitoring systems described above the wind turbines for the proposed Project would meet international engineering design and manufacturing safety standards including the International Electrotechnical Commission standard 61400-1: Wind Turbine Generator Systems—Part I: Safety Requirements. Project facilities would be marked and lighted in accordance with FAA regulations to minimize the potential for a low-flying aircraft to collide with a structure. Finally the conductors for the proposed transmission line would be of sufficient diameter to control corona effects and special care would be employed during construction to minimize nicks and scrapes to the conductors.

The Applicant proposes to implement a comprehensive series of measures to prevent fires during construction of the Project, including but not limited to equipping vehicles with fire extinguishers, installing fire boxes with fire fighting supplies at various locations; and maintaining a minimum of one water truck with sprayers on each turbine string road during construction activities during fire season; and using high clearance off-road vehicles.

The Applicant will be required to prepare a fire control plan in coordination with local and state agencies and response organizations. The Applicant has also entered into an agreement with Fire District No. 2 for fire protection services. The SCA requires that this agreement be maintained through the life of the Project.

<u>Release of hazardous materials.</u> The Applicant conducted a Phase I Environmental Site Assessment (ESA) for the Project site. The Phase I ESA did not reveal the presence or potential presence of any environmental contamination on the Project site. In the event that contaminated soil would be encountered during construction, the Applicant would coordinate with the Washington Department of Ecology to determine the measures to be taken.

Construction and operation of the Project would, however, require the use of hazardous materials such as: diesel and gasoline fuels for operating construction equipment and vehicles; lubricating oils; transformer mineral oils; and cooling, lubricating and hydraulic fluids used in the turbines. The Applicant has proposed various supply and storage mechanisms depending on the type of fluid being handled.

The Applicant has proposed mitigation measures to prevent or control the occurrence of spills on site during construction and operation of the Project, including appropriate handling and storage facilities for the fluids of concern, and facility design to include sensors for fluid leaks as appropriate. In addition, the Applicant will be required to develop a Spill Prevention Control and Countermeasures (SPCC) Plan for both construction and operation phases of the Project. SPCC plans are required by regulation to be reviewed and updated, as appropriate, at a minimum every 2 years.

<u>Hazards specifically associated with wind generation facilities.</u> Several health and safety hazards are specific to wind generation facilities: ice and blade fragment throw from the turbine blades; turbine tower collapse; turbine blade throw; and shadow flicker.

Ice can form on wind turbine towers and rotor blades. Moving rotor blades are subject to heavier buildups of ice than stationary blades. The Applicant has estimated that icing conditions could occur on an average of 3 to 5 days per year and that the distance of the maximum ice throw, if it were to occur, would be 328 feet. The ice throw hazard area would extend perpendicular to the wind direction and downwind from the turbine. The ice throw hazard area would extend about 80 feet upwind of the turbine. Blade fragment throw risk would be similar to that for ice throw. Blade fragment throw would most likely be the result of terrorism, sabotage, vandalism, or a lightning strike. The hazard zone for blade fragment throw should be approximately that for ice throw.

Because of the significant distances from the proposed tower locations to existing residences and public roads, and restricted site access, the proposed Project should not result in any risk to the public due to ice or blade fragment throw. In addition, the Applicant and Kittitas County have agreed to implement safety setbacks of 541 feet for each of the turbine towers.

The Council heard testimony that incidences of tubular tower collapse are very rare, with only two incidences recorded, one due to an over-speed condition and the other resulting from a weak weld in the tower flange. Restricted site access combined with the large distances to

existing residences and public roads should result in minimal risk to the public if a turbine tower were to collapse.

Possible causes of a loss of a turbine blade are equipment failure, improper assembly, terrorism, sabotage, vandalism, or a lightning strike. Only one occurrence of loss of a turbine blade has been documented, where a blade was thrown 50 to 75 meters. The failure analysis determined that the blade to hub fastening system had failed due to a combined manufacturing and design defect. The Applicant estimated the worst-case blade throw distance to be approximately one turbine tip-height. Restricted site access combined with the large distances to existing residences and public roads should result in minimal risk to the public if a turbine blade were to be thrown.

Shadow-flicker caused by a wind turbine is defined as alternating changes in light intensity when the moving turbine blades cast shadows on the ground or objects (including windows of residences). Shadow-flicker can occur in Project-area homes if a wind turbine is located near a home and is in a position where the blades interfere with very low-angle sunlight. The result can be a pulsating shadow in the rooms of the residence facing the wind turbine and subject to the shadow-flicker effect. Such a location is called a "shadow-flicker receptor." Visual obstacles (e.g., terrain, trees, or buildings) between the wind turbine and a shadow-flicker receptor can reduce or eliminate the shadow-flicker effect. Shadow-flicker frequency is related to the rotor speed and number of blades on the rotor. In addition to being an annoyance, concerns have been raised regarding shadow-flicker causing epileptic seizures.

The proposed Project should not produce shadow-flicker effects on any existing residences in the area because the residences are too far from the turbines and are additionally shielded by existing terrain that separates them from the turbines.

Finally, health and safety and emergency plans for both the construction and operation phases would be prepared by the Applicant to protect public health and safety and the environment on and off the site in the case of a comprehensive list of major natural disasters or industrial accidents relating to or affecting the proposed Project. The Applicant would be responsible for implementing the plans in coordination with the local emergency response support organizations. The Project operating and maintenance group and all contractors would receive emergency response training as part of the regular safety-training program to ensure that effective and safe response actions would be taken to reduce and limit the impact of emergencies at the Project site.

Socioeconomics

Project construction will result in increased employment in Kittitas County. It is estimated that about 50% of the direct construction employment impact (125 jobs) would occur within Kittitas and Yakima counties, with the remainder distributed among other local economies in the Northwest.

Total direct income (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) generated during the construction

phase of the Project is estimated to be \$3,783,000. This would be a temporary effect on the Kittitas County economy.

The Project's economic impacts are not expected to be limited to jobs. The Applicant estimates additional indirect and induced impacts to add another \$1,000,000 to the regional economy. Thus, the total direct and indirect income resulting to the County during the construction phase is projected to be \$4,790,000.

Surveys show that local housing supplies are adequate to accommodate the Project's construction-related demand for temporary rental housing. Thus, no adverse impacts are expected with regard to regional or local housing supply.

Total Project cost is estimated to be \$235 million. Thus, it is estimated that the Project will increase the total valuation of real property in Kittitas County by approximately 8%, from \$2.5 billion to \$2.7 billion. It appears that the Project will become the largest single taxpayer in Kittitas County contributing revenues for state schools and local public services in the area, including county roads and county government. Finally, the Project could result in reduced property tax levy rates for local taxpayers.

The issue of the Project's potential effect on property values in the County was debated during the proceedings. Evidence in the record suggests that the relatively remote location of the Wild Horse Project site is beyond the geographic area where any potential negative impacts to residential or agricultural property values might be experienced. Further, evidence was offered to show that property sales in developed and developing portions of the County remain robust and that property values have not been affected by the publicity related to either of the two other potential wind power projects in the area. Finally, no landowners within 15 miles of the Project site offered any testimony opposing the Project. Therefore, the Council believes that for this particular Application, the sum of the evidence demonstrates that the Project will not have any significant negative affect on the property values in the County

Public Services

Construction of the Project will occur in an area that is susceptible to wildfires, especially during the hot, dry summer season. Risk of fires increases with the acreage of the Project site that is disturbed during construction, and the number of construction workers present on the site. To mitigate for this risk, the Applicant has entered into a Fire Services Agreement with Rural Ellensburg Fire District #2 that will remain in effect for the life of the Project. Because there are only three residences within 2 miles of the Project, the nearest being 1.75 miles away, fire risk to people and private property will be minimal.

Temporary construction workers are not expected to move their families to the area during construction. Therefore, little additional demand on schools and police services is expected. Law enforcement activities would peak during a 1 to 2 month period when on-site employee numbers are greatest. The Applicant has agreed to pay additional costs for law enforcement associated with construction impacts and activities, to be provided by the County Sheriff's office or private onsite security as deemed necessary by the County.

Demand for emergency medical services could increase slightly due to construction accidents on-site or within the Project vicinity. However, the Kittitas Valley Community Hospital has capacity for additional patients, and there are several ambulances available to service the Project area. No significant adverse impacts to medical services in the Project area are expected during construction.

Increased use of local recreational facilities during Project construction may occur. Some workers may decide to stay at parks and campgrounds that allow overnight camping, and some displacement of existing recreational users may occur. However, there is an adequate supply of recreational lodging to accommodate this increased demand, and worker demand may favor weeknight use versus weekend use.

Project operation is not expected to adversely impact fire response, law enforcement, school and medical services; any impacts on these services will be lower than during construction. Even so, the Applicant will maintain fire and emergency response plans developed during the construction phase of the Project, and will also continue coordination with local service providers.

The Applicant has verified through analysis and modeling that operation of the wind turbines will not affect communication technologies in the Project area. All turbine locations and their infrastructure have been chosen to avoid impacts on existing communication paths in the area. Proposed turbine locations will not obstruct or interfere with any existing microwave telecommunication facilities, including those used by cellular telephone providers. Wind turbines do not interfere with cellular phone reception, and as a result there would be no obstruction from Project facilities or operations to cell phone service or the ability of cell phone users to contact emergency providers in the area using that means of communication.

Finally the Applicant commissioned an analysis of potential interference with television reception in the surrounding area. This study concluded that the Project would result in minimal to no degradation of television reception. Further, the number of potentially affected residences is very small.

As stated previously, water for the Project will be obtained from authorized off-site sources. Given the small amount of water required for sanitary uses during operations, there will be no adverse impacts to water supply in the area.

The Project will not require connection to local sewer systems. All sanitary wastes will be collected and disposed of off-site during construction; during operation, sanitary wastes will be handled by an on-site septic system. Solid wastes generated during construction and operation will be disposed of at appropriate waste handling sites. The amounts of waste generated will be relatively small, and are not expected to cause adverse impacts to solid waste disposal sites or services.

The Applicant has committed to a number of mitigation measures pursuant to its Development Agreement with Kittitas County and its agreement with Rural Ellensburg Fire District #2. With these mitigation measures, no significant adverse impacts are anticipated for

public services or recreational facilities.

Site Restoration

WAC 463-42-655, as in effect on the date of submittal of the Application, requires an Applicant to provide a plan for site restoration in sufficient detail to identify, evaluate, and resolve all anticipated major environmental, public health, and safety issues. The rule requires that this plan address provisions for funding or bonding arrangements to meet the site restoration or management costs.

In its Application, Wind Ridge briefly outlined the scope of activities that would be undertaken at the end of the Project's useful life. These activities included removal of Project structures, removal of foundations to 3 feet below grade, and restoration of soil surfaces as close as reasonably possible to their original condition. Through its Stipulation and Settlement Agreement with Kittitas County, the Applicant has further defined the timing, scope and funding of site restoration activities.

The Project would be decommissioned within twelve (12) months following the earlier of either: (a) the date of termination of the County Development Agreement [see Section 1.2 of the Development Agreement]; or (b) at the written request of the County, when the Certificate Holder demonstrates that the energy generated by the Project for the past 12 month period is less than 10% of the Historical Energy Production (as defined in the County Development Agreement).

Decommissioning of the Project would involve removal of the turbines and all component parts; removal of foundations to a depth of 3 feet below grade; re-grading the areas around the Project Facilities; removal of Project access roads and overhead cables (except for any roads and/or power cables that Project Area landowners wish to retain); and final reseeding of disturbed lands (all of which shall comprise "decommissioning"). Decommissioning would be scheduled with turbine removal as the first priority, with performance of all remaining elements immediately thereafter.

The Applicant has committed to posting funds sufficient for decommissioning in the form of a guarantee bond or a letter of credit to ensure the availability of said funds (the "Decommissioning Funds") to EFSEC prior to the end of the first year after commencement of construction. The County would be listed as additionally insured. The Applicant also prepared an engineering estimate of the amount of the Decommissioning Funds that would be required.

The Council has considered the above commitments, and, finding them to be appropriate, has incorporated them into the Site Certification Agreement; *provided* Wind Ridge complies with EFSEC's site restoration regulations in effect at the time of Application submittal. Wind Ridge must provide an initial site restoration plan to the Council prior to construction of the Project, and a detailed site restoration plan must be approved by the Council prior to decommissioning at the end of the useful life of the Project.

An additional condition of the Development Agreement with Kittitas County allows the decommissioning funding security requirements to lapse in the event the owner of the Project is an entity which is an investor-owned electric utility regulated by the FERC and the Washington

Utilities and Transportation Commission, such as Puget Sound Energy, in which case the obligation to fully decommission the Project when due would be a general obligation of the investor-owned electric utility owner. As stated below, the Council has concluded that transfer of ownership to another entity can not be considered in this proceeding. As a result, the Council can not make any conclusions regarding a future owner's capability to guarantee the availability of funds for site restoration to occur. Therefore, the Council has not included such lapse language in the Site Certification Agreement.

Cumulative Impacts

Potential impacts of the proposed Project were considered cumulatively with other potential development in the Project and surrounding areas. Two types of reasonably foreseeable development were identified: proposals for two other wind generation facilities to be located northwest of Ellensburg (Kittitas Valley Wind Power Project, and Desert Claim Wind Power Project), and additional economic and residential development within the County as a whole. It was determined that the construction of the Wild Horse Project, in conjunction with other development considered, is not expected to result in significant adverse cumulative impacts for one or more of the following reasons: no significant adverse impacts were identified for each of the actions individually; impacts of the independent actions were localized to each project; the impacts of the actions are of a temporary nature; mitigation measures and requirements of county regulations reduce adverse impacts to non-significance; the WHWPP does not contribute to cumulative impacts because of the distance that separates it from other wind power development in the County.

A single cumulative impact involving development of all three wind power projects was identified with respect to visual resources: the impact of repetitive views of turbines in the County for residents and frequent visitors to the Valley could result in the impression of change in the overall visual character of the Kittitas Valley landscape. It does not appear that any mitigation measures are available to fully address this cumulative impact to visual resources.

Term of the Site Certification Agreement

The Council finds that there is a benefit to the public to have permitted facilities ready to be constructed whenever it becomes known that more generation capacity is needed. Further, it is in the state's interest to provide abundant energy at reasonable cost. Nonetheless, the Council recognizes that an unlimited build window for a proposed project is *not* appropriate, as over time, mitigation measures presented in an application may no longer be protective of environmental standards and conditions at the time the facility is constructed.

The Applicant, in its Development Agreement with Kittitas County, has proposed a limited "build window" for the Project. The Development Agreement authorizes the Applicant to construct the Project such that "substantial completion" (as defined in the Development Agreement) is achieved no later than 5 years from the date that all state and federal permits necessary to construct the Project are obtained, but in no event later than six (6) years from March 4, 2005, the effective date of the Development Agreement with Kittitas County, provided, however, that such construction is not delayed by a Force Majeure Event.

The Council finds that this build window contained in the Applicant's Stipulation and Settlement Agreement with Kittitas County appropriately balances the Council's concerns regarding the term of this Site Certification Agreement; *provided*, that the Applicant must submit a construction schedule to the Council demonstrating its intention to construct the entire Project within the construction schedule timeframe provided in the Application, i.e. that construction shall be completed within approximately eight to twelve (8-12) months after beginning construction. Thus, at the latest, the Applicant could have until March 3, 2011, to complete the Project, but the actual required completion date will be determined to be approximately 1 year from the date the Applicant commences construction.

Applicant's Proposed Transfer of Project Ownership to Puget Sound Energy

During the adjudicative hearings, the Applicant made it known to the Council that Puget Sound Energy (PSE), a regional utility, had entered into an agreement with Zilkha Renewable Energy to purchase the Wild Horse Wind Power Project, if the Project was ultimately approved by the Governor. Representatives of Puget Sound Energy also presented testimony to the Council regarding the potential benefits of such a transfer of ownership.

In its final brief to the Council, the Applicant requested that the Council include provisions for automatic transfer of Project ownership to PSE in the Site Certification Agreement. The Applicant claimed that such language was appropriate because the Council, through the review of the Application, and based on the adjudicative record, had complied with its regulations on transfer of ownership of a Site Certification Agreement, Chapter 463-36 WAC.

The Council has considered the Applicant's request and understands the advantages and efficiencies of including pre-approved transfer of ownership language in the SCA, but must deny the request at this time. WAC 463-36-100 addresses transfer of Site Certification Agreements; here, no SCA will actually exist until and unless the Governor acts in accordance with the Council's recommendation. Further, WAC 463-36-100(1) prohibits transfer of any SCA without the successor in interest filing a formal petition to assume responsibilities for operation and site management. PSE has not submitted any such request to the Council, aside from a presentation of its interest in the Project at the public comment hearing on March 8, 2005. In addition, the Council has not provided the notice nor held the public informational meeting required by WAC 463-36-100(4) and WAC 463-36-030.

Given the general nature of the transfer of ownership sought, the Council is not currently aware of any grounds to deny PSE owning and operating this wind power facility. Even so, EFSEC is bound to follow its own regulations, even those that might be seen as mere formality. When the Governor takes final action on the Council's Recommendation on Application No. 2004-01, Wind Ridge and PSE may then make the necessary applications and petitions to the Council seeking necessary amendments to and transfer of the SCA.

Conformance with Law

It is the policy of the state of Washington to recognize the pressing need for increased energy facilities, and to ensure through available and reasonable methods, that the location and operation of such facilities will produce minimal adverse effects on the environment, ecology of

the land and its wildlife, and the ecology of state waters and their aquatic life. It is the intent to seek courses of action that will balance the increasing demands for energy facility location and operation in conjunction with the broad interests of the public. RCW 80.50.010.

Consistent with legislative intent, the Council must consider whether an energy facility at a particular site will produce a net benefit after balancing the legislative directive to provide for abundant energy at a reasonable cost with the impact to the environment and the broad interests of the public. Here, the Council finds that the Project conforms to the legislative intent expressed in RCW 80.50.010.

The Applicant proposes to construct the Project in accordance with applicable national and international building codes. Electrical and mechanical project components would comply with international design and construction standards. The Applicant proposes to implement a comprehensive employee safety plan during construction and operation of the Project. The Council therefore finds that operational safeguards will be at least as stringent as the criteria established by the federal government and will be technically sufficient for welfare and protection of the public. RCW 80.50.010 (1).

The Applicant has agreed to appropriate environmental mitigation requirements as indicated in the sections discussed above. As a whole, the mitigation package preserves and protects the quality of the environment. It is the policy of the state of Washington to support the development of wind energy facilities. See State Energy Policy, Guiding Principle #2, RCW 43.21F.015. This Project will produce electrical energy without generating greenhouse gas emissions. As a renewable energy resource, the Project will enhance the public's opportunity to enjoy the esthetic and recreational benefits of the air, water and land resources; to promote air cleanliness; and to pursue beneficial changes in the environment. RCW 80.50.010 (2).

Finally, the evidence in the record supports the conclusion that the region needs to continue to add electrical generation capacity. As a renewable energy source wind power generation facility, the Project will contribute to the diversification and reliability of the state's electrical generation capacity, and will therefore support legislative intent to provide abundant energy at a reasonable cost.

5. CONCLUSION

The Council has carefully considered its statutory duties, applicable administrative rules, and all of the evidence in the record in exercising its duty to balance the state's need for energy at a reasonable cost with the need to protect the environment and the health and safety of the residents of the local area.

One of the Council's principal duties is to ensure that the location of energy facilities will produce minimal adverse effects on the environment. We have considered the testimony of expert witnesses and members of the public, the settlement agreements, as well as the Draft and Final EIS in determining whether this Project, with its proposed mitigation measures and the requirements of the settlement agreements, is appropriate for this location. As currently proposed, and with mitigation for a number of impacts and the conditions of the Site Certification Agreement, the Project would have a minimal impact on the environment. One of

the Council's additional duties is to ensure that the supply of energy, at a reasonable cost, is sufficient to ensure people's health and economic welfare. The record shows that this Project would serve those goals. The Council considered whether the total package of mitigation measures offset the environmental impacts of the Project. Viewed on balance, with respect to this Project, and in the context of mitigation proposed, the package offered by Wind Ridge comports with the legislative policy of Chapter 80.50 RCW.

For all of the reasons discussed in the body of this Order, the Council recommends to the Governor that this Project be APPROVED for site certification.

FINDINGS OF FACT

Having discussed in detail above the facts relating to the material matters, as well as certain conclusions, the Council now makes the following Findings of Facts, Conclusions of Law and states its Decision. Any Findings of Fact which are found to be Conclusions of Law will be considered as such.

Nature of the Proceeding

1. This matter involves Application No. 2004-01 to the Washington State Energy Facility Site Evaluation Council (EFSEC or Council) for certification to construct and operate the Wild Horse Wind Power Project (Project), a wind powered energy generation facility with a maximum of 158 wind turbines and a maximum installed nameplate capacity of 312 megawatts (MW). The Project is to be located in the eastern portion of Kittitas County, Washington.

The Applicant and the Application

- 2. The Applicant, Wind Ridge Power Partners, is a Delaware Limited Liability Company (LLC) formed to develop, permit, finance, construct, own and operate the Project. Wind Ridge Power Partners LLC is owned by one or more "parent" companies which are considered to be Site Certificate Holders, as defined in the Site Certificate.
- 3. On July 2, 2003, the Applicant requested that EFSEC conduct a Potential Site Study. On November 18, 2003, EFSEC issued a Potential Site Study report. RCW 80.50.175.
- 4. On March 9, 2004, the Applicant submitted an Application for Site Certification to the Council seeking certification, pursuant to the RCW 80.50.060, to construct and operate the Wild Horse Wind Power Project in Kittitas County, Washington. The Project is a wind powered electrical generation facility, with a generation capacity not to exceed 312 MW.

Compliance with the State Environmental Policy Act (SEPA)

- 5. EFSEC is the lead agency for environmental review under the State Environmental Policy Act, Chapter 43.21C RCW. The Council Manager is the SEPA responsible official. WAC 463-47-051.
 - 6. On March 30, 2004, the Council issued a Determination of Significance and request

for comments on the scope of environmental impacts. On April 22, 2004, the Council held a hearing on the scope of the Environmental Impact Statement (EIS) in Ellensburg, Washington. The deadline for written comments on the scope of the EIS was April 30, 2004.

- 7. On August 4, 2004, the Council issued a SEPA Draft EIS. On August 24, 2004, the Council held a public hearing regarding the Draft EIS in Ellensburg, Washington. The Council accepted public comments regarding the Draft EIS through September 10, 2004.
 - 8. On May 16, 2005, the Council issued the Final EIS for the Project.

The Adjudicative Proceeding

- 9. The Council duly published notices of receipt of the Application, public meetings, commencement of the Adjudicative Proceeding and opportunity to file petitions for intervention, prehearing conferences, land use hearings, and the adjudicative hearings regarding Application No. 2004-01.
- 10. The Council duly noticed, and conducted prehearing conferences on September 30, 2004, November 1, 2004, February 8, 2005, February 22, 2005, February 24, 2005 and March 7, 2005. The Council issued Prehearing Orders Numbers 1 through 6 (Council Orders Nos. 805, 806, 807, 808, 810, and 811).
- 11. Counsel for the Environment (CFE) was a party to the proceeding pursuant to RCW 80.50.080. The Council received a notice of intervention and granted party status to the Washington State Department of Community, Trade and Economic Development (CTED) which is entitled to intervene pursuant to WAC 463-30-050. Upon petitions being filed, the Council also granted party status to Kittitas County, Friends of Wildlife and Wind Power (FWWP), the Economic Development Group of Kittitas County (EDGKC) and Mr. F. Steven Lathrop.
- 12. On March 4, 2005, Wind Ridge and Kittitas County filed a Stipulation and Settlement Agreement with the Council addressing issues of land use consistency.
- 13. On March 4, 2005, Wind Ridge and WDFW filed a Settlement Agreement with the Council addressing issues of wildlife and habitat protection and preservation.
- 14. At the pre-hearing conference on March 7, 2005, the Council considered and approved the Stipulation and Settlement Agreement between Wind Ridge and Kittitas County, as well as the Settlement Agreement between Wind Ridge and WDFW.
- 15. Prior to the Adjudicative Proceedings, intervenor Friends of Wildlife and Wind Power indicated its withdrawal, and intervenor Lathrop indicated his non-participation in further proceedings in this matter. The Council acknowledged the withdrawals at the prehearing conference held on March 7, 2005.
- 16. The Council held formal adjudicative hearings regarding Application 2004-01 on March 7 and 8, 2005, in Ellensburg, Washington.
 - 17. The Council held a public hearing regarding Application 2004-01 on March 8, 2005,

in Ellensburg, Washington. 15 members of the public offered comments.

- 18. The Applicant and other remaining parties to the case were given an opportunity to submit Proposed Findings of Fact, Conclusions of Law, and Order and Proposed Site Certification Agreement. Council staff prepared a draft Site Certification Agreement for the Applicant pursuant to RCW 80.50.085. On April 4, 2005, the Applicant and the Counsel for the Environment submitted post-hearing briefs.
- 19. On May 25, 2005, the Council voted unanimously to recommend approval of the Project to the Governor of the state of Washington.

The Land Use Consistency Process

- 20. The Council conducted a land use consistency hearing on April 22, 2004, in Ellensburg, Washington, after which the Council issued Order No. 791, finding that the Project was inconsistent with local land use plans and zoning ordinances.
- 21. The Council's processing of Application 2004-01 was delayed approximately 5 months while the Applicant and Kittitas County resolved land use inconsistencies. On March 7, 2005, the Council reconvened the land use hearing in Ellensburg, Washington. During this hearing, the Council received a certificate from Kittitas County indicating that the Project had been made consistent with the County's land use plans and zoning ordinances. Representatives from Kittitas County also testified that the Project complied with all applicable Kittitas County land use laws and regulations. No testimony or evidence contradicted the certificate.
- 22. In the absence of contradictory testimony, a county's certificate provides prima facie proof of consistency and compliance with local zoning ordinances and land use plans. WAC 463-26-090. The Council finds that the Project's proposed use is consistent and in compliance with the land use plans and zoning ordinances of Kittitas County.

Project Description and Configuration

- 23. The Wild Horse Wind Power Project is a wind powered electrical generation facility in Kittitas County, Washington. The Project would consist of between 104 and 158 wind turbine generators with a total nameplate capacity of between 158 and 312 megawatts (MW).
- 24. The Applicant analyzed and the Council considered the environmental impacts of three Project scenarios to capture possible Project impacts resulting from the selection of a turbine configuration within a range of turbine sizes identified in the Application.
- 25. The Site Certification Agreement will require the Certificate Holder to select a single Project configuration from within the range of the three scenarios. The "lower end scenario" is the Project configuration with the lowest number of turbines erected: up to 104 turbines with a nameplate capacity of approximately 3 MW each, for a total nameplate capacity of approximately 312 MW. The "upper end scenario" is the Project configuration with the highest number of turbines erected, up to 158 turbines with a nameplate capacity of 1 MW each, for a total nameplate capacity of 158 MW.

- 26. Only one type and size of turbine shall be used for the entire Project. Regardless of which size of turbine the Applicant finally selects for the Project, the turbines would generally be installed along the access roadways and all construction activities would occur within the corridors identified in the Application for Site Certification, with any final adjustments to specific turbine locations made to maintain adequate spacing between turbines for optimized energy efficiency and to compensate for local conditions.
- 27. The analysis performed in the EIS showed that, overall, the impacts from the various Project scenarios did not vary significantly from one to the next. No single scenario resulted in significant adverse environmental impacts to any element of the environment.
- 28. The Project would include access roads, turbine foundations, underground and overhead collection system electrical lines, a grid interconnection substation, step-up substation(s), feeder line(s) running from the on-site step-up substation(s) to the interconnection substation, meteorological stations, an operations and maintenance (O&M) center, an informational kiosk and associated supporting infrastructure and facilities.
- 29. The Project would include up to three rock quarries, a rock-crusher, and a concrete batch plant. These facilities are temporary and to be used only during Project construction.
- 30. The Council finds that the Project is to be constructed in accordance with the Application and the analysis performed in the Environmental Impact Statement, which presume a construction schedule of no more than one year. Therefore, while the Applicant may commence construction at any time during the "build window" set out in the Stipulation and Settlement Agreement it reached with Kittitas County, the Site Certification Agreement shall require the Applicant to complete construction of the entire Project within twelve (12) months from beginning construction. However, the Applicant will be permitted to operate and generate power from individual strings of turbines as they are completed, while the remaining strings of turbines remain under construction.

Site Characteristics

- 31. The Project will be located two miles north of the Vantage Highway at Whiskey Dick Mountain, roughly 11 miles east of the City of Kittitas.
- 32. The Project will be constructed across a land area of approximately 8,600 acres in Kittitas County. Up to 401 acres will be impacted by temporary construction activities; the actual permanent facility footprint will comprise approximately 165 acres of land.
- 33. The majority of the Wild Horse Wind Power Project site and the proposed electric transmission interconnect points lie on privately owned lands. Parts of the Project site are owned by the Washington DNR, upon which the Applicant has secured a long term lease. A portion of the Project site is owned by WDFW and is currently under review for possible lease to the Applicant; no construction can occur on this portion of the site until and unless the Applicant presents EFSEC with copies of the signed and executed lease with WDFW. The Applicant has obtained an option to purchase the privately held portions of the Project site and options for easements and/or purchase from the landowners necessary for installation and operation of the transmission feeder line and interconnect substation.

- 34. The proposed site is located within Forest and Range and Commercial Agriculture land use zoning designations in Kittitas County. The site has historically been used for grazing.
- 35. Kittitas County has amended its Comprehensive Plan and Zoning Code to create a Wind Farm Resource Overlay Zoning District for the Project site. Kittitas County and the Applicant have entered into a Development Agreement setting out minimum terms and conditions for the construction and operation of the Project.
- 36. As part of its Development Agreement with Kittitas County, the Applicant agreed that all turbine towers would be subject to setbacks of at least 541 feet from any residences. Although the Council has included this term in the Site Certification Agreement, the Council makes no independent finding as to the appropriateness of this minimum setback distance.

Air Quality

- 37. During construction, the types of direct impacts to air quality would be typical of those associated with any large construction project. The primary types of air pollution generated during Project construction will be emissions from vehicle and equipment exhaust, along with fugitive dust particles from travel on paved and unpaved surfaces.
- 38. Exhaust emissions and fugitive air emissions from construction sites are exempt from air emission permitting requirements. Exhaust emissions and fugitive air emissions resulting from travel on Project roads during operation of the Project are also exempt from air permitting requirements. However, the Council finds that requiring a temporary air quality permit for operation of an on-site rock crusher and concrete batch plant is appropriate.
 - 39. Operation of the Project will not result in any direct air emissions.
- 40. The Council finds that the Applicant's proposed mitigation measures are adequate to minimize fugitive dust impacts during construction and operation of the Project.

Water Resources

- 41. The Project will typically employ approximately 20,000 gallons per day of water during construction, with up to 220,000 gallons per day required during the peak of road construction activities. Water for construction will be purchased off-site from an authorized source, then delivered by truck to the Project site.
- 42. During construction, sanitary waste water will be collected in portable tanks, and disposed of off-site at locations permitted to accept such waste. For operations, a septic system will be installed at the operations and maintenance facility site in compliance with Kittitas County septic system requirements to treat the domestic-type sanitary waste water from the facility.
- 43. Wind energy facilities do not use water in the electrical generation process. There will be no operational use or discharge of water from the Project.
 - 44. Water for domestic-type uses by operations and maintenance facility staff will be

purchased off-site from an authorized source, then delivered by truck to the O&M facility for storage in one or two 5,000 gallon tanks.

- 45. 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 compliance 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.
- 46. The Council finds there would not be significant adverse impacts to water quality from the Project.

Habitat, Vegetation and Wetlands

- 47. The Project area is located to the west of the Whiskey Dick Wildlife area, and to the south of the Quilomene wildlife area, and is part of a large and contiguous patch of shrub-steppe habitat. Shrub-steppe habitat is considered a priority habitat by the WDFW.
- 48. The 1 MW turbine Project scenario would result in the largest temporary vegetation community impact with up to 364 acres of shrub-steppe impacted out of a total of 401 acres of disturbance. Regardless of Project configuration, of the approximately 165 acres of permanent impacts, 139 acres would occur in shrub-steppe. Approximately 61 acres of permanent impacts are expected to occur on lithosols.
- 49. The Applicant has proposed to mitigate all permanent and temporary impacts on vegetation and habitat in accordance with the WDFW Wind Project Habitat Mitigation Guidance Document (WDFW Wind Power Guidelines). An approximately 600 acre mitigation parcel has been identified within the 8,600 acre Project area. The parcel would meet or exceed the required habitat replacement ratios under the WDFW wind power guidelines for any of the Project scenarios considered, and would be protected for the life of the Project.
- 50. The Applicant would also implement Best Management Practices to minimize introduction of weeds, implement a noxious weed control program, and would develop and implement a comprehensive post-construction restoration plan for temporarily disturbed areas, including habitat reseeding programs, in consultation with WDFW.
- 51. The Applicant will fence several springs within the Project area to eliminate livestock degradation. Fencing used for the mitigation parcel and the springs will be designed to keep livestock out but allow game species to cross. The Applicant will coordinate with Washington Department of Fish and Wildlife (WDFW) regarding fence specifications. However, the Council will require in the draft SCA that such fencing be maintained for the life of the Project.
- 52. Known populations of federally or state-listed endangered, threatened, proposed or candidate plant species have not been identified in the Project area, or the corridors where transmission feeder lines would be constructed. No impacts to protected plants are therefore expected to occur.

- 53. The Applicant would implement mitigation measures to prevent the spread of noxious weeds in the Project area during construction. During Project operation the Applicant would control access to the site, and would also post signs at the informational kiosk indicating that collection of cacti is prohibited on the site. The Council finds that with the implementation of these mitigation measures, no significant adverse impacts are expected to occur to the hedgehog cactus, a Washington State Review listed species.
- 54. There are a few Class 3 wetlands in the form of seeps and springs within the Project area; however, all Project facilities will be located a considerable distance from them to prevent any impacts to these wetlands. The Project will not disturb any wetland systems at the Project site. There will be no turbines placed within 150 meters of any wetlands, which significantly exceeds the most stringent wetland setback for Class 1 wetlands in the State of Washington.
- 55. The Council finds that with the implementation of all mitigation measures proposed by the Applicant, the Project is not expected to result in significant adverse impacts on wetlands, vegetation, and habitat.

Fisheries and Wildlife

- 56. Given the lack of potential fish habitat for fish species with federal or state protected status within the Project area, no significant impacts on fisheries are anticipated to occur with the implementation of Best Management Practices (BMPs) and applicable stormwater permits that would control runoff, erosion and sedimentation into water bodies.
- 57. The Council finds that with the mitigation measures proposed, no significant adverse impacts are expected to occur on fish resources.
- 58. The Council finds that mitigation measures implemented by the Applicant to protect habitat, wetlands and vegetation, as described previously, will compensate for disturbance impacts to wildlife, including avian species, during construction and operation of the Project.
- 59. Bird fatality projections of 0.6 to 3.5 per turbine year are anticipated, with most of the fatalities involving resident songbirds. Avian mortality is expected to be 50 to 300 individuals per year if 136 turbines are constructed. Low raptor mortality is anticipated, with one to ten birds per year, though mortality of bald eagles is not expected because of their infrequent use of the Project area. Some upland game bird fatalities are anticipated. Occasional nocturnal migrating songbird fatalities are also anticipated. Waterfowl and other waterbird (e.g., gulls) mortality are estimated to be low.
- 60. The proposed design of the Project incorporates numerous features to avoid and/or minimize impacts to plants and wildlife, including: avoidance of construction in sensitive areas such as streams, riparian zones, wetlands, forested areas; avoidance of placing wind turbines in prominent saddles along the main Whiskey Dick Ridge to minimize potential impacts to raptors; minimization of new road construction by improving and using existing roads and trails instead of constructing new roads; choice of underground (vs. overhead) electrical collection lines wherever feasible to minimize perching locations and electrocution hazards to birds; choice of turbines with low rotation speed and use of tubular towers to minimize risk of bird collision with turbine blades and towers; use of unguyed permanent meteorological towers to minimize

potential for avian collisions with guy wires; equipping all overhead power lines with raptor perch guards to minimize risks to raptors; and spacing of all overhead power line conductors to minimize potential for raptor electrocution.

- 61. The Applicant conducted baseline monitoring and avian mortality analyses in conformance with WDFW's wind power guidelines. The Applicant coordinated extensively with WDFW and the Council's WDFW contractor, and addressed all of their concerns, as witnessed by its Settlement with WDFW.
- 62. The Applicant shall develop a post-construction monitoring plan for the Project to quantify impacts to avian species and to assess the adequacy of mitigation measures implemented. The monitoring plan will include the following components: 1) fatality monitoring involving standardized carcass searches, scavenger removal trials, searcher efficiency trials, and reporting of incidental fatalities by maintenance personnel and others, for a period of two years after the beginning of Project operation; and 2) a minimum of one breeding season raptor nest survey of the study area and a one-mile buffer in order to locate and monitor active raptor nests potentially affected by the construction and operation of the Project. The protocol for the fatality monitoring study will be similar to protocols used at the Vansycle Wind Plant in northeastern Oregon and the Stateline Wind Plant in Washington and Oregon.
- 63. The Applicant has proposed, and will be required to convene, a Technical Advisory Committee (TAC) to review pertinent monitoring and scientific data and to develop appropriate responses to impacts that exceed avian mortality projections made in the Application and EIS. The TAC will monitor all mitigation measures and efforts and examine information relevant to assessing Project impacts to habitat, avian and bat species, and other wildlife. The TAC will determine whether further mitigation measures would be appropriate, considering factors such as the species involved, the nature of the impact, monitoring trends, and new scientific findings regionally or at a nearby wind power facility. The TAC shall recommend mitigation measures to the Council; the ultimate authority to implement additional mitigation measures, including any recommended by the TAC, will reside with EFSEC.
- 64. Of several listed threatened, endangered or candidate wildlife species that have been identified by the U.S. Fish and Wildlife Service as potentially occurring on the Project site, only the bald eagle has the potential to occur within the Project site, based on the actual habitat attributes present on the Project site and the habitats with which this species is associated.
- 65. One bald eagle was observed at the Project site during a winter survey. Bald eagle breeding areas have not been documented within two miles of the Project area.
- 66. Sage grouse are listed as a threatened species by the State of Washington. The Project Area lies within the Washington State Sage Grouse Recovery Area. No leks have been observed within or near the Project area based on systematic searches and incidental observations. The Project area has been historically used by sage grouse, with most recent recorded observations having occurred between 1980 and 1994.
- 67. Impacts to sage grouse have been considered in light of scientific information available. The impacts of the Project on future breeding and nesting in the Project area is

uncertain, but based on available evidence it does not appear to present a threat to sage grouse populations, or WDFW sage grouse recovery programs.

68. The Council finds that the Project will result in no significant unavoidable adverse impacts to wildlife.

Noise

- 69. The Project shall be designed to comply with applicable Washington State Environmental Noise Levels of Chapter 173-60 WAC.
- 70. Due to the remoteness of the site, the Council finds no significant noise impacts from construction or operation of the Project.

Geological Hazards

- 71. There are no significant impacts on soil, topography, and geology resulting from construction of the Project. Risks associated with ground movements due to landslides, subsidence, expansive soils or similar geological phenomena are minimal; no special design or construction considerations are recommended or required.
- 72. Historically, the region has a low level of seismicity. Local crustal faults are not considered to pose a significant earthquake hazard to the proposed Project. Even so, Project buildings, structures, and associated systems shall be designed and constructed consistent with requirements, including seismic standards, of the Uniform Building Code (UBC) or the International Building Code (IBC), but no less stringent than those found in the Uniform Building Code of 1997.
- 73. The Project site is on or near ridgelines located above 3,000 feet in elevation and far above any floodplain, eliminating any risk of flooding.

Traffic and Transportation

- 74. Construction of the Project will result in a short-term increase of traffic in the local area, particularly on Vantage Highway, through truck deliveries of equipment and materials. Operation of the Project will have no significant impact on local traffic patterns.
- 75. The Applicant's Traffic Mitigation Plan will adequately mitigate all adverse impacts identified in the FEIS. The Plan will include documentation of pavement conditions before construction begins, allowing Kittitas County and the City of Kittitas to monitor any road deterioration associated with the Project. The Applicant will repair any such road damage.
- 76. The FAA has issued Determination of No Hazard certificates for 127 of the proposed turbine locations. Nine locations identified in the Application did not receive such certificates, and the Applicant has decided to remove these locations from the proposed Project. Turbines constructed will be equipped with FAA compliant lighting. With the above modification, the Project will not have any significant unavoidable adverse impacts on air navigation with respect to the Kittitas County Airport (Bowers Field).

Cultural and Archeological Resources

- 77. The Applicant conducted background research and an archaeological survey which covered the entire areas within the Project where ground-altering activities are proposed. Eight previously unrecorded prehistoric archaeological sites and one previously unrecorded historical site were identified during this survey. Four "isolated finds" of prehistoric artifacts, eight prehistoric archaeological sites, and one historic site were located and recorded during this archaeological survey.
- 78. The Applicant proposes to maintain 100-foot design and construction buffers around the archaeological and historical sites identified during this current cultural resource survey, even though the sites do not meet the standard qualifications for the National Register of Historic Places (NRHP). Ground disturbing actions within a specified radius of any archaeological sites, either recorded during the initial survey or previously documented, would be monitored by a professional archaeologist to prevent damage or destruction to both known and unanticipated archaeological resources.
- 79. The Applicant, in consultation with the Office of Archeology and Historic Preservation (OAHP), will develop a cultural resources monitoring plan for monitoring construction activities and responding to the discovery of archeological artifacts or buried human remains.
- 80. The Council finds that with implementation of these mitigation measures no impacts on known culturally sensitive areas would occur under any of the proposed scenarios. Operation of the Project would not impact any of the archaeological or historical sites identified during this current cultural resource survey.

Visual Resources/Light and Glare

- 81. The Applicant's visual simulations of the Project demonstrated existing conditions together with the expected post-construction images from a variety of viewpoints, allowing the Council to contemplate a computer model of the completed wind farm.
- 82. The Council recognizes that evaluation of visual impacts of wind farms is potentially controversial. Visual impact assessment based on evaluation of the changes to the existing visual resources that would result from construction, operation, and decommissioning of the Project can be conducted scientifically. However, assessing actual impact on existing aesthetics remains largely a matter of individual taste and opinion.
- 83. The Applicant classified potential levels of visual impact as high, moderate, and low. In general, the Applicant's and EFSEC's analysis agreed that after all mitigation measures are implemented, the visual impact of this Project would be low to moderate, with no significant adverse impacts on the existing visual environment.

Health and Safety

84. Because the Project site is generally arid rangeland with a predominant groundcover of grasses and sagebrush, the risk of fire during the hot, dry summer season is a primary health

and safety concern associated with the proposed Project.

- 85. To mitigate the fire risk the Applicant will comply with electrical design that complies with the National Electric Code (NEC). The Project site roads will act as firebreaks and also allow for quick access of fire trucks and personnel in the event of a grass fire. The Applicant has entered into a fire protection contract with Ellensburg Rural Fire District #2. The Applicant will also prepare a fire control plan and an emergency plan, coordinated with local and state agencies to ensure efficient response to emergency situations.
- 86. Construction and operation of the Project would require the use of hazardous materials such as: diesel and gasoline fuels for operating construction equipment and vehicles; lubricating oils; transformer mineral oils; and cooling, lubricating and hydraulic fluids used in the turbines. The Applicant has proposed various supply and storage mechanisms depending on the type of fluid being handled.
- 87. The Applicant has proposed mitigation measures to prevent or control the occurrence of spills on site during construction and operation of the Project, including appropriate handling and storage facilities for the fluids of concern, and facility design to include sensors for fluid leaks as appropriate. In addition, the Applicant will be required to develop a Spill Prevention Control and Countermeasures Plan for both construction and operation phases of the Project.
- 88. Construction and operation of the Project will not result in the generation of any hazardous wastes in quantities regulated by state or federal law.
- 89. There has been no reported injury from ice thrown from wind turbines. Tower collapse is extremely rare and highly unlikely. Minimum setbacks incorporated into the proposed Project layout would reduce the safety risks associated with ice throw, tower collapse and other safety or nuisance issues.
- 90. The Project will not produce shadow-flicker effects on any existing residences in the area because the residences are far from the turbines and are additionally shielded by existing terrain that separates them from the turbines.
- 91. With the mitigation measures provided, the Council finds that the Project will not cause a significant adverse health and safety impact.

Socioeconomics

- 92. Project construction and operation will result in increased employment in Kittitas County, with approximately one-half of all construction-related jobs created within Kittitas and Yakima counties.
- 93. The Project will generate total direct income of approximately \$3,783,000 during the construction phase. Additional indirect income of just over \$1,000,000 is also anticipated during construction of the Project.
- 94. Adequate local housing supplies exist to accommodate the Project's demand for temporary rental housing.

- 95. The Project will cost approximately \$235 million. Thus, construction of the Project will increase the total valuation of real property in Kittitas County by approximately 8%, from \$2.5 billion to \$2.7 billion. Based on the assessed value of its real property, the Project will become the largest single taxpayer in Kittitas County. These new tax revenues will benefit local and state schools, county government, county roads, and other local services.
- 96. The relatively remote and rural location of the Project site greatly diminishes the potential for negative impacts to residential property values. Based upon a review of all evidence contained in the record, the Council finds that construction and operation of the Wild Horse Wind Power Project will not have any significant negative impact on property values in Kittitas County.

Public Services

- 97. The Project is not anticipated to have a significant adverse effect on any public services, including law enforcement, fire, water, medical, recreational, or schools.
- 98. The Project will not have any significant adverse impact on communication facilities or services in the area (*see* FEIS, page 1-36).

Site Restoration

- 99. In accordance with WAC 463-42-655 (as in effect in March 2004) the Applicant prepared an initial site restoration plan in the Application and also entered into a Stipulation and Settlement Agreement with Kittitas County that addresses site restoration. At the end of the useful life of the facility, the equipment will be removed and the entire area returned to as near its original condition as reasonably possible.
- 100. Prior to initiating construction activities, the Applicant must post sufficient security funds to ensure complete decommissioning of the Project.

Cumulative Impacts

- 101. Potential cumulative impacts of the development of the Kittitas Valley, Desert Claim and Wild Horse wind power projects, as well as other economic and residential growth in Kittitas County, were considered. With the exception of visual impacts, the construction of the Project, in conjunction with other development actions, is not expected to result in significant adverse cumulative impacts, because such impacts are either not expected to occur, or mitigation measures shall be employed to reduce the impacts of individual development.
- 102. A single cumulative impact involving development of all three wind power projects was identified with respect to visual resources: the impact of repetitive views of turbines in the County for residents and frequent visitors to the Valley could result in the impression of change in the overall visual character of the Kittitas Valley landscape.

Term of the Site Certification Agreement

103. The Site Certification Agreement will authorize the Certificate Holder to construct

the Project such that substantial completion is achieved no later than five (5) years from the date that all state and federal permits necessary to construct the Project are obtained, but in no event later than six (6) years from the effective date of the Kittitas County Development Agreement.

104. Construction of the entire Project shall be completed within approximately twelve (12) months of beginning construction.

Conformance with Law

- 105. The Applicant proposes to construct the Project in accordance with applicable national and international building codes, in compliance with international design and construction standards, and including the implementation of a comprehensive employee safety plan. The Council finds that operational safeguards will be at least as stringent as the criteria established by the federal government and will be technically sufficient for welfare and protection of the public. RCW 80.50.010 (1).
- 106. The Applicant has agreed to appropriate environmental mitigation requirements. The mitigation package preserves and protects the quality of the environment. As a renewable energy resource, the Project will enhance the public's opportunity to enjoy the aesthetic and recreational benefits of the air, water and land resources; to promote air cleanliness; and to pursue beneficial changes in the environment. RCW 80.50.010 (2).
- 107. As a renewable energy source wind power generation facility, the Project will contribute to the diversification and reliability of the state's electrical generation capacity, and will therefore support legislative intent to provide abundant energy at a reasonable cost. RCW 80.50.010 (3)
- 108. The Council finds that this course of action will balance the increasing demands for energy facility location and operation in conjunction with the broad interests of the public.

CONCLUSIONS OF LAW

Based on the foregoing findings of fact, the testimony received, and evidence admitted during the adjudicative and land use hearings, the environmental documents and environmental determinations made by the Council, the settlement agreements presented to and approved by the Council, and the record in this matter, the Council makes the following Conclusions of Law:

- 1. The Washington State Energy Facility Site Evaluation Council has jurisdiction over the persons and the subject matter of Application No. 2004-01, pursuant to Chapter 80.50 RCW and Chapter 34.05 RCW.
- 2. The Council conducted its review of the Wind Ridge Application 2004-01 as adjudicative proceedings and land use hearings, pursuant to Chapter 34.05 RCW as required by RCW 80.50.090(3) and Chapter 463-30 WAC (as in effect at the time of application).
- 3. EFSEC is the lead agency for environmental review of Wind Ridge's Application pursuant to the requirements of Chapter 43.21C RCW. Because the SEPA responsible official determined that the proposed action could have one or more significant adverse environmental

impacts, an Environmental Impact Statement (EIS) was required. The Council complied with Chapter 43.21C RCW, Chapter 197-11 WAC, and Chapter 463-47 WAC, by issuing a Determination of Significance and Scoping Notice, conducting a scoping hearing, issuing a Draft EIS for public comment, conducting a public hearing and accepting written comments on the Draft EIS, and adopting a Final EIS.

- 4. The Council is required to determine whether a proposed Project site is consistent with county or regional land use plans or zoning ordinances. RCW 80.50.090; WAC 463-14-030. The Council concludes that the proposed use of the site is consistent and in compliance with all applicable Kittitas County land use plans and zoning laws.
- 5. The Council encourages Applicants to enter into stipulations and settlement agreements whenever possible. WAC 463-30-230. In this matter, the Applicant agreed with Kittias County that the minimum setback for this Project's wind turbine towers would be 541 feet. Respecting the terms of that Stipulation and Settlement Agreement, the Council has included this provision in the Site Certification Agreement. However, the Council makes no independent conclusion as to the appropriateness of this minimum setback distance.
- 6. The legislature has recognized that the selection of sites for new large energy facilities will have a significant impact upon the welfare of the population, the location and growth of industry, and the use of the natural resources of the state. It is the policy of the state of Washington to recognize the pressing need for increased energy facilities and to ensure through available and reasonable methods that the location and operation of such facilities will produce minimal adverse effects on the environment, ecology of the land and its wildlife, and the ecology of state waters and their aquatic life. RCW 80.50.010.
- 7. The Council concludes that the certification of the Wild Horse Wind Power Project, as described in Application 2004-01, and with the inclusion of the requirements of the settlement agreements, will further the legislative intent to provide abundant energy at reasonable cost. At the same time, the mitigation measures and the conditions of the proposed Site Certification Agreement ensure that through available and reasonable methods, the construction and operation of the Project will produce minimal adverse effects to the environment, the ecology of the land and its wildlife, and the ecology of state waters and their aquatic life.

ORDER AND RECOMMENDATION

Based on the Findings of Fact, Conclusions of Law, the Draft EIS and Final EIS, and the full record in this matter, the Council issues the following Order:

- 1. The Council recommends that the Governor of the state of Washington APPROVE certification for the construction and operation of the Wild Horse Wind Power Project located in Kittitas County, Washington.
- 2. The Council orders that its recommendations as embodied in the Findings of Fact, Conclusions of Law and this Order, together with the Site Certification Agreement appended hereto, be reported and forwarded to the Governor of the state of Washington for consideration and action.

SIGNATURES

DATED and effective at Olympia, Washington, this 25 th day of May, 2005.	
James Oliver Luce, Chair	
Richard Fryhling, Department of Community, Trade and	Hedia Adelsman, Department of Ecology
Economic Development	Department of Leology
Chris Towne, Department of Fish and Wildlife	Tony Ifie, P.E., Department of Natural Resources
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Tim Sweeney,	Patti Johnson,
Utilities and Transportation Commission	Kittitas County

NOTICE TO PARTIES: Administrative relief may be available through a petition for reconsideration, filed within twelve days of the service of this order, filed with the Council Manager pursuant to WAC 463-30-120.

Council Order No. 814