BEFORE THE STATE OF WASHINGTON
ENERGY FACILITY SITE EVALUATION COUNCIL

In the Matter of:

APPLICATION NO. 2003-01

SAGEBRUSH POWER PARTNERS, LLC

KITTITAS VALLEY WIND POWER PROJECT

COUNCIL ORDER No. 826

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 equally 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 12 miles northwest of the city of Ellensburg, Washington, for the construction and operation of the Kittitas Valley Wind Power Project (Project or KVWPP), a wind-powered energy production facility consisting of a series of “strings” of turbines as well as associated electric transmission lines and other supporting infrastructure. Approximately 6,000 acres of land are associated with the Project. Up to 371 acres would be temporarily disturbed by construction activities; 118 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. Sagebrush Power Partners, LLC, (Sagebrush or Applicant) seeks a Site Certification Agreement (SCA) to construct and operate up to 65 wind turbines that would generate between 100 and 180 megawatts (MW) of wind power, dependent on the type of turbines selected by the Applicant.

The Council has reviewed Sagebrush’s Application for Site Certification (Application), No. 2003-01; conducted public and adjudicative hearings; and by this Order recommends to the Governor of the state of Washington preemption of local land use plans and zoning regulations as well as approval of the Application.

The Applicant requested that EFSEC preempt Kittitas County’s local land use plans and zoning regulations. After review of the Kittitas County Comprehensive Plan and supporting zoning code, the Council finds that the Project is consistent with all of the local government’s plans and regulations except (1) the 35-foot height restriction in the Forest & Range (FR20) zone and (2) the Wind Farm Overlay Ordinance, Kittitas County Code Chapter 17.61A, which prohibits all wind farms until the Board of County Commissioners takes action to approve and
permit a project. Therefore, determining that the County’s siting ordinance duplicates EFSEC’s site evaluation process and usurps this Council’s statutory authority, the Council recommends preemption of Kittitas County’s Wind Farm Overlay Ordinance as well as the height restriction.

The Applicant entered into an on-the-record stipulation with Counsel for the Environment during the adjudicative hearing agreeing to independent environmental monitoring of the Project’s construction. In addition, the Applicant agreed during the adjudicative hearing to eliminate any demonstrated “shadow flicker” impacts in the area within ½ mile of the Project. Furthermore, pursuant to the requirements of the above-noted stipulation, agreement, and the evidence presented during the hearing, the Applicant will provide 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’s 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 is consistent with local land use plans and zoning regulations (as explained in Appendix A) and, with the proposed mitigation measures and with the agreed upon requirements of the previously referenced stipulation and agreement, 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 PREEMPTION of Kittitas County’s local Wind Farm Overlay Ordinance as well as the local height restriction and further recommends that the Governor APPROVE the siting of this Project, as described in this Order and the accompanying draft Site Certification Agreement.
1. INTRODUCTION

The Applicant and the Project

The Applicant for the Kittitas Valley Wind Power Project (Project or KVVPP) is Sagebrush Power Partners, LLC (Sagebrush or Applicant), a wholly owned subsidiary of Horizon Wind Energy. Sagebrush Power Partners, LLC, was created as a Delaware Limited Liability Company for the sole purpose of developing, permitting, financing, constructing, owning and operating the Kittitas Valley Wind Power Project.

The Applicant is proposing to build the Kittitas Valley Wind Power Project, a renewable energy generation facility with a maximum of 65 wind turbines and a maximum installed nameplate capacity of approximately 180 megawatts (MW). The Project would be constructed in central Washington’s Kittitas Valley in designated corridors located on ridge tops between Cle Elum and Ellensburg, approximately 12 miles northwest of Ellensburg. 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 6,000 acres, with approximately 118 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 Agricultural-20. The majority of the KVVPP 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). The Applicant has obtained wind option agreements with landowners for all private lands within the Project site boundary and electrical collection 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 1.5 MW to 3 MW (generator nameplate capacity) with turbine rotor diameters ranging approximately from 80 to 90 meters (231 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 80 meters and nameplate capacity of 1.5 MW, the maximum contemplated 65 units would produce a total Project nameplate capacity of approximately 100 MW. For the largest contemplated turbines, each with a rotor diameter of 90 meters and nameplate capacity of 3 MW, the maximum contemplated 65 units would produce a total Project nameplate capacity of approximately 180 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
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 (as subsequently modified in the Final EIS), 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 wastewater produced during construction will be disposed of off-site at facilities authorized to accept such wastes. Sanitary wastewater produced during Project operation (mainly from bathrooms and a kitchen at the O&M facility) 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 an approximately 539 acre mitigation parcel within the 6,000 acres of the Project area. The mitigation parcel is located in T19N, R17E, Sections 22 and 27.

The Project will interconnect with the Bonneville Power Administration (BPA) Grand Coulee to Olympia 287-kV and/or the Puget Sound Energy (PSE) Rocky Reach to White River 230-kV electrical transmission lines near Bettas Road. Interconnection to the electrical power grid at these locations does not require construction of any new major transmission feeder lines; however, 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 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. EFSEC serves as the state’s “one-stop” permitting authority for energy facilities, allowing for the streamlining of the siting process. 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. 2003-01, conducted hearings to determine if the proposed Project complies with local land use regulations, analyzed environmental impacts in accordance with the State Environmental Policy Act (SEPA), 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;\(^2\) Chris Towne, Department of Fish and Wildlife;\(^3\) Judy Wilson, Department of Natural Resources;\(^4\) 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.

**Application for Site Certification**

The Applicant chose to obtain certification for the Project pursuant to RCW 80.50.060(2). On January 13, 2003, Sagebrush submitted to the Council an Application for Site Certification to construct and operate the KJVWPP in Kittitas County, Washington.\(^5\)

**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.

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\(^1\) The Council reviewed Application No. 2003-01 pursuant to the provisions of Title 463 of the Washington Administrative Code in effect on January 13, 2003, the date the Application was filed.

\(^2\) Hedia Adelsman replaced Charles Carelli as the DOE representative on January 2, 2004.

\(^3\) Chris Towne replaced Sue Patnude as the DFW representative on August 1, 2003. Ms. Patnude had replaced Jenene Fenton as the DFW representative shortly after the May 2003 land use hearing.

\(^4\) Judy Wilson replaced Tony Ifie as the DNR representative on July 1, 2005.

\(^5\) As originally proposed, the Applicant sought permission to construct between 82 and 150 wind turbines with a total nameplate capacity of approximately 181.5 to 246 MW. Prior to the adjudicative hearings held in September 2006, the Applicant reduced the scope of the proposed Project to no more than 65 wind turbines with a maximum total nameplate capacity of approximately 195 MW.
In this proceeding, the Council complied with SEPA requirements by issuing a Determination of Significance and Scoping Notice; conducting a scoping hearing, issuing a Draft Environmental Impact Statement (Draft EIS) for public comment; conducting a public hearing and accepting written comments on the Draft EIS; issuing a Draft Supplemental EIS for public comment; conducting a public hearing and accepting written comments on the Draft Supplemental EIS; issuing an Addendum to the Draft EIS; and subsequently adopting and issuing a Final EIS.

On February 14, 2003, 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 March 12, 2003. Nine people from nine agencies attended the agency meeting and approximately 150 people attended the public scoping meeting. The Council accepted written comments on the scope of the EIS until March 14, 2003. In April 2003, the Council issued the Scoping Summary report.

On December 12, 2003, 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 January 13, 2004, in Ellensburg, Washington. The Council heard oral comments from 31 members of the public. The Council accepted written comments through January 20, 2004 (postmark deadline); the Council received 70 written comment letters.


On January 20, 2005, in response to a concern expressed as to the adequacy of the notice provided with regard to the public hearing on the Draft Supplemental EIS, the Council reopened the comment period on the Draft Supplemental EIS. The Council held another public hearing to receive additional oral comment on the Draft Supplemental EIS on February 2, 2006, in Ellensburg, Washington. The Council heard additional oral comments from four members of the public. The Council accepted written comments through the close of the February 2, 2006, public comment hearing; the Council received two additional written comment letters.

On December 23, 2005, as a result of the Applicant’s decision to reduce the scope of the proposed Project, the Council issued an Addendum to the Draft EIS prepared by EFSEC staff. The Council did not hold a public hearing or otherwise solicit public comment on the Addendum to the Draft EIS.

A Final EIS was adopted and issued by the Council on February 1, 2007.

**Adjudicative Proceeding: Parties, Pre-Hearing Conferences, & Schedule**

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, Residents Opposed to Kittitas Turbines (ROKT), Mr. F. Steven Lathrop, Ms. Chris Hall, Renewable Northwest Project (RNP), Sierra Club’s Cascade Chapter, and the Economic Development Group of Kittitas County (EDG).  

The parties were represented in the various hearings as follows:


**Counsel for the Environment:** Michael Tribble, Assistant Attorney General, Office of the Attorney General, Olympia, Washington.

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

**Kittitas County:** James Hurson, Deputy Prosecuting Attorney, Kittitas County Prosecuting Attorney’s Office, Ellensburg, Washington.


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

**Chris Hall:** Chris Hall, pro se.

**Renewable Northwest Project:** Susan Elizabeth Drummond, Foster Pepper & Shefelman P.L.L.C., Seattle, Washington.

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6 When granted intervenor status, EDG was known as the Phoenix Economic Development Group.


8 Chris Hall withdrew as an intervenor in the proceedings by letter dated May 25, 2005, indicating that she had been able to resolve her issues with the Applicant through a settlement. See also Council Order No. 816, acknowledging Ms. Hall’s withdrawal.
Sierra Club, Cascade Chapter: Louise Stonington, Seattle, Washington.\(^9\)

Economic Development Group of Kittitas County: Debbie Strand, Executive Director, Ellensburg, Washington.

Prior to formal adjudicative hearings on the Application, the Council duly noticed, and conducted prehearing conferences on June 26, 2003; January 13, 2004; February 19, 2004; July 19, 2004; August 2, 2004; August 10, 2004; September 22, 2004; August 22, 2005; March 3, 2006; April 24, 2006; May 30, 2006; June 13, 2006; July 12, 2006; and August 17, 2006. The Council issued Prehearing Orders Numbers 1 through 26 (Council Orders Nos. 777, 778, 781, 782, 783, 786, 789, 790, 792, 793, 794, 795, 796, 799, 800, 801, 802, 804, 816, 817, 818, 819, 820, 821, 822, and 823).

The Council held a formal Adjudicative Proceeding regarding Sagebrush’s Application, No. 2003-01, on September 18, 19, 20, and 21, 2006, in Ellensburg, Washington.\(^10\) Approximately one week prior to the formal Adjudicative Proceeding, on the evening of September 12, 2006, the Council held a public hearing in Seattle, Washington, at which 36 members of the public testified. On the evenings of September 20 and 21, 2006, the Council held public hearings in Ellensburg, Washington, at which 59 members of the public testified. The Council received 323 written comment letters regarding the Project.

Subsequent to the Adjudicative Proceedings, the parties filed post-hearing briefs.

**Land Use Consistency – Procedural History**

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 land use consistency hearing was conducted on May 1, 2003, in Ellensburg, Washington. The Applicant and Kittitas County testified that the Project was inconsistent with Kittitas County’s land use plans and zoning ordinances, specifically with a Wind Farm Overlay Ordinance that had been adopted by the Kittitas County Board of County Commissioners (BOCC) in December 2002. The Council heard from 14 members of the public who testified on the issue of land use consistency; the Council also received additional written comments, which were marked as exhibits. Upon considering the oral testimony and the documents presented at the land use hearing, the Council found the Project to be inconsistent with Kittitas County land use plans and zoning ordinances, and issued Council Order No. 776 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 776 gave the Applicant 90 days to resolve the inconsistencies, ask for preemption of local land use law, or request an extension of the time period for requesting

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\(^9\) Sierra Club was accorded intervenor status but did not participate as such in the proceeding.

\(^10\) As detailed below, the adjudicative hearings were originally scheduled for August 2004 but postponed on several occasions.
preemption pursuant to WAC 463-28-040. The Applicant filed an application with Kittitas County seeking to comply with the Wind Farm Overlay Ordinance; the Applicant and the County worked together to obtain all necessary documentation and process the application. Upon timely requests received from the Applicant, the Council agreed to several extensions of the land use consistency deadline, initially through September 1, 2003, then through January 15, 2004, and again until February 12, 2004.11 Shortly thereafter, the Applicant determined that it could not achieve land use consistency through the County’s processes and therefore filed a Request for Preemption on February 9, 2004.

The Council scheduled several weeks of adjudicative hearings on the Application for Site Certification and accompanying Request for Preemption to commence in August 2004;12 the adjudicative hearings were later postponed to late September and early October 2004 to allow time for consideration of the recently released Draft Supplemental EIS.13

On September 20, 2004, the Applicant and Kittitas County filed a Joint Motion to Continue the adjudicative hearings in favor of both parties prioritizing a separate application for the Wild Horse Wind Power Project and to allow further negotiations on resolving land use consistency issues. The Council granted this Joint Motion and postponed the matter indefinitely.14

On August 22, 2005, the Applicant informed the Council of its intention to reduce the scope of the Kittitas Valley Wind Power Project and file a new Development Activities Application (DAA) with Kittitas County.15 At the request of Kittitas County, on October 19, 2005, the Applicant withdrew its Request for Preemption.

Commencing in January 2006, the Kittitas County Board of County Commissioners (BOCC) and its Planning Commission jointly held a series of public hearings on the Applicant’s DAA. The Kittitas County Planning Commission unanimously recommended denial of the Applicant’s project on February 13, 2006.16 The BOCC held additional hearings on the DAA in March and April 2006. On May 3, 2006, the BOCC verbally decided to “preliminarily” deny the DAA, due to unacceptable visual impacts to private residences near the project site and

11 See Council Order No. 789.
12 See Council Order No. 790; see also Council Order No. 792.
13 See Council Orders No. 793, 794, and 795.
14 See Council Order No. 804.
15 See Council Order No. 816.
16 See Kittitas County Planning Commission’s recommendation as contained in Applicant’s Second Request for Preemption, at Exhibit 2.1; see also Planning Commission Transcript, February 13, 2006, as contained in Applicant’s Second Request for Preemption.
additional concerns regarding “shadow flicker” from the turning blades of the wind turbines.\(^{17}\)

In May 2006, the Applicant continued its efforts to address the BOCC’s concerns as expressed at the public hearing of May 3, 2006. However, on June 6, 2006, the BOCC adopted Resolution No. 2006-90, formally denying the DAA.\(^{18}\) Shortly thereafter, the Council formally rescheduled the adjudicative proceeding to commence in September 2006.\(^{19}\)

The Applicant filed a Second Request for Preemption on June 20, 2006.

**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 and the Draft Supplemental 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 hearing; Draft Supplemental EIS comment period and public comment hearings; notice of availability of Addendum to Draft EIS; 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: the land use consistency hearing on May 1, 2003, in Ellensburg, Washington (17 members of the public); at a public hearing for comment on the Draft EIS on January 13, 2004, in Ellensburg, Washington (31 members of the public); at public hearings for comment on the Draft Supplemental EIS on August 25, 2005, in Ellensburg, Washington (5 members of the public) and on February 2, 2006, in Ellensburg, Washington (4 members of the public); and at public hearings on the proposed Project held September 12, 2006, in Seattle, Washington (36 members of the public) and on September 20 and 21, 2006, in Ellensburg, Washington (59 members of the public).

The Council received 17 comment letters from agencies and organizations, 53 comment letters from members of the public, and heard from 31 speakers for a total of 1,075 specific comments regarding the Draft EIS. The Council received an additional four comments from agencies and organizations, 13 comment letters from members of the public, and heard from nine

\(^{17}\) See BOCC Transcript, May 3, 2006, at 54-55, as contained in Applicant’s Second Request for Preemption, at Exhibit 6; see also discussion of same as contained in Council Order No. 819.

\(^{18}\) See Kittitas County Resolution No. 2006-90, as contained in Applicant’s Second Request for Preemption, at Exhibit 1.1; see also BOCC Transcript, June 6, 2006, as contained in Applicant’s Second Request for Preemption, at Exhibit 6.

\(^{19}\) See Council Order No. 820; see also Council Order No. 823.
speakers for a total of 171 specific comments regarding the Draft Supplemental EIS. In addition, the Council heard from 17 speakers and received 25 written 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 March 27, 2007, at a duly noticed Special Meeting conducted in Ellensburg, Washington, the Council voted by a majority of 6-1 to recommend preemption of Kittitas County’s local Wind Farm Overlay Ordinance and further voted by a majority of 6-1 to recommend approval of the Project to the Governor of Washington state. The Council memorializes its action in this Order, Council Order No. 826, Findings of Fact, Conclusions of Law, and Order Recommending Approval of Site Certification on Condition.

**2. SETTLEMENTS AND STIPULATIONS**

In connection with Application No. 2003-01, the Council encouraged the parties to make all reasonable efforts to settle contested issues. Prior to the Adjudicative Proceedings, the Applicant noted a settlement with Ms. Chris Hall and presented a letter from Ms. Hall indicating her withdrawal from the proceedings.20

On September 19, 2006, during the course of the adjudicative hearing, the Applicant entered into a verbal agreement with Counsel for the Environment (CFE). Although not reduced to writing, this stipulation addressed monitoring of mitigation measures related to wetlands, geology, and stormwater, and EFSEC’s hiring of an independent environmental monitor for these items and related issues during project construction.21 The requirements and conditions agreed upon between the Applicant and Counsel for the Environment have been incorporated into the Site Certification Agreement.

On September 21, 2006, also during the course of the adjudicative hearing, the Applicant stated its commitment to wholly eliminate any demonstrated actual adverse impacts associated with the proposed Project caused by “shadow flicker” for homes within 2,500 feet of a turbine.22 The terms of this stipulation have also been incorporated into the Site Certification Agreement.

20 See, supra, at footnote 8. No formal settlement document was presented to the Council.

21 See EFSEC Transcript, September 19, 2006, at 356-358, where CFE waived the opportunity to cross-examine witness Peggy O’Neill (Exhibit 27); see also EFSEC Transcript, September 20, 2006, at 567-568, where CFE waived the opportunity to cross-examine witness Michael Pappalardo (Exhibit 23).

3. LAND USE CONSISTENCY AND PREEMPTION OF KITTITAS COUNTY’S WIND FARM OVERLAY ORDINANCE & LOCAL HEIGHT RESTRICTION

As noted above, the Applicant requested approval from the County to develop the Kittitas Valley 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 September 30, 2005, and deemed complete by County staff on October 17, 2005. Following public hearings conducted by the Planning Commission and the Board of County Commissioners, on June 6, 2006, the BOCC adopted Ordinance No. 2006-90, denying the DAA.

Shortly after the BOCC’s action and its indication that the Project remains inconsistent with local land use plans and regulations, the Applicant filed a Second Request for Preemption and reported that efforts to resolve noncompliance had not been successful. Therefore, in accordance with WAC Chapter 463-28, the Council must determine whether or not to recommend to the Governor that the state preempt local land use plans or zoning ordinances for the site. In order to do so, a brief review of the BOCC’s denial is provided, followed by an evaluation of the merits of the Applicant’s Second Request for Preemption under the Council’s regulatory criteria as contained in WAC 463-28-040.

Project’s Inconsistency with Kittitas County Wind Farm Overlay Ordinance

The Applicant seeks to construct the Project in Kittitas County, on open ridge tops between Ellensburg and Cle Elum at a site located approximately 12 miles northwest of the city of Ellensburg. The Project area is currently zoned as Forest-and-Range-20 (FR 20) and Agricultural-20 (Ag 20). The FR 20 zone limits non-agricultural structures to 35 feet in height. Wind farms can be an allowed use within these rural zones, but only through application of the County’s Wind Farm Resource Overlay Zone. As set out in the Kittitas County Code, Chapter 17.61A, approval of a Wind Farm Resource Overlay Zone requires four separate items:

1. an amendment to the Comprehensive Plan Land Use map to designate a wind farm resource district;  
2. a site-specific rezone to create a wind farm resource overlay zone;  
3. execution of a development agreement; and  
4. issuance of a wind farm resource development permit.

In Kittitas County Resolution No. 2006-90, the BOCC denied the overall KVWPP proposal and individually denied each of the four elements required by KCC 17.61A.

In support of its action, the BOCC made findings of fact to demonstrate the inconsistency of the proposed Project with its Comprehensive Plan and zoning code, including, generally:

23 Under the Growth Management Act (GMA), amending a county’s comprehensive plan is a complex process and is typically permitted only once annually. Thus, the Council views as unusual the requirement for an amendment to a local comprehensive plan for each proposed project site.
• The proposed turbines exceed the 35-foot height limit for the FR 20 zone.\(^{24}\)

• The Project’s visual impact, particularly on residences located within a half mile of a proposed turbine, is high, but can be mitigated with increased setbacks that must exceed the 1,320 feet proposed by the Applicant.\(^{25}\)

• “Shadow flicker” from the proposed turbines would impact up to 40 local residences, including one as far as a mile away from the closest wind turbine.\(^{26}\)

The BOCC then made additional findings of fact in Resolution 2006-90 that specifically delineate the basis for its denial of the Project, quoted verbatim as follows:

• The placement in the project area of the wind farm as proposed is not properly mitigated with adequate setbacks and is incompatible with the neighborhood.\(^{27}\)

• The proposal fails to properly mitigate the [visual and shadow flicker] impact. The exercise of substantive SEPA authority pursuant to WAC 197-11-660(1)(b) and KCC 15.04.200 allows for denial of the project due to the significant adverse visual and shadow flicker impacts, the reasonable mitigation of increased setbacks has been refused by the applicant and cannot be imposed in the development agreement without the consent of the applicant, and the denial is consistent with the SEPA policy of maintaining aesthetically pleasing surroundings.\(^{28}\)

• The project area is in close proximity to many individual nonparticipating\(^{29}\) homeowners and property owners. This area of the county has the character of rural residential and agricultural mixed use. The introduction of turbines of this size and number to this area is incompatible in such close proximity to the current uses. The Draft EIS and other environmental analysis demonstrate that the project as proposed involves significant, unavoidable, adverse impacts to the visual environment. The mitigation offered to residents who may be affected by shadow flicker required the nonparticipating property owner neighbors to

\(^{24}\) See BOCC Resolution 2006-90, Findings of Fact 11 through 13.

\(^{25}\) See BOCC Resolution 2006-90, Findings of Fact 14 through 23.

\(^{26}\) See BOCC Resolution 2006-90, Findings of Fact 24 through 26.

\(^{27}\) See BOCC Resolution 2006-90, Finding of Fact 27.

\(^{28}\) See BOCC Resolution 2006-90, Finding of Fact 34.

\(^{29}\) In the context of this Project, the BOCC and EFSEC both defined “nonparticipating” to mean those property owners with parcels adjacent or close to the proposed wind farm who had not entered into a lease arrangement or otherwise reached some sort of accord with the Applicant with regard to impacts on their properties. By contrast, “participating” property owners had reached agreements with the Applicant and therefore do not object to the Project.
mitigate the impact on their own property. The project also included other low, medium and significant non-mitigated impacts associated with the project. The Board finds that the project as proposed is not a reasonable development of the subject property given its impacts.  

- Kittitas County Code 17.61A.040 requires that a determination be made that the proposal is not detrimental or injurious to the public health, peace, or safety or to the character of the surrounding neighborhood. The Board is unable to make this determination due to remaining unresolved concerns including shadow flicker and the visual environment for the nearby rural residents. The Board finds that requiring residents to mitigate an adverse impact caused by the proximity of the Project to existing residences is detrimental to the public health, peace and safety. Location of the Project to a less populated site could negate shadow flicker as an adverse impact to existing residents and thus fully mitigate the issue of shadow flicker.

- The Board finds that identified adverse impact could not be mitigated, either on site or off site, due to the proximity of the proposed facility to nearby residences and property. The Board finds that a minimum of 2500 feet separation from wind turbines and nonparticipating landowner’s residences would be necessary to reduce the significant adverse impact rating of “high” down to moderate visual impacts for those residences. Even at a distance greater than 2500 feet, some areas will experience impacts greater than moderate.

Thus, in Resolution 2006-90, the focus of the BOCC’s objections to and chief reasons for denying the Applicant’s DAA were the visual impacts caused by the height of the proposed wind turbines and the shadow flicker impacts to nearby homes.

Despite the BOCC’s findings, this Council’s review of the Kittitas County Comprehensive Plan finds that the Project is not inconsistent with the overall goals and policies of the Kittitas County Comprehensive Plan or it’s implementing zoning designations. Instead, the Project actually appears to reinforce the County’s overall planning goals; the Project conflicts only with the local height restriction (35 feet) on FR-20 lands and the County’s Wind Farm Overlay Ordinance, particularly with the site-specific mitigation measures requested by the

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30 See BOCC Resolution 2006-90, Finding of Fact 36.
33 Although the BOCC does not explicitly state as much in Resolution 2006-90, it would appear to the Council that the BOCC concluded that the proposed Project complied with the County’s Wind Farm Overlay Ordinance in nearly all respects, excepting concerns for height, visual impacts and shadow flicker effects.
34 The Council’s review of the County’s Comprehensive Plan and applicable portions of the zoning code is set out in Appendix A to this Order.
BOCC as part of the development agreement under negotiation in the BOCC hearings. In essence, but for the existence of the Wind Farm Overlay Ordinance, the County could have evaluated the KVWPP as a whole through its conditional use permit process or reviewed each individual tower through a series of applications seeking variances from the local height restriction.

In an Application for Site Certification filed with EFSEC, site-specific details are not for a county or city to negotiate and impose, but are firmly within the jurisdictional realm of this Council. EFSEC is charged with unitary permitting authority for energy facilities seeking its site certification, allowing for a streamlined siting process. EFSEC’s preemptive statutory power to certify and regulate the location, construction, and operation of energy facilities such as the proposed KVWPP simply cannot be usurped by local governments seeking to impose their own imprimatur on the siting process. Nevertheless, this Council does not lightly override local ordinances, particularly when they exist as expressions of local care and concern for protecting public health and safety and the character of the surrounding neighborhood.

**Evaluation of Applicant’s Second Request for Preemption**

Under the preemption authority granted to EFSEC by RCW 80.50.110 and further delineated by WAC 463-28-040, an Applicant unable to resolve noncompliance issues with local land use authorities must address the following four areas in a request for state preemption:

1. That the applicant has demonstrated a good faith effort to resolve the noncompliance issues;
2. That the applicant and the local authorities are unable to reach an agreement which will resolve the issues;
3. That alternate locations which are within the same county and city have been reviewed and have been found unacceptable, and
4. Interests of the state as delineated in RCW 80.50.010.

The Applicant’s Second Request for Preemption contained all of these required elements. The merits of each is addressed here, in turn.

**Good Faith Efforts to Resolve Noncompliance Issues.** EFSEC’s rules contain no express definition of “good faith” and the Council recognizes the abstract and intangible quality associated with this term. Even so, the Council believes this requirement to mean that an Applicant must work through local government land use processes to resolve inconsistencies as extensively as possible, but not to the point where further efforts would be futile. Further, reasonable compromises in position must be explored by both sides. Finally, a good faith effort

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35 This EFSEC requirement is to be distinguished from a similar sounding SEPA provision for private projects on a specific site that requires the lead agency to evaluate only the “no action” alternative along with reasonable alternatives for achieving the proposal’s objectives on the same site. See WAC 197-11-440(5)(d).
to resolve a land use consistency dispute need not result in actual resolution of all underlying
matters.\textsuperscript{36}

Here, the Applicant made two separate attempts to achieve land use consistency in
Kittitas County, first in 2003-2004 and then again in 2005-2006. The details of these efforts are
contained in the record.\textsuperscript{37} As relevant to the Applicant’s Second Request for Preemption, the
Applicant filed a Development Activities Application with Kittitas County in late September
2005. At that time, the Applicant reduced the size of its Project from a maximum of 150 turbines
to a maximum of 80 turbines and altered the proposed layout of the turbine strings. The
Applicant worked with County staff in preparing the matter for review by the Kittitas County
Planning Commission and, in turn, the Kittitas County Board of County Commissioners. As
described below, that review process consumed five months.

In January 2006, the Kittitas County Planning Commission held a public hearing on the
Project on three consecutive evenings, then conducted a deliberative session later in the month.\textsuperscript{38}
At the first of these meetings, the Applicant presented expert witnesses to explain the Project and
its impacts. Public comments were presented that same evening and on the two following nights.
The Applicant then provided a brief response to concerns raised in the public comments.\textsuperscript{39} On
January 30, 2006, the Planning Commission reconvened to deliberate and the Applicant made its
representatives available to answer technical and other questions posed in that public session.
Following discussion, the Commission voted to deny any amendment to the Kittitas County
Comprehensive Plan,\textsuperscript{40} deny a rezone,\textsuperscript{41} and to pass forward to the BOCC the Applicant’s
proposed development agreement “with no recommendation but a general sense that it’s

\textsuperscript{36} Darryl Piercy, Director of Community Development Services for Kittitas County, agreed with
this approach, testifying that “a good faith effort in any project is a willingness and a desire to come to a
satisfactory conclusion that is mutually agreeable to both parties,” but that ultimate agreement between
the parties was not necessary. See EFSEC Transcript, September 19, 2006, at 484-85.

\textsuperscript{37} The Applicant’s pre-filed testimony for witnesses Chris Taylor (Exhibit 20, at 7-14, and
Exhibit 20-SUP, at 7-16 and 23) and Dana Peck (Exhibit 42-SUP, at 7-18, and Exhibit 42-SUP REB) set
out a summarized version of events from the Applicant’s point of view. The County’s pre-filed testimony
for witness Darryl Piercy (Exhibit 51, at 4 and at 11-18) discusses this topic from a County viewpoint.

\textsuperscript{38} Exhibit 6 to the Applicant’s Second Request for Preemption contains transcripts for these
special meetings of the Planning Commission held on January 10, 11, and 12, 2006, as well as that held

\textsuperscript{39} See Planning Commission Transcript, January 12, 2006, at 167-188.

\textsuperscript{40} See Planning Commission Transcript, January 30, 2006, at 87-94.

\textsuperscript{41} Id., at 103-104.
acceptable.” On February 13, 2006, the Planning Commission adopted specific findings of fact in support of its prior decision and forwarded that document on to the BOCC.

On March 29, 2006, the Kittitas County Board of County Commissioners convened a special meeting to review the KVWPP. Initially, the individual Commissioners identified their primary issues as the actual number of turbines proposed, the boundaries of the Project area, methodology for calculation of the Applicant’s proposed 1000-foot setback, visual impacts between ½ mile and 1 mile from the turbines, restoration of roads impacted by Project construction, and local property values. Following a staff report, the Applicant was given an opportunity to respond to the BOCC’s stated concerns. The BOCC then heard public comment for the balance of that evening and the majority of the following night, followed by closing comments from the Applicant.

On April 12, 2006, the BOCC reconvened its public hearing on the Project. Commissioner Huston clarified that the purpose of the BOCC’s review would be to ensure: that each and every one of these projects would be evaluated on a site-specific basis. That’s key: site-specific basis.

Commissioner Huston then detailed his concerns with the Project’s impacts, stating that his “stumbling block” was mitigating impacts to existing residences, and concluding that the 1,000-foot setback proposed was not adequate and was a “deal killer.” Commissioner Crankovich inquired about the basis for the 1,000-foot setback and Chairman Bowen questioned the adequacy of the information provided for determining an appropriate setback. The BOCC then agreed that a site visit to an existing wind farm would help them to better evaluate the ability of distance to mitigate the visual impacts of the turbines. The BOCC also requested the Applicant

42 Id., at 107-109.
44 The BOCC had received and reviewed the Planning Commission’s findings of fact, transcripts of each of the Planning Commission meetings, and all other documents in the record.
46 Id., at 25-47.
47 See BOCC Transcripts for March 29, 2006, at 47-175, and March 30, 2006, at 5-75.
49 See BOCC Transcript, April 12, 2006, at 7; see also Chairman Bowen’s comments at 44-45.
50 Id., at 18-28 and 49-51 (“stumbling block” comment at 25; setbacks discussed at 27-28 and “deal killer” comment within discussion at 49-51).
51 Id., Commissioner Crankovich at 34-35; Chairman Bowen at 43-44 and 48-49.
52 Id., at 53-62. The Applicant endorsed the BOCC viewing an operating wind farm (at 56-57).
to present additional information to justify a particular setback distance that would mitigate the impacts on existing residences near the Project.  

On April 27, 2006, the BOCC again reconvened its public hearing on the Project. Each commissioner reported on his independent site visit to Puget Sound Energy’s Hopkins Ridge wind farm at Dayton, WA (near Walla Walla, WA). The Applicant then reviewed its letter to the BOCC of April 25, 2006, sent in response to the commissioners’ requests for additional information and suggesting a new and farther setback of ¼ mile (1,320 feet) from existing residences. The BOCC acknowledged the letter but insisted that further discussion or negotiation not occur until the Applicant prepared a revised and up-to-date version of its proposed development agreement. The Applicant agreed to provide the requested document the following week.

On May 3, 2006, the BOCC reconvened the process and discussion quickly focused on the setback issue. Chairman Bowen, in his opening remarks, stated that a setback designed to mitigate visual impacts and shadow flicker would be, at minimum, 2,000 feet from non-participating property lines and 2,500 feet from non-participating landowners’ residences. Commissioner Crankovich felt that one-half mile (2,640 feet) was more appropriate; Commissioner Huston suggested that it took a distance of at least 2,760 feet before he began “to lose the sense of these things looming over me,” concluding that the appropriate setback should be between one-half mile to 3000 feet. Despite these individual opinions, the BOCC did not adopt any agreed setback standard to impose on the Project. When the Applicant was afforded an opportunity to respond, Chris Taylor informed the BOCC that a setback of 2,500 feet would “render this project inviable.” Commissioner Huston then criticized the Applicant for not explaining what made a wind farm economically viable; however, the Applicant indicated its desire to have the BOCC vote to approve or disapprove the proposed Project. The BOCC then voted its preliminary denial of the Project.

53 Id., at 62-64.
54 See BOCC Transcript, April 27, 2006, at 4-14.
55 Id., at 17-24. See also Applicant’s Letter to BOCC, April 25, 2006, as contained in Exhibit 7 to Applicant’s Second Request for Preemption, at 7.19 through 7.23.
56 Id., at 25-31.
57 Id., at 31-33.
58 See BOCC Transcript, May 3, 2006, at 12.
59 Id., Commissioner Crankovich at 23-24; Commissioner Huston at 27-29.
60 Id., at 47.
61 Id., at 47-52.
62 Id., at 54-55.
The BOCC reconvened the process on May 31, 2006, and heard from County staff that the Applicant had continued discussions and exchanged correspondence with staff in an attempt to determine whether the Project could be reworked to satisfy the BOCC’s recent statements about acceptable setbacks. The Applicant explained its difficulties in modifying the Project layout without the BOCC providing a definitive setback distance. The BOCC members then came to agreement that an acceptable setback would be 2,500 feet from nonparticipating residences. Although the Applicant did not agree to the 2,500-foot setback, it indicated that it would try to fit the Project into that standard, reassuring the BOCC that all other comments the County had made with regard to deficiencies in the development agreement would not be an obstacle to favorably resolving the matter.

On June 6, 2006, the BOCC reconvened its public hearing on the Project for the final time. The Applicant provided no further input to the BOCC and the commissioners adopted Resolution 2006-90 (excerpted above) denying the Project.

As demonstrated by this five-month chronology, the Applicant worked through local land use processes to resolve inconsistencies very extensively, providing detailed information, expert testimony, and timely responses to BOCC concerns, inquiries, and requests for updated documents. Further, the Applicant made compromises in the scope and scale of the proposed Project by reducing the number of turbines as well as adjusting their placement. In addition, the Applicant suggested a variety of measures to mitigate the potential impacts of shadow flicker on nearby residents. Finally, the Applicant compromised on the minimum setback of turbines from nonparticipating residences, moving from 1,000 feet to 1,320 feet. Even after the BOCC’s preliminary denial, the Applicant continued its attempts to receive a definitive setback standard and fit its proposed Project within the BOCC’s criteria.

After reviewing the full record, the Council finds, 6-1, that the Applicant expended significant effort to navigate the County’s permitting process and that these efforts to resolve the land use noncompliance issues were made in good faith. Despite these attempts, the Applicant was ultimately unable to reach an agreement or to otherwise resolve the local land use inconsistency issues posed by the County’s Wind Farm Overlay Ordinance. Therefore, Council finds that the first prong of WAC 463-28-040 is satisfied.

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63 See BOCC Transcript, May 31, 2006, at 8-13 and 15-17; see also various correspondence between Applicant and County staff from May 2006, as contained in Exhibit 3 to Applicant’s Second Request for Preemption.

64 Id., at 24-29.

65 Id., at 30-38. Chairman Bowen later referenced a different setback standard of 2,000 feet from nonparticipating property lines, at 53, but it appears that this was a position favored by Commissioner Crankovich and a possible point of negotiation, not a minimum standard being imposed.

66 Id., at 41-45; see also Exhibit 51.3, showing impact on Project layout of 2,500 foot setback.

67 See BOCC Transcript, June 6, 2006. Commissioner Huston characterized Resolution 2006-90 saying “we could not get to the point where we could approve the project.” Id., at 7.
Minority Opinion of Patti Johnson, Kittitas County representative to Council. I respectfully dissent from the above-noted Council finding. In light of the Applicant’s failure to respond to the BOCC at the May 3, 2006, meeting when asked to suggest a setback greater than 1,320 feet, I do not agree that the Applicant completed its negotiations with Kittitas County in good faith. Silence on the Applicant’s part cannot be characterized as a “good faith attempt” to resolve the issue of negative visual impacts to the nearby residents; a review of that portion of the transcript reveals that none of the commissioners was happy to see discussion come to a halt.\(^{68}\) In my opinion, the Applicant quit prematurely, abandoning the process and thereby preventing a good faith completion of the BOCC’s review of the Project. Therefore, I cannot join my fellow EFSEC council members in finding the “good faith” required by WAC 463-28-040(1). Thus, I further cannot ultimately join the Council to recommend preemption of Kittitas County’s local land use laws.

Applicant and Local Authorities Unable to Reach Agreement. As evidenced by Kittitas County Resolution 2006-90, the Applicant and the County did not reach an agreement resolving all of the land use noncompliance issues. The Council notes that a failure to reach agreement is not always equivalent to an inability to reach agreement. In this case, however, the Council concludes that following numerous public hearings and the good faith efforts already noted above, the Applicant and the BOCC were unable to reach agreement. Therefore, the Council finds that the second prong of WAC 463-28-040 is satisfied.

Alternate Locations in Kittitas County Reviewed and Found Unacceptable.\(^{69}\) Alternate wind farm sites in Kittitas County were analyzed in EFSEC’s Draft EIS for this Project (Chapter 2.7) and were the focus of EFSEC’s subsequent Draft Supplemental EIS for this Project. The criteria for analyzing alternate sites consisted of:

1) sufficient wind resource (the most important factor);
2) proximate/adequate transmission facilities;
3) large land area;
4) absence of significant environmental constraints; and
5) property owner interest/property availability/control of property.

The Draft Supplemental EIS concluded that although other sites for wind power generation may exist in Kittitas County, none would satisfy the test for availability or practicability (fifth factor)

\(^{68}\) See BOCC Transcript, May 3, 2006, at 49-55.

\(^{69}\) WAC 463-28-040(3) requires that “alternate locations which are within the same county and city have been reviewed and have been found unacceptable.” This language, adopted in 1978, was most likely intended to apply to the siting of a large coal-fired or nuclear power plant, with a strong likelihood that only one such energy facility would be sited in any single county. The Council recognizes that this factor may not be as directly applicable to alternative energy sites which have distinctly different environmental impacts from their non-renewable competitors. Nevertheless, this EFSEC preemption regulation requires analysis on this factor and efforts were made throughout the process to adapt the rule to the situation presented by a proposed wind farm, many of which might be appropriately sited in a given county.
for the Kittitas Valley Wind Power Project. Furthermore, competing companies are proposing to develop some of these alternate sites, making these locations unavailable to the Applicant.

According to the Applicant, it did consider other locations in the County but did not find any acceptable alternatives to the proposed site. The Applicant believes there is no other site with a wind resource as robust and as well documented by long-term on-site data. Further, the Applicant notes the presence of multiple transmission lines of appropriate voltage and adequate capacity to carry the entire output of the Project, with no new feeder line construction required. In addition, the Applicant points out its existing land agreements with participating landowners securing the ability to use this site. Finally, the Applicant correctly notes that under current Kittitas County land use regulations, there are no pre-approved zones or specific sites for constructing wind farms in the entire county.

The Council has reviewed the record and heard testimony regarding the quality of the wind resources at the KVWPP site. Witness Ron Nierenberg, a consulting meteorologist specializing in analyzing wind resources, called the KVWPP site “one of the best wind power project sites available in Washington.” It was undisputed that the KVWPP site is very close to several adequate transmission lines and that some of the alternate sites in Kittitas County share a similarly advantageous location with respect to interconnection to the existing electrical grid. Further, the existence of a large land area was not a significant distinguishing factor for KVWPP. However, the environmental constraints identified at several of the proposed alternate sites demonstrated appreciable obstacles to development of a suitable wind power project, hurdles not present at KVWPP. In addition, the County’s zoning does not designate any site within Kittitas County as an approved area for development of a wind farm. Finally,

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70 See Applicant’s Proposed Findings of Fact, Conclusions, and Order Recommending Approval of Site Certification on Condition, at 46-51 and 144-149, for its full exposition on the summarized contentions contained in this paragraph.

71 See Exhibit 26, at 7-9; see also EFSEC Transcript, September 20th, at 698-712, where Mr. Nierenberg specifically discusses the KVWPP site in comparison to other sites in Kittitas County. When seen from a resource exploitation view, it is logical for developers to identify the least costly areas from which the resource can be extracted. If the wind industry is at all similar to the oil and gas industries, this approach illuminates their primary economic incentive to develop a particular site, allowing them to harness the most wind for the least cost.

72 See Draft Supplemental EIS, Table 2-1.

73 Id. See also Figure 2.2 for map of identified potential off-site alternative locations.

74 Id. The existence of extensive archaeological sites at the Boylston Mountains site complicates the development of this area, as does its current use for military training. Further, this site as well as the sites at Manastash Ridge, Skookumchuck Creek, and Quilomene contain or are adjacent to much more sensitive wildlife habitat.

75 Evaluating alternate sites is impossible because of Kittitas County’s failure to pre-designate specific wind farm development zones in its plans and regulations. This requires any and all potential sites to be evaluated only through individual applications to the BOCC under the Wind Farm Overlay
the Applicant’s lack of control of the property at any of the alternative sites creates the most significant complication in finding any of the other possible sites acceptable.\textsuperscript{76}

A review of the available information demonstrates that the KVWPP is the best available undeveloped wind resource remaining in Kittitas County. Further, the environmental constraints at alternate sites appear to be significantly more complex than those in evidence at the Kittitas Valley site. The Applicant has surveyed alternate sites and put forward what it believes to be the best choice for development of a wind farm. After considering the Applicant’s contentions and evaluating the record, the Council concurs and finds that alternative sites for the KVWPP are unacceptable. Therefore, the Council finds that the third prong of WAC 463-28-040 is satisfied.

\textit{Interests of the State as Delineated in RCW 80.50.010.}\textsuperscript{77} This statute recognizes that Washington needs additional sources of electrical energy but that selection of appropriate sites for its generation must balance a variety of broad public interests. The statute (quoted in its entirety below) sets out five main premises for the site selection process, including sufficient operational safeguards, environmental issues, provision of abundant energy at reasonable cost, an inapplicable reference to unfinished nuclear sites, and avoiding costly duplication of a timely decision-making process. Each of the four relevant premises is briefly addressed in turn.

Ordinance, KCC 17.61A, as described above. Therefore, it is currently impossible to identify any acceptable alternative sites within Kittitas County.

\textsuperscript{76} The Council recognizes that this particular prong of the alternative site analysis is fraught with subjectivity and may appear to allow an Applicant to simply state the non-existence of lease agreements elsewhere in the surrounding area. However, it is also true that without the ability to control the necessary acreage, no Applicant can put forward a proposed Project. In this case, the Council did not rely on this as the determinative factor in its analysis about alternative sites.

\textsuperscript{77} RCW 80.50.010 provides: The legislature finds that the present and predicted growth in energy demands in the state of Washington requires the development of a procedure for the selection and utilization of sites for energy facilities and the identification of a state position with respect to each proposed site. The legislature recognizes that the selection of sites 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.

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. Such action will be based on these premises:

(1) To assure Washington state citizens that, where applicable, operational safeguards are at least as stringent as the criteria established by the federal government and are technically sufficient for their welfare and protection.

(2) To preserve and protect the quality of the environment; to 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.

(3) To provide abundant energy at reasonable cost.

(4) To avoid costs of complete site restoration and demolition of improvements and infrastructure at unfinished nuclear energy sites, and to use unfinished nuclear energy facilities for public uses, including economic development, under the regulatory and management control of local governments and port districts.

(5) To avoid costly duplication in the siting process and ensure that decisions are made timely and without unnecessary delay.
Sufficient Operational Safeguards. The Application for Site Certification, Final Environmental Impact Statement, provisions of this Order Recommending Approval of Site Certification on Condition, and the accompanying Site Certification Agreement each address a wide variety of unique operational safety measures presented by wind farms. Although neither the federal nor the county government has adopted comprehensive standards for wind farms, safety issues such as tower collapse, blade throw, and ice throw have been extensively explored during the EFSEC process. Further, the Project will comply with all Federal Aviation Administration requirements for tower visibility and lighting. Therefore, the Council finds that the mitigation measures contained herein and in the SCA are more than sufficient to ensure that the KVWPP will operate under stringent criteria designed to protect the public welfare.

Environmental Preservation and Protection Issues. The Final EIS, this Order, and the accompanying SCA each delineate the various mitigation measures required to ensure the KVWPP is built and operated such that it preserves and protects the quality of its immediate environment as well as a range of more regional environmental interests. In the immediate category, the Project’s environmental studies comply with the requirements set out in the Wind Power Guidelines adopted in 2003 by the Washington Department of Fish & Wildlife (WDFW). Further, the Project includes the purchase of a 539-acre mitigation parcel designed to offset any impacts to habitat. In the regional category, the generation of wind power to meet current and future energy demands (addressed further below) promotes air cleanliness and helps to meet increasing demand from utility customers for “green” energy.

The ability of the KVWPP to enhance “the public’s opportunity to enjoy the esthetic and recreational benefits of the air, water and land resources” is inevitably subject to differing views and debate. Construction of more than five dozen very tall wind turbines where none have previously existed will dramatically alter the visual environment for both local residents and regional travelers. However, a variety of evidence in the record, including public comment and the Council’s own site visit, reveals that the Project’s occupation of approximately 6,000 acres of rural land zoned for agriculture, forest, and range uses will increase the economic viability of these tracts of land, reducing the possibility of further residential subdivision of this part of the county. While some rural residents emphasized the undesirable nature of having one or more wind turbines as neighbors, others stated their preference for a wind farm as opposed to seeing agricultural or rangeland further subdivided and developed for uses more compatible with suburbia. The Council heard numerous voices calling for a variety of outcomes in this case.

This particular premise, when balanced with the other state interests examined herein, is served by certification of the KVWPP site. As discussed elsewhere in this Order, the immediate visual impact falls on a very small number of nonparticipating residences. While the overall influence on the esthetic of the region is not to be trivialized, the benefits associated with this wind farm are much more widespread. When the broad interests of the public are balanced, the adverse impacts of the KVWPP are outweighed and the interests of the State must take precedence. In this case, therefore, the Council finds that when all required mitigation measures are considered, environmental quality is sufficiently preserved and protected by recommending preemption of the local ordinances and approval of this Project.

Provision of Abundant Energy at Reasonable Cost. The stated purpose of the KVWPP is “to construct and operate a new electrical generation resource using wind energy that will meet a
portion of the projected growing regional demands for electricity produced from non-renewable and renewable resources.\textsuperscript{78} In its Second Request for Preemption and its post-hearing briefing materials, the Applicant sets out a variety of arguments as to why current economic conditions and trends support the need for this Project.\textsuperscript{79} The evidence in the record indicates that the KVWPP will produce electricity at a reasonable cost, without the volatility shown by the fossil fuel market.\textsuperscript{80}

The Council recognizes that wind resources in the state of Washington are finite and limited.\textsuperscript{81} As noted above, the KVWPP site is one of the best available across the entire state.\textsuperscript{82} Further, the State of Washington is part of an integrated electrical system that incorporates most of the western portion of both the U. S. and Canada. During the winter heating season the State of Washington becomes a net importer of electricity; at other times of the year, other portions of the U. S. and Canada become dependent on Washington’s surplus hydroelectric power.\textsuperscript{83} The addition of wind power resources to the state’s electrical grid may allow integration with the management of hydroelectric dams to provide additional flexibility in meeting the seasonal needs of federally protected species, including salmonids.\textsuperscript{84}

New sources of electrical generation are needed now and will continue to be important in the future. After reviewing all available information in the record, the Council finds that the Project will contribute to the availability of abundant energy at reasonable cost.

\textit{Avoiding Costly Duplication of the Siting Process.} This statutory premise highlights the Council’s main motivation in recommending preemption of Kittitas County’s Wind Farm Overlay Ordinance. In accordance with Chapter 80.50 RCW, EFSEC is charged with the statewide responsibility for siting major energy facilities.\textsuperscript{85} Applicants for alternative energy

\textsuperscript{78} See Draft EIS, Section 1.2.

\textsuperscript{79} See Applicant’s Second Request for Preemption, at 17-22; see also Applicant’s Proposed Findings of Fact, Conclusions, and Order Recommending Approval of Site Certification on Condition, at 54-60 and 149-155, for its full exposition on these issues.

\textsuperscript{80} See Exhibit 43 (pre-filed testimony of Randy Hardy), at 2-9, and EFSEC Transcript, September 20, 2006, at 752-754 (cross-examination of Randy Hardy); see also Exhibit 60 (pre-filed testimony of Tony Usibelli), at 6-10, and Exhibit 60.3; see also Exhibit 70 (pre-filed testimony of Sonja Ling), at 5-12, and Exhibit 72.4 (introduced by Troy Gagliano).

\textsuperscript{81} See Draft EIS, Sections 3.5 and 3.6.

\textsuperscript{82} See, supra, footnote 71, and accompanying text regarding meteorological attributes of site.

\textsuperscript{83} See EFSEC Transcript, September 20, 2006, at 634-636 (cross-examination of witness Tony Usibelli); see also Exhibit 60.

\textsuperscript{84} See EFSEC Transcript, September 20, 2006, at 752-758 (cross-examination of witness Randy Hardy); see also Exhibit 43.

\textsuperscript{85} See RCW 80.50.040; see also RCW 80.50.060(1) and (2).
facilities can choose between EFSEC’s centralized process and other available local permitting processes. In either case, when an application is presented to EFSEC, all site-specific evaluation is to be conducted by EFSEC.

Kittitas County’s Wind Farm Overlay Ordinance usurps EFSEC’s role of site-specific project evaluation. The Board of County Commissioners failed to provide the Applicant in this case with a method for resolving land use inconsistencies without submitting itself to the local permitting process that focused on the specifics of the Project. In this case, the Wind Farm Overlay Ordinance made it impossible for the Applicant to apply to Kittitas County only for an accommodation in the zoning code through the conditional use permit or variance process. Under the County’s Overlay Ordinance process, the Applicant had to obtain its site-specific permits from Kittitas County, then return to the EFSEC process and obtain those same permits a second time. The Council finds this to be exactly the type of “costly duplication in the siting process” that EFSEC was created to avoid.

It is in the State’s interest to see that applications for new energy facilities are processed in a timely and efficient fashion. The site-specific process demanded by Kittitas County circumvents EFSEC’s ability to achieve this statutory mandate and also seeks to preserve a local veto power over energy facility projects proposed for EFSEC approval. Therefore, the Council finds that the fourth prong of WAC 463-28-040 is satisfied by recommending preemption of the Kittitas County Wind Farm Overlay Ordinance.

**EFSEC’s Power of Preemption is Not Eliminated by the Growth Management Act**

Parties in opposition to the Project have argued that the 1990 adoption of the Growth Management Act (GMA), Chapter 36.70A RCW, operated to eliminate EFSEC’s ability to recommend preemption of local land use plans and/or zoning codes to the governor. A brief review of the rules of statutory construction and a glance at the GMA alongside its implementing regulations reveal the fallacy of this contention.

RCW 36.70A.103 requires state agencies to comply with local comprehensive plans and development regulations adopted pursuant to the GMA. However, no language within the GMA explicitly repeals RCW 80.50.110(1), which clearly elevates Chapter 80.50 RCW to override any conflicting law, rule, or regulation. This EFSEC statute establishing state preemption for the siting of energy facilities was adopted many years before the creation of the GMA. Neither the original language of the GMA nor its multiple amendments since 1990 have made any attempt to eliminate EFSEC’s power of preemption.

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86 See, supra, footnote 49, citing to BOCC members explaining the site-specific nature of the Wind Farm Overlay Ordinance. See also EFSEC Transcript, September 19, 2006, at 469-479 (cross-examination of Darryl Piercy, conceding that under the terms of the County’s ordinance, applicants filing for EFSEC site certification must also seek site-specific approval from Kittitas County).

87 This premise set out in RCW 80.50.010(5) is further supported by RCW 80.50.100(1) which directs EFSEC to complete its review of each application, including SEPA compliance, the adjudicative hearings, and publishing of its recommendation to the governor within a 12 month period.
Further, the GMA’s implementing regulations address that law’s relationship with other statutory schemes. WAC 365-195-700 states, in pertinent part:

... These plans and regulations will take their place among existing laws relating to resource management, environmental protection, regulations of land use, utilities and public utilities and public facilities. Many of these existing laws were neither repealed nor amended by the Act.

In addition, under WAC 365-195-765(2), RCW 36.70A.103 is only applicable to state agencies when they occupy “the position of an applicant proposing development, except where specific legislation explicitly declares otherwise.” Here, EFSEC is not the applicant for the KVWPP and, in fact, EFSEC does not hold final decision-making authority in this matter. Rather, the governor, who is not a “state agency” holds that ultimate power.

Washington courts disfavor implied repeals, yet this is the theory advanced by opponents of the Kittitas Valley Wind Power Project seeking to prevent EFSEC from recommending that the governor preempt the Kittitas County Wind Farm Overlay Ordinance. Given the clarity of RCW 80.50.110 and the acknowledgement contained in GMA implementing regulations that the GMA does not supersede other pre-existing laws, the Council rejects the argument that following enactment of the GMA, it no longer retains the authority to recommend preemption of local land use codes.

Council’s Recommendation to Preempt

The Council considered the Applicant’s Second Request for Preemption and finds that the Applicant has complied with all provisions and requirements of Chapter 463-28 WAC and that the Council has given due consideration to the local community interests and governmental interest affected by the project and shall provide for such in the SCA. Specifically, the Council finds that to the extent that it is in conflict with the present application herein, the height limit in the FR-20 zone and the Kittitas County Wind Farm Overlay Ordinance in KCC Chapter 17.61A should be preempted by the Council pursuant to RCW 80.50.110 and Chapter 463-28 WAC.

The Applicant made all reasonable efforts, in good faith, to resolve “noncompliance” issues with the County as required by WAC 463-28-030. In summary, the Applicant made two efforts to seek local consistency, reduced the project in half to minimize impacts, deployed substantial expert witness resources to the County process, and participated in numerous local hearings before the local Planning Commission and the Kittitas County Board of County Commissioners. The Applicant has met all Council-developed criteria for evaluating the exercise of EFSEC’s statutory preemption power.

The Council notes that the existing uses of the Project’s land area will not be permanently displaced or significantly disturbed by operation of a wind farm. After consideration of all available evidence, the Council finds and concludes that the Project is consistent with all applicable local land use laws and regulations except for the above-noted 35-foot height

restriction in the FR-20 zone and the Wind Farm Overlay Ordinance, particularly its site-specific evaluation criteria.

For all of the reasons discussed in the body of this Order, the Council recommends to the Governor by a vote of 6-1 that the Kittitas County Wind Farm Overlay Ordinance, KCC Chapter 17.61A, be PREEMPTED, as required by RCW 80.50.110.

4. ISSUES

In addition to the land use consistency and preemption issues, the Council also 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.

Further, 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 and its subsequent modification. 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 modified Application, and analyzed in the FEIS, 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 while other strings of turbines remain under construction. Further, if the Applicant insists on the Project being constructed in phases over a period exceeding that presented in Application No. 2003-01 the Applicant may seek an amendment to the Site Certification Agreement at a later date, allowing for any required additional environmental impact analysis and, if relevant, confirmation of land use consistency at that time.

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

The Project is located in a rural area of Kittitas County with scattered rural residential development. Therefore, consideration and analysis of the Project’s impacts to visual resources must be accomplished from both a general perspective as well as with regard to the more specific impacts on nearby existing residents.

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. In 2003, the Applicant’s analysis and the Council’s DEIS both found that the overall visual impact of the Project, as originally proposed, would be low to moderate. However, there were several simulated viewpoints that predicted a high or moderately high level of impact from the Project, particularly from portions of US 97, the ridges east of US 97, and certain national forest lands; in addition, panoramic regional views of the Stuart Range were impacted, mainly from southeast of the Project.

In 2005, the Applicant revised the layout of the Project, relocating or reducing the length of various turbine strings, reducing the number of turbines, and eliminating others altogether. Further analysis by the Applicant and the Council’s Addendum to the DEIS agreed that the overall visual impact of the revised Project would remain low to moderate. In addition, along US 97, the Project’s revised layout eliminated at least one area of high visual impact and reduced another from high to low. View impacts from several other areas were also mitigated by the revised layout. To further minimize visual impacts, the Applicant will undertake mitigation measures, such as painting the wind turbine towers with light-colored (neutral gray) low-reflective paints which allows for elimination of otherwise-FAA-required daytime lighting and potentially permits the turbines 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.

Despite the overall reduced visual impact of the revised Project layout, a number of private residences would remain within one-half mile of the Project’s turbines. By definition (in the EIS analysis), any homes located within one-half mile have a high level of visual sensitivity to the turbines. However, “participating residences,” those on private land being leased to the Applicant for placement of a turbine, have voluntarily accepted the Project’s visual impacts. Thus, only the impacts to a smaller set of no more than sixteen (16) “non-participating” residences require further specific review. Although the Council recognizes it is not obligated to eliminate all negative impacts on nearby properties, the Council nevertheless believes that determination of an appropriate methodology to mitigate visual impacts to private homes, particularly “looming” (see below), is appropriate in this case.

Visual sensitivity is not equivalent to actual visual impact. Thus, the Council finds that a blanket prohibition on the siting of all turbines within one-half mile of existing non-participating
residences is unwarranted. Even so, neither the Applicant nor the Intervenors provided specific data or visual simulations with regard to topography or other potential obstructions to views of the turbines from each of the affected non-participating residences within one-half mile of the Project.\textsuperscript{89} Therefore, individualized accommodations to best suit each affected non-participating residence or to address only each non-participating home’s primary viewshed cannot be addressed herein or in the accompanying Site Certification Agreement (SCA). Further, as EFSEC is not equipped to receive and rule on non-agreed individual post-approval modifications to the SCA for the siting of one or more of the turbines (i.e. a variance process), a more generalized rule to best mitigate potential visual impacts to these nearby homes must be adopted for this Project.

The Applicant presented expert testimony that a quarter-mile setback (1,320 feet) would be adequate to mitigate against any potential effect of a turbine visually dominating the view from a residence.\textsuperscript{90} The Applicant’s expert explained that studies of visual dominance have established that an object ceases to dominate a person’s normal field of view when seen from a distance of four times the height of the structure (4xh).\textsuperscript{91} Although cross-examination pointed out the subjective nature of how much any particular item of varying horizontal dimensions might visually dominate one’s viewshed,\textsuperscript{92} the Council finds that for structures predominantly defined by height rather than by width, such as wind turbines, the Applicant’s proffered formula for determining the minimum distance necessary for preventing visual dominance (also known as “looming”) is appropriate.

The Council further finds that siting individual wind turbines to remove any “looming” effect on non-participating residences in the immediate surrounding area sufficiently balances the impacts on those homeowners with the public’s interest in developing new sources of wind power. Therefore, the Council hereby adopts criteria to eliminate any potential “looming” effect to be caused by any turbine in the Kittitas Valley Wind Power Project, to wit: no KVWPP turbine may be placed closer to any point of a non-participating residential structure than four times that turbine’s tip height (4xh; i.e. for the proposed 1.5 MW turbines with tip heights of 330 feet, the required minimum setback from a non-participating residence would be 1,320 feet; for

\textsuperscript{89} The Applicant’s expert surveyed potential view impacts to all 16 properties from above (via helicopter) and from the closest public road access. However, because some of these owners did not agree to allow the Applicant’s consultant access onto their properties, he was not able to determine actual visual impacts to each of the non-participating residences within one-half mile of the Project. See EFSEC Transcript, September 18, 2006, at 274-279, 284, and 296-97.

\textsuperscript{90} See Exhibit 34-SUP, at 11 (line 15-16) and at 16 (line 6-9).

\textsuperscript{91} See Exhibit 34-SUP, at 16-18; see also EFSEC Transcript, September 18, 2006, at 298-99 and 320.

\textsuperscript{92} See EFSEC Transcript, September 18, 2006, at 306-07 and 312-14.
the proposed 3 MW turbines with tip heights of 410 feet, the minimum setback would be 1,640 feet).

**Minority Opinion of Patti Johnson, Kittitas County representative to Council.** I respectfully dissent from the Council’s findings with regard to Visual Resources. The overall viewshed of the western valley is an irreplaceable community asset for Kittitas County, particularly the panoramic views of the Stuart Range. Marring existing pristine views of the mountains with strings of wind turbines is an unacceptable impact of this Project, one which cannot be mitigated, even with the Project’s revised layout. Without measures to preserve and protect these vistas, I cannot vote to approve this Project.

**Light, Glare, and Shadow Flicker**

The Project’s location in a rural area populated with scattered residences limits its potential impacts from light or glare. The turbines will not add significant ambient light to their immediate surroundings. However, approximately 18 turbines will be marked with flashing warning lights required by the FAA to alert aircraft to their presence.

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; however, there are no documented adverse human health impacts from shadow-flicker rates associated with wind turbines.

The Applicant has stipulated that it is able to mitigate shadow flicker by programming the turbines to shut down during those specific times that significant shadow flicker occurs. The Applicant further stipulated that it would institute this mitigation for all existing residences on non-participating properties within 2,500 feet of a turbine that have a line-of-sight view (view of turbine not blocked by topography and/or vegetation) from the residences to that turbine, upon request of the non-participating land owner.

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93 Given the unique topographical characteristics associated with individual wind power generation sites, the setback explained herein shall not be considered a binding precedent for future EFSEC siting decisions.

94 See Exhibit 40, at 5 (pre-filed testimony of Arne Nielsen). According to the Epilepsy Foundation, photosensitive epilepsy involves seizures triggered when flickering or flashing light occurs at rates of 5-30 flashes per second. Wind turbine flash rates are much lower, typically between 0.5 and 1 flash per second.
After considering and accepting the Applicant’s proposed mitigation measures, the Council finds that the Project has no appreciable impacts from light or glare, including shadow flicker.

**Socioeconomics/Property Values**

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 rural location of the Kittitas Valley Project site should be beyond the geographic area where any potential negative impacts to urban property values might be experienced. Evidence was offered to show that Kittitas County remains a vibrant real estate market; property sales in developed and developing portions of the County remain robust. Further, evidence in the record demonstrates continued subdivision of rural lands in the vicinity of the affected area following announcement of the proposed Project; however, commitment of 6,000 rural acres to the Project may prevent a trend toward further rural residential sprawl in the area. No evidence was offered to demonstrate any negative effect on property values, urban or rural, due to the publicity related to this or any of the other potential wind power projects in the area. Even so, the Council acknowledges that there is no objective means to demonstrate the actual impact on local property values until after the Project has actually been constructed. The Council found no conclusive evidence to demonstrate that the Project will have any probable significant adverse impact on the property values in the County. Thus, lacking such evidence, the Council cannot require mitigation of any speculative negative impacts.

Project construction will result in increased employment in Kittitas County. It is estimated that about 50% of the direct construction employment impact (253 full and part-time jobs) would occur within the local economies, with the remainder distributed elsewhere in the Northwest. Approximately 16-18 permanent jobs will be added for operation of the Project.

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 $5,814,500. 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 $4,335,600 to the regional economy. Thus, the total direct and indirect income resulting to the County during the construction phase is projected to be $10,150,100.

Surveys show that local housing supplies are adequate to accommodate the Project’s construction-related demand for temporary rental housing. Further, no more than 6-7 families are estimated to require new housing based on jobs created by the operation of the Project. Thus, no adverse impacts are expected with regard to regional or local housing supply.

Total Project cost is estimated to be $190 million. Thus, it is estimated that the Project will increase the total valuation of real property in Kittitas County by approximately 5%, from

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95 See BOCC Transcript, January 11, 2006, at 40-42 and 57.
$2.5 billion to $2.7 billion, thereby increasing tax revenues for Kittitas County. It appears that the Project will become one of the largest single taxpayers in Kittitas County, contributing revenues for state school funds, local 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.

In addition to increased local tax revenues, the Project will also financially benefit the state treasury. Several turbines are expected to be located on land managed by the Washington Department of Natural Resources (DNR). For these turbines, a rental fee for land will be paid to the State which then returns these funds to schools across Washington based upon the needs of individual school districts. The annual rental rate is estimated to be $9,249 per turbine for the first 10 years of the Project, with incremental increases in the following 15 years until the rate reaches an estimated $20,744 per turbine when the Project is 25 years old.

**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 rural nature 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 and conduct all other noise-generating construction activity between the hours of 7:00 a.m. and 10:00 p.m.  

The Washington Department of Ecology has established limits for environmental noise in WAC 173-60-040. The environmental designation for noise abatement (EDNA) limit for noise generated by an industrial facility is 60 dBA during daytime hours and 50 dBA during nighttime hours. 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. According to the Applicant’s modeling, the highest estimated Project noise level at a residential receptor is 49 dBA, which is within the nighttime regulatory limits adopted by DOE. Even so, the operational noise from the turbine blades and nacelles may be discernible from some nearby homes, particularly when low wind speeds create only minimal background noise.

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96 WAC 173-60-050 exempts from its regulatory limits most construction-related noise, including blasting, if conducted between the hours of 7:00 a.m. and 10:00 p.m.

97 See Exhibit 25-SUP, testimony of environmental engineer Mark Bastasch, at 3, and at Table 1 in accompanying Technical Memorandum (of 94 potential receptors analyzed, only 15 had estimated Project noise levels ≥40 dBA; the only receptor at 49 dBA was a participating landowner). This modeling methodology considered all possible sources of turbine noise at the particular residential site (i.e. all turbines within earshot of the home), not just a single turbine. See EFSEC Transcript, September 20, 2006, at 727-728.  

98 See EFSEC Transcript, September 20, 2006, at 719-723 and 736-737.
Noise from the high voltage feeder lines, substation transformers and high-voltage switching equipment will comply with levels specified in WAC 173-60-040.

**Habitat, Vegetation, and Wetlands**

The Applicant surveyed and mapped vegetation communities in the 6,000-acre Project area, and associated collection feeder line corridors. The Project is at the western edge of the Central Arid Steppe zone defined by the Washington State GAP Analysis. Vegetation communities within the KVWPP site consist primarily of sagebrush and grasslands. There are riparian zones along ravines and lithosol communities along ridge tops. The higher portions of the Project area border the ponderosa pine zone. Habitat quality within the Project area ranges from poor in many of the valley bottoms to good along some of the ridge tops and flats. Generally, the ridge top habitats are in fair to good condition. More specifically, the ridge top lithosols are typically in good condition, containing a relatively intact vegetative structure and few non-native species. The deeper-soiled ridge top habitats are generally in fair condition, with certain areas dominated or co-dominated by non-native species in the grass layer.

The Project would result in temporary vegetation community impact of approximately 231 to 371 acres of which approximately 145 acres is shrub-steppe. Of the approximately 93 to 118 acres of permanent impacts, approximately 45 acres would occur in shrub-steppe. Shrub-steppe habitat is considered a priority habitat by WDFW.

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 539-acre mitigation parcel has been purchased within the 6,000-acre Project area. The parcel meets or exceeds the required habitat replacement ratios under WDFW Wind Power Guidelines for any of the Project scenarios considered.

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.

As noted above, in Section 2, the Applicant and Counsel for the Environment have agreed that the Environmental Monitor for construction of the Project should be an independent, qualified engineering firm to be hired directly by EFSEC. In addition, the “trenching protocol” adopted during construction of the Wild Horse Wind Power Project in spring 2006 shall be utilized for this Project.

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99 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.
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.

A rare plant investigation has been conducted on the Project site. There are no known populations of federally or state-listed endangered, threatened, proposed or candidate plant species in the Project area, or the corridors where collection feeder lines would be constructed. No impacts to protected plants are therefore expected to occur.

A wetland investigation was performed on the Project site. Potentially jurisdictional wetlands or waters of the United States have been identified at nine locations within or adjacent to the Project area. At four of the locations, the Project design will keep development away from streams and wetlands and avoid any impacts to waters of the United States. In five other locations, potentially jurisdictional streams (waters of the United States) were identified where impacts cannot reasonably be avoided.

Potential direct impacts to wetlands and waters from the Project will result from construction of road and underground electric cable crossings of seven intermittent streams, none of which provides fish habitat.

The Project has seven (7) proposed stream crossings; at the present time, each property where stream crossings will be located is used for grazing. Three (3) of the seven (7) stream crossing locations have existing dirt or gravel trails adjacent to or already crossing the streams. The total area of construction activities within jurisdictional waters (including all seven crossings) will be approximately 1,270 square feet or 0.03 acres.

All crossings are to be a minimum of one mile away from any stream reaches that support fish. Construction of the crossings will occur while the streams are dry, thus avoiding impacts to water quality or to water-dependent resources. Design of the crossings will allow the periodic stream flows to pass through the porous rock bases of the crossing without increasing erosion or turbidity. Each crossing will involve a backhoe excavating just enough streambed material to allow for the placement of roadbed crossing material or electric cables. Excavated material will be spread on the shoulders of the new and widened roads. New road crossings will be constructed of clean quarry rock and clean gravel excavated from the locations of Project wind turbine foundations, or brought in from offsite sources. Electrical cables will be placed within the roadbed where feasible. Road crossings will be no wider than 34 feet in order to accommodate the construction equipment and transport trucks required to construct the wind turbine project.

The final profile and grade of each stream crossing will be as close as possible to that of the original streambed while providing a load-bearing surface that functions as a ford crossing. All crossings will be constructed in compliance with the Project’s construction stormwater NPDES permit and its erosion control plan, which will include erosion control details for stream crossings. The DOE Eastern Washington Stormwater Manual, modified as appropriate for Kittitas County, will be used for guidance in development of the erosion control measures. The total volume of materials anticipated to be removed from jurisdictional waters will be approximately 47.1 cubic yards; the total amount of clean rock and gravel placed within the ordinary high water mark of jurisdictional waters will be approximately 60.5 cubic yards.
A comprehensive mitigation plan will be implemented for this Project.\textsuperscript{100} It consists of several categories of actions, including BMPs and mitigation by preservation and enhancement of 8 acres of riparian land contained in the mitigation parcel.

A Joint Aquatic Resource Permit Application (JARPA) was prepared and submitted for this Project and last updated with supplementary information provided to the U.S. Army Corps of Engineers on February 11, 2004. The JARPA is presently valid through April 3, 2008.

The Council finds that due to the mitigation for potential disturbance to the wetlands that may be affected by the Project, no significant adverse impacts to wetlands will occur as a result of construction and operation of this Project.

**Fisheries and Wildlife**

There are no fish-bearing aquatic resources anywhere within the Project area. The WDFW Priority Habitat and Species database does not identify any fish-bearing streams within the Project area. The nearest documented fish-bearing aquatic resources include the Yakima River, located more than one-half mile south of the Project area, and Swauk Creek, located more than one-half mile west of the Project area. Potential fish habitat within the Project area is limited to topographically low areas between ridges, which contain stream channels, and seeps that flow into the Yakima River. These streams are small, narrow channels with intermittent flows that do not provide habitat for resident or anadromous fish.

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 and the relatively short window for construction that will affect only a single nesting season. The Council finds that mitigation measures implemented by the Applicant to protect habitat, as described previously, will compensate for these disturbance impacts.

\textsuperscript{100} See FEIS, Section 3.2.4.
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, and impacts to bats.

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 (including bald eagles), raptor nests, and big game. The Applicant also reviewed unique and protected species lists and consulted with WDFW and the U.S. Fish and Wildlife Service (USFWS) to determine the potential occurrence of priority habitat and special and/or protected species. Sagebrush 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.

**Avian mortality.** The Applicant identified a total of 97 species of birds during the avian point count 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.

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 0.46 to 3.08 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 30 to 200 individual passerines per year if 65 turbines are constructed. Low raptor mortality is anticipated, with a total of two to three birds per year, and mortality of bald eagles is not expected because of their infrequent use of the Project area. Mortality of other types of birds (upland game birds, occasional nocturnal migrating songbirds, waterfowl and other water birds) though expected, would be low.

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 has incorporated several mitigation measures aiming at reducing avian mortality into the initial design of the Project. These measures include: minimizing construction of new roads by improving existing roads and trails; choosing underground (versus overhead) electrical collection lines where 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.

**Baseline studies.** 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.

The Council has given consideration to these issues, comments and requests. On the issue of avian mortality, the Council defers to WDFW to define the type, number, and duration of studies required. Here, the Council finds that the Applicant conducted its baseline monitoring and avian mortality analyses in conformance with WDFW’s Wind Power Guidelines; therefore, the Applicant’s studies are adequate for the environmental analysis required for this proposed Project. 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.

Even so, implementation of a post-construction avian monitoring plan will be an important measure in assessing the accuracy of the mortality estimates. The plan will be used to quantify impacts to avian species and to assess the adequacy of mitigation measures implemented. The plan will 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 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, the Stateline Wind Plant in Washington and Oregon, and the recently constructed Wild Horse Wind Power Project in Kittitas County, Washington.

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.
**Big game.** The Project is located within an area already subject to significant amounts of human activity. Nevertheless, some displacement impacts to wintering big game may occur within the Project area. Because these disturbance levels will not greatly increase beyond what already exists, only minimal impacts, if any, are expected from operation of the Project. In addition, construction impacts to wintering animals are expected to be low, as most heavy construction (road and foundation construction) will occur outside of the critical winter months.

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.

**Bats.** 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. The various intermittent creeks 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 of the KVWPP site.

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 two bat fatalities per turbine per year, or up to 130 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. The significance of this impact is hard to predict since there is very little information available regarding existing bat populations in the Project area. The 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 on bats.
Unique and protected species. 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, bald eagles and golden eagles have the potential to occur within the Project site.

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.

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

Ephemeral creeks are the primary naturally occurring surface water resources on the Project site. The Project is not located in any floodplains. There are existing residential wells for extraction of ground water on some portions of 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 (implemented through a construction stormwater pollution prevention plan (SWPPP)); setbacks of facility structures from creeks; and compliance with general National Pollutant Discharge Elimination System (NPDES) permits for construction activities, including any 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 implementation of BMPs used during construction will continue.

Construction of the Project will require water for road construction, wetting of concrete, dust control and other activities. Water will be procured from an off-site authorized source and transported to the site in water-tanker trucks. No water will be used from the site. Estimated water consumption for all construction-related needs is between 2 and 6.4 million gallons, dependent on the selected method of dust control. The Applicant shall provide proof of a contract for all needed construction water supplies.

During operations the Project will require water only for the limited needs of the O&M facility. The estimated daily water use will be less than 1,000 gallons per day. This water will be obtained from an exempt well that will be installed by a licensed contractor pursuant to Washington Department of Ecology and Kittitas County Health Department requirements.

During operations the Project will not produce industrial waste water. Sanitary waste water produced at the O&M facility will be discharged to an on-site septic system, constructed and operated in accordance with Kittitas County requirements.

**Geological Resources and Hazards**

The 6,000-acre Project site will remain largely intact, with up to 371 acres temporarily impacted by construction activities and only 118 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 will be minimized by local earth resources not being exported off-site. All materials excavated from the site will be used for on-site backfill as necessary, with any processing done at an existing quarry near the “G” turbine string; any off-site disposal will be subject to approval of an off-site disposal plan.

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. Implementation of BMPs will be independently verified through EFSEC’s on-site environmental monitor.

Further, a NPDES general permit will be required for construction activities. 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.

The Council finds that the Applicant’s proposed mitigation measures will appropriately mitigate impacts to the site’s 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 will consist of construction truck deliveries of Project equipment and materials and approximately 160 construction workers commuting to the site during any one month. This traffic will primarily impact US 97 but will also affect Interstate 90. Workers will be encouraged to carpool, potentially reducing the number of trips. 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. The Washington State Department of Transportation has reviewed and approved the accesses to the Project. Further, warning signs and flaggers will be employed to minimize the risk of accidents when large equipment is entering or exiting a public road. Finally, pavement conditions will be documented before construction begins, allowing EFSEC and/or Kittitas County to monitor any road deterioration associated with the Project. The Applicant will repair any such road damage and, in this regard, the Applicant has agreed to perform the following additional transportation mitigation measures:

- Access roads from state highways 10 and 97 shall be gravel and constructed with slope and culverts designed according to WSDOT and Washington state access management standards per Chapter 47.50 RCW and Chapter 468 WAC.

- Access from County Roads (Bettas Road and Hayward Road) shall be gravel and constructed with slope and culverts designed in accordance with Kittitas County standards.
• Project site roads shall be designed in accordance with Table 12-1 of the Kittitas County Road Standards for Private Roads with Low Density Traffic. In locations where road grades exceed the County’s maximum of 12%, the roads shall be designed to ensure that fire vehicles can gain access to the site as necessary to provide emergency services.

• County roads, including shoulder pavement, shall be video-monitored before and after construction of the Project to identify road degradation. The Applicant shall reinstate all county roads degraded by Project construction to as near their pre-construction conditions as possible. The Applicant shall improve portions of Bettas Road and Hayward Hill Road.
  
  o The portion of Bettas Road used for Project construction and operations (approximately 1.4 miles from state highway 97 to Hayward Hill Road) will be improved, following construction, to the current applicable Kittitas County road standards.
  
  o The portion of Hayward Hill Road used for Project construction and operations (approximately 1.4 miles) will be improved to a 22-foot gravel road along that section from Bettas Road to the access road to turbine string B.

• Applicant shall construct a visitor’s kiosk and public viewing area near the O&M facility off Bettas Road with adequate signs directing the public to a safe parking lot for viewing and learning about the Project.

• Applicant shall monitor traffic levels following completion of construction of the Project for a period of three years. After that time, Applicant shall continue monitoring of tourist and operations traffic to the Project upon written request from EFSEC. If this post-construction traffic exceeds WSDOT warrants as contained in Chapter 910 of the WSDOT Design Manual, the Applicant shall construct right and/or left turn lanes on state highway 97 in accordance with WSDOT guidelines.

• **Project Site Access:** Project access roads run across both private and public (DNR) lands. In order to avoid and minimize potential impacts to recreation on public lands, the Applicant will implement an adaptive management approach to allow access to and through the Project area for access to public lands for recreational purposes. Adaptive management allows for changes over time to the level of control and types of activities on the Project site, as needed. In general, the Applicant will permit controlled access to and through the site to public lands, so long as it does not interfere with or introduce adverse impacts on Project operations or personnel. At a minimum, Project site access during operation shall be allowed as follows:

  o Private property owners who wish to access their property from Project access roads will be allowed to do so as necessary under a formal access license and a key to a gated entrance;
  
  o Officials of DNR are currently allowed to access the Project site and will continue to be allowed such access by key; and
  
  o Others will be allowed to access the Project site on a case-by-case basis. Active recreation activities such as camping and off-road vehicle usage will not be allowed on
the Project site in order to avoid and minimize potential impacts to habitat and wildlife from such activities.

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.

The Federal Aviation Administration (FAA) reviewed plans for the proposed Project to evaluate potential interference with local air traffic operations and has issued separate Determination of Non-Hazard (DNH) certificates for each of the proposed turbine and meteorological tower locations. The FAA considered existing as well as potential future approach and departure procedures for the Kittitas County Airport (Bowers Field), as well as flight communications issues. The individual FAA DNH certificates specify which turbine towers require lighting and which do not require lighting.

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 entirety of areas within the Project where ground-altering activities are proposed. Two previously unrecorded prehistoric archaeological “lithic scatter” sites were identified during this survey. Further, although the North Branch Canal, which is eligible for listing on the National Register of Historic Places (NRHP), is located just outside the Project area, no previously unrecorded historical sites were identified during the survey. The Project area does not constitute a cultural or rural historic landscape as defined by the NRHP.

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.

In deference to standard precautions endorsed by the Department of Archaeology and Historic Preservation (DAHP), the Applicant shall maintain 100-foot design and construction buffers around the archaeological sites identified in its cultural resource survey, even though they do not meet the standard qualifications for NRHP. A Project archaeologist will flag off or otherwise delineate the archaeological sites with a 100-foot buffer and a professional archaeologist will monitor construction 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 DAHP, 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 will be tested for eligibility for listing in the NRHP. Any excavation or disturbance to the archaeological sites will require an excavation permit from DAHP per RCW 27.53.060. The Project archaeologist will remove any flagging tape or pin flags at the end of the construction-monitoring phase of the Project. If a tribe requests to have one of its representatives present during earth-disturbing construction activities, the Applicant shall comply with its wishes.
The Council finds that with implementation of these mitigation measures no impacts on known culturally sensitive areas would occur under either 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.

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.

Fire. 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 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 feeder transmission line would be of sufficient diameter to control potential corona effects, if any, and special care would be employed during construction to minimize nicks and scrapes to any 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, 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 Kittitas County Fire District No. 1 for fire protection services. The SCA requires that this agreement be maintained through the life of the Project.

**Release of hazardous materials.** 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 is encountered during construction, the Applicant will coordinate with the Washington Department of Ecology to determine the measures to be taken.

Construction and operation of the Project will, 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.

**Hazards specifically associated with wind generation facilities.** 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 (addressed above).

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 sabotage, vandalism, a lightning strike, or terrorism. The hazard zone for blade fragment throw should be approximately that for ice throw.

Due to restricted site access and because the distances from the proposed tower locations to existing residences and public roads well exceeds the estimated maximum ice or blade throw distance of 328 feet, the proposed Project should not result in any risk to the public from ice or blade fragment throw. In addition, the Applicant has agreed to implement safety setbacks of 541 feet for each of the turbine towers from any residence and a tip height setback (330 feet or 410 feet for KVWPP) from public roads and PSE or BPA transmission lines.

Testimony submitted to the Council indicated 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 above-noted safety setbacks 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, sabotage, vandalism, a lightning strike, or terrorism. 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 (330 feet or 410 feet for KVVPP). Restricted site access combined with the above-noted safety setbacks to existing residences and public roads should result in minimal risk to the public if a turbine blade were to be thrown.

Finally, health and safety and emergency plans for both the construction and operation phases will 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 will be responsible for implementing the plans in coordination with the local emergency response support organizations. The Project operating and maintenance group and all contractors will receive emergency response training as part of the regular safety-training program to ensure that effective and safe response actions will be taken to reduce and limit the impact of emergencies at the Project site.

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 Kittitas County Fire District #1 that will remain in effect for the life of the Project. As part of this Agreement, the Applicant will purchase a new fire truck (brush rig) for the fire district.

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.

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. No such issues accrued during construction of the Wild Horse Wind Power Project.

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.

As stated previously, water for the Project will be obtained from authorized off-site sources and one on-site well at the O&M facility. 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 including its Agreement with Kittitas County Fire District #1. With these mitigation measures, no significant adverse impacts are anticipated for public services or recreational facilities.

**Site Restoration and Decommissioning**

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, Sagebrush briefly outlined the scope of activities that will 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.

The Applicant shall provide EFSEC a Project Decommissioning Plan as required under WAC 463-42-655, containing sufficient detail to identify, evaluate, and resolve all major environmental and public health or safety issues which can reasonably be anticipated. The Plan must describe the process used to evaluate the options and select measures that will be taken to restore or preserve the site or otherwise protect all segments of the public against risks or danger resulting from the site. The Plan must also include a discussion of economic factors regarding the costs and benefits of various restoration options versus the relative public risk and shall address provisions for funding or bonding arrangements to meet the site restoration or management costs, to include evidence of sufficient insurance coverage in an amount justifiable for this Project and a site closure bond or other functionally equivalent financial instrument or security satisfactory to EFSEC compliance staff.

The Project will be decommissioned within twelve (12) months of the date of termination of the Site Certification Agreement. One potential cause of termination would be upon written request of the Council 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 Site Certification Agreement).

Decommissioning of the Project will 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 will 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 Applicant also prepared an engineering estimate of the amount of the Decommissioning Funds that would be required and has committed to annual reevaluations of said costs during Project construction and once every five (5) years thereafter.

The Council has considered the above commitments, and, finding them to be appropriate, has incorporated them into the Site Certification Agreement; provided Sagebrush complies with EFSEC’s site restoration regulations in effect at the time of Application submittal. Sagebrush 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.

The above-noted decommissioning funding security requirements and those incorporated into the SCA may 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. Separate obligations in that regard must be addressed at an appropriate time in the future.

**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 north of Ellensburg (Wild Horse Wind Power Project, now completing construction, 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 Kittitas Valley Wind Power 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 KVWPP does not contribute to cumulative impacts because of the distance that separates it from other actual and proposed 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’s “build window” for the Project shall not exceed 5 years. The Applicant shall construct the Project such that substantial completion 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 June 1, 2007, the approximate date by which the Governor of the State of Washington must act on this Order and Recommendation; provided, however, that such construction is not delayed by a force majeure event.

The Council finds that this build window 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 twelve (12) to eighteen (18) months after beginning construction. Thus, at the latest, the Applicant could have until December 1, 2013, to complete
the Project, but the actual required completion date will be determined to be approximately 18 months from the date the Applicant commences construction.

**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, as explained in further detail above, the Council finds that the Project conforms to the legislative intent expressed in RCW 80.50.010. The Council further finds that preempting the Kittitas County Wind Farm Overlay Ordinance in accordance with RCW 80.50.110 and Chapter 463-28 WAC conforms with that same legislative intent.

The Applicant proposes to construct the Project in accordance with applicable national and international building codes. Electrical and mechanical project components will 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 discussed in the sections 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. 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.

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101 See State Energy Policy, Guiding Principle #2, RCW 43.21F.015.
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 Sagebrush 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 Fact and 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. 2003-01 to the Washington State Energy Facility Site Evaluation Council (EFSEC or Council) for certification to construct and operate the Kittitas Valley Wind Power Project (Project), a wind powered energy generation facility with a maximum of 65 wind turbines and a maximum installed nameplate capacity of approximately 180 megawatts (MW). The Project is to be located northwest of the city of Ellensburg in Kittitas County, Washington, along ridge tops between Ellensburg and Cle Elum.

The Applicant and the Application

2. The Applicant, Sagebrush Power Partners, is a Delaware Limited Liability Company (LLC) formed to develop, permit, finance, construct, own and operate the Project. Sagebrush 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 January 13, 2003, 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 Kittitas Valley Wind Power Project in Kittitas County, Washington.

Compliance with the State Environmental Policy Act (SEPA)

4. 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.

5. On February 14, 2003, the Council issued a Determination of Significance and request for comments on the scope of environmental impacts. On March 12, 2003, 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 March 14, 2003.


8. On December 23, 2005, the Council issued an Addendum to the Draft EIS.


10. On February 1, 2007, the Council issued the Final EIS for the Project.

The Adjudicative Proceeding


13. 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, Residents Opposed to Kittitas Turbines (ROKT), Mr. F. Steven Lathrop, Ms. Chris Hall, the Renewable Northwest Project (RNP), the Cascade Chapter of the Sierra Club, and the Economic Development Group of Kittitas County (EDGKC).


16. On September 19, 2006, during the course of the adjudicative hearing, Counsel for the Environment and the Applicant announced a verbal agreement regarding independent environmental monitoring of Project construction. On September 21, 2006, the Applicant announced a commitment to fully eliminate any demonstrated adverse impacts associated with “shadow flicker.” The terms of each of these agreements has been incorporated into the Site Certification Agreement.


18. The Applicant was given an opportunity to submit its post-hearing brief as well as its Proposed Findings of Fact, Conclusions of Law, and Order and Proposed Site Certification Agreement. All other remaining parties to the case were afforded an opportunity to submit responsive post-hearing briefs.

19. On March 27, 2007, the Council voted 6-1 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 May 1, 2003, in Ellensburg, Washington, after which the Council issued Order No. 776, finding that the Project was inconsistent with local land use plans and zoning ordinances.

21. Following discussions and unsuccessful negotiations with Kittitas County seeking to resolve land use inconsistencies, the Applicant filed an initial Request for Preemption on February 9, 2004.

22. In September 2004, the Applicant asked the Council to indefinitely postpone the scheduled adjudicative hearings for this Project in favor of expediting EFSEC processing of the Wild Horse Wind Power Project.

23. In summer 2005, the Applicant revised the scope of the Project and renewed its efforts to resolve land use inconsistencies with Kittitas County, withdrawing its initial Request for Preemption.
24. In October 2005, as required by Kittitas County’s Wind Farm Overlay Ordinance, Kittitas County Code, Chapter 17.61A, the Applicant submitted a Development Activities Application to Kittitas County and sought to comply with all applicable Kittitas County local land use plans and zoning ordinances.

25. The Kittitas County Planning Commission held public hearings on the Project in January 2006 and later recommended to the Kittitas County Board of County Commissioners (BOCC) that they deny any amendment to the Kittitas County Comprehensive Plan and any related rezone required for the BOCC to permit the Project.

26. The Kittitas County Board of County Commissioners held public hearings on the Project in March and April 2006. On May 3, 2006, the BOCC voted to “preliminarily” deny the Development Activities Application, focusing on the question of mitigating visual impacts and shadow flicker through setbacks of up to one-half mile from neighboring residences.

27. The Applicant made additional attempts to modify the Project’s layout so as to satisfy the criteria articulated by BOCC members in May 2006.

28. The Kittitas County Board of County Commissioners denied Sagebrush’s Development Activities Application on June 6, 2006. The BOCC’s determination was based on the Project’s wind turbines exceeding the 35-foot height limit for the FR 20 zone, the visual impact of the wind farm, and the threat of shadow flicker to surrounding residences.


30. The Council’s processing of Application 2003-01 was significantly delayed while the Applicant and Kittitas County attempted to resolve land use inconsistencies.

Adequacy of Applicant’s Second Request for Preemption

31. The majority of the Council finds, with one member dissenting, that the Applicant attempted in good faith to resolve local land use noncompliance issues with Kittitas County.

32. The Applicant and Kittitas County were unable to reach agreement to resolve the land use consistency issues.

33. The Applicant and the Council have reviewed alternate locations within Kittitas County and determined that none are acceptable for the siting of this Project.

34. Siting of the Kittitas Valley Wind Power Project at the Applicant’s desired location supports the various interests of the State of Washington as delineated in RCW 80.50.010.

Project Description and Configuration

35. The Kittitas Valley Wind Power Project is a wind powered electrical generation facility in Kittitas County, Washington. It will consist of a maximum of 65 wind turbine generators with a maximum total nameplate capacity of approximately 180 megawatts (MW).
36. The Applicant analyzed and the Council initially 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. The Applicant later modified the Project and reduced the choice of scenarios from three to two.

37. The Site Certification Agreement will require the Certificate Holder to select a single Project configuration from within the range of the two scenarios. Both scenarios are limited to a maximum of 65 turbines, with the Applicant free to choose either the smaller 1.5 MW nameplate capacity wind turbine generators or the larger 3 MW nameplate capacity wind turbine generators.

38. 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 will 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, to comply with setback requirements, and to compensate for local conditions.

39. The analysis performed in the EIS showed that, overall, the impacts from the different 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.

40. The Project will 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.

41. 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, 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**

42. The Project will be located approximately 12 miles northwest of the City of Ellensburg, on open ridge tops between Ellensburg and Cle Elum.

43. The Project will be constructed across a land area of approximately 6,000 acres in Kittitas County. Up to 371 acres will be impacted by temporary construction activities; the actual permanent facility footprint will comprise approximately 118 acres of land.

44. The majority of the Kittitas Valley 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. 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.

45. The site is located within Forest and Range (FR) and Agriculture-20 (Ag-20) land use zoning designations in Kittitas County. Historically, the site has been used for grazing.

Visual Resources/Light, Glare and Shadow Flicker

46. 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 computer-generated visual simulations of the proposed layout of the wind farm from various viewpoints. The Council also made a site visit to better understand existing conditions and the potential visual impacts of the Project.

47. 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 aesthetic values remains largely a matter of individual taste and opinion.

48. 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. However, one Councilmember dissents, asserting that the Project’s impact on panoramic vistas and views of the Stuart Range is significant and cannot be adequately mitigated.

49. Residences within a half-mile of the Project are within a zone of high visual sensitivity to the individual wind turbines. The height of the turbines can produce a looming effect on some of the homes in this zone, depending on the topography and other characteristics of the landscape between a home and any nearby wind turbine.

50. In order to ensure that no individual turbine “looms” over any non-participating residence and thereby dominates its viewshed, the minimum setback from existing non-participating residential structures shall be four times the maximum tip height of the selected turbines.

51. The Project, including those turbines required by the FAA to display aviation warning lights, will not add significant ambient light or glare to the immediate surroundings.

52. The Project will be operated to eliminate any potential shadow flicker impact to local residences with line-of-sight views of turbines located within 2,500 feet of the residence.

Socioeconomics/Property Values

53. The rural location of the Project site greatly diminishes the potential for negative impacts to urban property values. Current predictions with regard to the Project’s future impact on local property values are merely speculation and are not supported by any objective evidence.
in the record. Based upon a review of all evidence contained in the record, the Council finds that construction and operation of the Kittitas Valley Wind Power Project will not have any significant negative impact on property values in Kittitas County.

54. Project construction and operation will result in increased employment in Kittitas County. Approximately one-half of all construction-related jobs created by this Project will be located within Kittitas and Yakima counties.

55. The Project will generate total direct income of approximately $5,814,500 during the construction phase. Additional indirect income of just over $4,335,600 is also anticipated during construction of the Project.

56. Adequate local housing supplies exist to accommodate the Project’s demand for temporary rental housing.

57. The Project will cost approximately $190 million. Thus, construction of the Project will increase the total valuation of real property in Kittitas County by approximately 5%, 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. New tax revenues will benefit local and state schools, county government, county roads, and other local services.

Noise

58. The Project shall be designed to comply with applicable Washington State Environmental Noise Levels of Chapter 173-60 WAC.

59. Due to the rural nature of the site, the Council finds no significant noise impacts from construction or operation of the Project.

Habitat, Vegetation and Wetlands

60. The Project area is located at the western edge of the Central Arid Steppe zone as defined by the Washington State GAP Analysis. Vegetation communities within the KVWPP site consist primarily of sagebrush and grasslands, with some limited instances of shrub-steppe habitat, which WDFW considers a “priority habitat.” There are riparian zones along ravines and lithosol (shallow soils) communities along ridgetops. The higher elevation portions of the Project area border on the ponderosa pine zone.

61. The Project will result in temporary vegetation community impacts on between 231 and 371 acres, of which approximately 145 acres is shrub-steppe. Permanent vegetation community impacts will occur on approximately 93 to 118 acres, of which approximately 45 acres will be shrub-steppe.

62. 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). Sagebrush will purchase an approximately 539-acre mitigation parcel within the 6,000-acre Project area. The parcel meets or exceeds the
required habitat replacement ratios under the WDFW wind power guidelines for any of the Project scenarios considered, and will be protected for the life of the Project.

63. The Applicant will also implement Best Management Practices to minimize introduction of weeds, implement a noxious weed control program, and develop and implement a comprehensive post-construction restoration plan for temporarily disturbed areas, including habitat-reseeding programs, in consultation with WDFW.

64. The Trenching Protocol adopted during construction of the Wild Horse Wind Power Project shall be utilized during the construction of this Project. This requirement is included in the SCA and a copy of the Trenching Protocol shall be attached thereto.

65. There are no known populations of federally or state-listed endangered, threatened, proposed or candidate plant species in the Project area, or the corridors where transmission feeder lines would be constructed. Therefore, no impacts to protected plants are expected to occur.

66. A wetland investigation was performed on the Project site. Potentially jurisdictional wetlands or waters of the United States have been identified at ten locations within or adjacent to the Project area. At four of the locations, the Project design will keep Project developments away from streams and wetlands and avoid any impacts to waters of the United States. In seven (7) other locations, potentially jurisdictional streams (waters of the U.S.) were identified where impacts cannot be reasonably avoided. At the present time, the properties where stream crossings will be located are used for grazing. Three (3) of the seven (7) stream crossing locations have existing dirt or gravel trails adjacent to or actually crossing the stream. The total area of construction activities within jurisdictional waters (for all seven (7) crossings) will be approximately 1,270 square feet or 0.03 acres.

67. Potential direct impacts to wetlands and waters from the Project will result from construction of road and underground electric cable crossings of seven intermittent streams. The streams involved in the seven crossings are all intermittent streams and do not provide fish habitat. All crossings are a minimum of one mile away from any stream reaches that support fish. Construction is expected to occur while the streams are dry and thus no impacts to water quality or water-dependent resources are expected.

68. The design of the crossings will allow the periodic stream flows to pass through the porous rock bases of the crossing without increasing erosion or turbidity. Each crossing will involve excavating just enough existing streambed material to allow for the placement of roadbed crossing material or electrical cables. All work will occur when flows are absent or well below 5 cubic feet per second (cfs). Backhoes will be used to remove existing streambed material and excavated material will be spread on the shoulders of the new and widened roads. The new road crossings will be constructed of clean quarry rock and clean gravel excavated from the locations of project wind turbine foundations, or brought in from offsite sources. Electrical cables will be placed within the roadbed crossings wherever feasible. Road crossings will be no wider than 34 feet in order to accommodate the construction equipment and transport trucks required to build the wind turbine project.
69. The final profile and grade of each crossing will be as close to the original streambed as possible while providing a load-bearing surface that functions as a ford crossing. All crossings will be constructed in compliance with the Project’s construction stormwater NPDES permit and its erosion control plan, which will include erosion control details for stream crossings. The DOE Eastern Washington Stormwater Manual, modified as appropriate for Kittitas County, will be used for guidance in development of the erosion control measures. The total volume of materials removed from jurisdictional waters will be approximately 47.1 cubic yards; the total amount of clean rock and gravel placed within the ordinary high water mark of jurisdictional waters will be 60.5 cubic yards.

70. A comprehensive mitigation plan will be implemented for this Project. It consists of several categories of actions including BMPs and mitigation by preservation and enhancement of 8 acres of riparian land located in the mitigation parcel. In addition, all construction work shall be accomplished within the limits of the Joint Aquatic Resources Permit Application (JARPA) obtained for this Project from the U.S. Army Corps of Engineers.

71. The Environmental Monitor for the construction of this Project shall be independent, hired directly by the Council, and be from a qualified engineering firm.

72. 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, or habitat.

**Fisheries and Wildlife**

73. 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.

74. The Council finds that with the mitigation measures proposed, no significant adverse impacts are expected to occur on fish resources.

75. 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.

76. Bird fatality projections of 0.46 to 3.08 per turbine year are anticipated, with most of the fatalities involving resident songbirds. Avian mortality is expected to be 30 to 200 individuals per year if 65 turbines are constructed. Low raptor mortality is anticipated, with two to three birds per year, most probably American kestrels and/or red-tailed hawks; mortality of bald eagles is not expected because of their infrequent use of the Project area. Very low numbers of fatalities of upland game birds, nocturnal migrating songbirds, and waterfowl or other waterbirds (e.g. gulls) are anticipated.

77. 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; 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 ungued 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.

78. The Applicant conducted baseline monitoring and avian mortality analyses in conformance with WDFW’s wind power guidelines.

79. 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.

80. 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.

81. 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. Although there is only a small likelihood of bald eagle mortality during the life of the Project, the Applicant has submitted to USFWS a Habitat Conservation Plan and an application for an incidental take permit under the Endangered Species Act.

82. The Council finds that the studies and mitigation measures implemented by the Applicant are consistent with WDFW Wind Power Guidelines. The Council further finds that the Project will result in no significant unavoidable adverse impacts to wildlife.
Air Quality

83. 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.

84. The Project will make use of existing local rock quarries but may utilize an on-site rock crusher and/or a temporary concrete batch plant. Any rock crusher or batch plant is to be temporary and used only during Project construction.

85. 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 any on-site rock crusher or concrete batch plant is appropriate.

86. Operation of the Project will not result in any direct air emissions.

87. 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

88. The Project is expected to require approximately two to 6.4 million gallons during construction. Water for construction will be purchased off-site from an authorized source, then delivered by truck to the Project site.

89. During construction, sanitary wastewater 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 wastewater from the facility.

90. 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.

91. Water for domestic-type uses by operations and maintenance facility staff will be minimal, less than 1,000 gallons per day, primarily for bathroom and kitchen use. This water will be obtained from an exempt well to be installed at the O&M facility site by a licensed installer pursuant to Washington State Department of Ecology regulations and requirements.

92. 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.
93. The Council finds there will not be significant adverse impacts to water resources or water quality from the Project.

**Geological Resources and Hazards**

94. 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.

95. 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.

96. The Project site is on or near ridgelines located above any floodplain, eliminating any risk of flooding.

**Traffic and Transportation**

97. Construction of the Project will result in a short-term increase of traffic in the local area, particularly on U.S. 97, through truck deliveries of equipment and materials. Operation of the Project will have no significant impact on local traffic patterns.

98. 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.

99. The Applicant has also agreed to perform additional transportation mitigation measures, specifically:

- Access roads from state highways 10 and 97 shall be gravel and constructed with slope and culverts designed according to WSDOT and Washington state access management standards per Chapter 47.50 RCW and Chapter 468 WAC.

- Access from County Roads (Bettas Road and Hayward Road) shall be gravel and constructed with slope and culverts designed in accordance with Kittitas County standards.

- Project site roads shall be designed in accordance with Table 12-1 of the Kittitas County Road Standards for Private Roads with Low Density Traffic. In locations where road grades exceed the County’s maximum of 12%, the roads shall be designed to ensure that fire vehicles can gain access to the site as necessary to provide emergency services.

- County roads, including shoulder pavement, shall be video-monitored before and after construction of the Project to identify road degradation. The Applicant shall reinstate all
county roads degraded by Project construction to as near their pre-construction conditions as possible. The Applicant shall improve portions of Bettas Road and Hayward Hill Road.

- The portion of Bettas Road used for Project construction and operations (approximately 1.4 miles from state highway 97 to Hayward Hill Road) will be improved, following construction, to the current applicable Kittitas County road standards.

- The portion of Hayward Hill Road used for Project construction and operations (approximately 1.4 miles) will be improved to a 22-foot gravel road along that section from Bettas Road to the access road to turbine string B.

- Applicant shall construct a visitor’s kiosk and public viewing area near the O&M facility off Bettas Road with adequate signs directing the public to a safe parking lot for viewing and learning about the Project.

- Applicant shall monitor traffic levels following completion of construction of the Project for a period of three years. After that time, Applicant shall continue monitoring of tourist and operations traffic to the Project upon written request from EFSEC. If this post-construction traffic exceeds WSDOT warrants as contained in Chapter 910 of the WSDOT Design Manual, the Applicant shall construct right and/or left turn lanes on state Highway 97 in accordance with WSDOT guidelines.

- **Project Site Access**: Project access roads run across both private and public (DNR) lands. In order to avoid and minimize potential impacts to recreation on public lands, the Applicant will implement an adaptive management approach to allow access to and through the Project area for access to public lands for recreational purposes. Adaptive management allows for changes over time to the level of control and types of activities on the Project site, as needed. In general, the Applicant will permit controlled access to and through the site to public lands, so long as it does not interfere with or introduce adverse impacts on Project operations or personnel. At a minimum, Project site access during operation shall be allowed as follows:

  - Private property owners who wish to access their property from Project access roads will be allowed to do so as necessary under a formal access license and a key to a gated entrance;

  - Officials of DNR are currently allowed to access the Project site and will continue to be allowed such access by key; and

  - Others will be allowed to access the Project site on a case-by-case basis. Active recreation activities such as camping and off-road vehicle usage will not be allowed on the Project site in order to avoid and minimize potential impacts to habitat and wildlife from such activities.

100. The FAA has reviewed plans for the proposed Project and has issued Determination of No Hazard (DNH) certificates for each of the proposed turbine and meteorological tower locations. The individual FAA DNH certificates specify which towers require lighting and which do not require lighting.
101. The Council finds that the Applicant’s proposed mitigation measures will appropriately mitigate construction traffic and air navigation impacts.

Cultural and Archeological Resources

102. The Applicant conducted background research and an archaeological survey which covered the entire areas within the Project where ground-altering activities are proposed. Two previously unrecorded prehistoric archaeological sites were identified during this survey. Further, although the North Branch Canal, which is eligible for listing on the National Register of Historic Places (NRHP), is located just outside the Project area, the Project area itself does not constitute a cultural or rural historic landscape.

103. The Applicant proposes to maintain 100-foot design and construction buffers around the archaeological sites identified during this current cultural resource survey, even though the sites do not meet the standard qualifications for the 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.

104. The Applicant, in consultation with the Office of Archeology and Historic Preservation (DAHP), will develop a cultural resources monitoring plan for monitoring construction activities and responding to the discovery of archeological artifacts or buried human remains.

105. 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 will not impact any of the archaeological or historical sites identified during this current cultural resource survey.

Health and Safety

106. 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.

107. 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 #1. 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.

108. Construction and operation of the Project will 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.
109. 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.

110. Construction and operation of the Project will not result in the generation of any hazardous wastes in quantities regulated by state or federal law.

111. 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 will reduce the safety risks associated with ice throw, tower collapse and other safety or nuisance issues.

112. There are no documented human or animal health impacts associated with shadow flicker from wind turbines. The Project will not produce shadow-flicker effects on any existing residences within 2,500 feet of any turbine; the Applicant has stipulated to the shutdown of any turbine within 2,500 feet of a non-participating residence if there is a line-of-sight view upon request of the affected non-participating landowner.

113. With the mitigation measures provided, the Council finds that the Project will not cause a significant adverse health and safety impact.

Public Services

114. The Project is not anticipated to have a significant adverse effect on any public services, including law enforcement, fire, water, medical, recreational, or schools.

115. The Project will not have any significant adverse impact on communication facilities or services in the area.

Site Restoration

116. In accordance with WAC 463-42-655 (as in effect in January 2003) the Applicant prepared an initial site restoration plan in the Application 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.

117. Prior to initiating construction activities, the Applicant must post sufficient security funds to ensure complete decommissioning of the Project and provide the Council with a decommissioning plan as required by the SCA.

Cumulative Impacts

118. Potential cumulative impacts of the development of the existing Wild Horse, proposed Desert Claim and this proposed Kittitas Valley 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.

119. 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**

120. 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 June 1, 2007, the approximate date by which the Governor of the State of Washington must act on this Order and Recommendation; *provided*, however, that such construction is not delayed by a force majeure event.

121. Construction of the entire Project shall be completed within approximately eighteen (18) months of beginning construction.

**Conformance with Law**

122. 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).

123. 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).

124. 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).

125. 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 verbally 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. 2003-01, pursuant to Chapter 80.50 RCW and Chapter 34.05 RCW.

2. The Council conducted its review of the Sagebrush Application 2003-01 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 Sagebrush'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 and a Draft Supplemental EIS for public comment, conducting a public hearing and accepting written comments on the Draft EIS and Draft Supplemental EIS, issuing an Addendum to 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 Kittitas County land use plans and zoning laws except for the local height restriction (35 feet) in the Forest & Range (FR20) zone and Kittitas County’s Wind Farm Overlay Ordinance (see Appendix). However, the Council concludes that it is appropriate to preempt the local zoning code’s height restriction in order to allow for the height of the individual wind turbine towers, on condition of the minimum setback requirements described herein and in the SCA. In addition, the Council further concludes that this Wind Farm Overlay Ordinance improperly usurps and unnecessarily duplicates EFSEC’s statutory role in the siting of energy facilities and, in accordance with RCW 80.50.110, must therefore be preempted by state law.

5. The legislature has recognized that the selection of sites for new energy facilities can 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.

6. The Council concludes that the certification of the Kittitas Valley Wind Power Project, as described in Application 2003-01 and as reduced in scope as described in the
supporting SEPA documents, 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 human 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, the Draft Supplemental EIS, Addendum to 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 PREEMPT the Kittitas County zoning code’s 35-foot height limitation in the Forest & Range zone as well as the Wind Farm Overlay Ordinance adopted by the Kittitas County Board of County Commissioners in December 2002.

2. The Council recommends that the Governor of the state of Washington APPROVE certification for the construction and operation of the Kittitas Valley Wind Power Project located in Kittitas County, Washington.

3. 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 27th day of March, 2007.

James Oliver Luce, Chair

Richard Fryhling,
Department of Community, Trade and Economic Development

Hedia Adelman,
Department of Ecology

Chris Towne,
Department of Fish and Wildlife

Judy Wilson,
Department of Natural Resources

Tim Sweeney,
Utilities and Transportation Commission

Patti Johnson,
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.
APPENDIX A

Consistency With Kittitas County Comprehensive Plan

Although the project has been deemed inconsistent with local land use plans, specifically with the Kittitas County Wind Farm Overlay Ordinance, the Project conforms to all relevant General Planning Goals, Objectives and Policies (GPO) defined in the Kittitas County Comprehensive Plan including, but not limited to the following:

**GPO 2.1** - The maintenance and enhancement of Kittitas County’s natural resource industry base including but not limited to productive timber, agriculture, mineral and energy resources.

Wind power development as proposed by the Kittitas Valley Wind Power Project enhances the energy portion of the County’s natural resource industry. This is accomplished while also assisting to maintain the agriculture sector in the Project’s vicinity which is zoned Agriculture-20 (A-20) and Forest & Range (FR) and planned for rural uses.

**GPO 2.2** - Diversified economic development providing broader employment opportunities.

Wind power allows for economic diversification in Kittitas County. Construction of the project is expected to create up to 253 temporary jobs during construction and 16-18 permanent, family wage new jobs during operation. Revenue from the Project would also lower the effective property tax rates on landowners, a further benefit to the agriculture community. Wind power development of agricultural lands will aid agricultural landowners, helping to sustain long-term agricultural use of the properties, by helping to insulate rural landowners from economic cycles typical in the rural economy that might lead to pressures to subdivide the land for other uses (i.e. rural residential).

**GPO 2.3** - The encouragement of urban growth and development to those areas where land capability, public roads and services can support such growth.

The Project area and vicinity are planned and zoned for forest and range and agricultural uses, not residential development. Plan policies and the zoning code specifically prohibit sprawling residential development in this area of the County, confirming that it is the County’s GMA-based policy to avoid extension of urban services in the area. The Project will provide economic development without imposing demands on public utilities and services.

**GPO 2.5** - Kittitas County should encourage residential and economic growth that will minimize the costs of providing public utilities and services.

As referenced above with relation to GPO 2.3, the Kittitas Valley Wind Power Project will not impose infrastructure costs on the County; however, tax benefits will be significant. To the contrary, if residential development occurs in the project area, the addition of homes would create demand for urban-like services and additional infrastructure costs for the County.
**GPO 2.6** - Kittitas County will maintain a flexible balance of land uses.

With only 0.4% of the County’s total acreage affected by the 6,000 acre Project area, and a fraction of that (90 acres) occupied by permanent Project improvements, ample opportunity remains for flexibly balancing land use countywide. By providing economic incentives for rural landowners within 6,000 acres of the A-20 and FR zones to sustain rural agricultural and natural resource management and development land uses, the Project should help reinforce the County’s rural land use policies and help to maintain the Comprehensive Plan’s flexible balancing of uses.

**GPO 2.7** - Kittitas County will cooperate with the private sector and local communities in actively improving conditions for economic growth and development.

The Project enables sustainable agricultural and natural resource management uses in the vicinity. The Project provides an opportunity for economic growth and development in a rural area, without compromising the County’s GMA-based Comprehensive Plan and zoning code policies and requirements for the protection and preservation of agricultural and natural resource-based land uses, practices and traditions.

**GPO 2.11A** - Much of Kittitas County receives little natural precipitation and is highly susceptible to fire hazard during much of the year. Meanwhile, more people are moving to previously uninhabited forest and rural areas. As this number increases, the need to provide adequate and efficient fire services to these areas also increases.

The Project’s design provides benefits to fire district(s) concerned about wildland fire management, including development of access roads that serve as fire breaks; providing on-site equipment that supplements the fire district’s own resources; and controlling site access and reducing the chance of fire. The Applicant has entered into a fire services agreement with FD #1 that will provide fire protection for the life of the Project, including areas which currently have no fire protection. In addition, under the terms of the Fire Services Agreement, the Applicant will purchase a new brush rig to allow the fire district to better fight fires in the area.

**GPO 2.14** - Kittitas County will place a high priority in the Kittitas County Comprehensive Plan on the following state goal:

> RCW 36.70A.020(6) Property Rights. Private property shall not be taken for public use without just compensation having been made. The property rights of landowners shall be protected from arbitrary and discriminatory actions.

**GPO 2.110** - Oppose laws and regulations which restrict agriculture, and support laws and regulations which enhance agriculture.

The Project’s payments to landowners, and the property tax payments to the County and other taxing districts which may reduce the tax burden on landowners, will enhance the economic viability of ranching and other agriculture operations. It meets the policies and regulations intended to protect rural land uses, and to discourage residential sprawl.

**GPO 2.114** - Look at solutions to the problems of needing to sell house lots without selling farm ground.
The Project will provide support to the agricultural community, reinforcing agricultural and natural resource management land uses and rural traditions.

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

The Project is sited on non-irrigated land, most of which is used for cattle grazing. The site's ongoing use for cattle operations will constitute a continuation of productive agricultural or farming use. Removal of only approximately 118 acres of rangeland is required for the overall Project footprint and will not significantly affect the productivity of cattle grazing operations on this land.

**GPO 2.118** - Encourages development projects whose outcome will be the significant conservation of farmlands.

The Project promotes both economic development and agricultural land conservation. It may enable the conservation of a 6,000-acre area of Kittitas County, providing incentives for ongoing, sustainable agricultural and natural resource management uses.

**GPO 2.122** – Look into additional tax incentives to retain productive agricultural lands.

Lease payments from the Project to the landowners are a non-tax incentive to retain potentially productive lands for agriculture use. The county as a whole will benefit from the Project, not only financially, but also through the prevention of rural lands conversion.

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

The Project conforms to the County’s Private Property Planning Goals, Objectives and Policies, and others related thereto. The County places a high priority on private property rights. This includes the rights of rural landowners to continue agricultural and natural resource management and development of lands planned and zoned for rural land uses. Wind energy development is one strategy to enable and encourage ongoing rural land uses, and to provide incentives for rural landowners not to convert their lands to sprawling residential uses. Property rights considerations are a strong argument for approving this Project. The Project’s landowners – including long-time residents interested in continuing family ranching and other agricultural and natural resource management and development uses – have partnered with the proposed Project to enable sustainable rural land uses in a large rural area of Kittitas County. These policies require that landowners should not be expected to forgo the opportunity to develop wind generation or other use on their properties due to potential, subjective visual effects on other properties. The Project will be located primarily on private open rangeland to be leased or purchased by the Applicant. Parts of the Project are proposed on land owned by the Washington Department of Natural Resources (DNR). The applicability of Plan Policy GPO 8.9 is particularly pronounced in this area of the County, where the rural landowners have a right to rely on the County’s GMA-based planning and zoning, and have a right to expect that the
County will enable and encourage ongoing, sustained rural land uses, without infringement by incompatible residential sprawl.

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

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

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

The Project is compatible with traditional rural land uses and is an alternative to the development of residential subdivisions or other uses which do not preserve open space or encourage rural land conservation. The Project will provide significant economic incentives for ongoing rural/agricultural land uses. Through economic incentives to participating landowners, the KV Project will effectively preserve a 6,000-acre area for rural uses and rural character, fulfilling the promise of this Plan Policy. Traditionally, the Project area and surrounding lands have been used for cattle grazing, recreation, hunting and natural resource development, extraction and production, all of which are compatible with the Project. Generation of electricity substantially using wind power is a relatively new, rural land use which generates nominal revenues to landowners through royalty payments and the public through taxes and royalty payments to state agencies (DNR). In an area such as the Project site, this use is compatible with the traditional land uses, enabling the lands to retain their rural character, as opposed to residential development. In the Northwest, wind energy development is a relatively new rural, natural resource-based land use. Throughout the Northwest, wind energy generation has proved itself as a highly successful, progressive means of diversifying and developing rural natural resource industries and economies, fully compatible with ongoing cattle and other agricultural operations. It is a key choice in retaining rural land uses and traditions.

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

Wind energy production is a type of resource-based industry in that it uses a natural renewable resource. The proposed Project is consistent with this policy encouraging such industries.

**Consistency With Zoning Code**

1. The Project is consistent with the controlling purpose and intent of the underlying zoning districts:

A-20 – AGRICULTURAL ZONE

**17.29.010 - Purpose and intent.**
The agricultural (A-20) zone is an area wherein farming, ranching and rural life styles are dominant characteristics. The intent of this zoning classification is to preserve fertile farmland from encroachment by nonagricultural land uses; and protect the rights and traditions of those engaged in agriculture. (Ord. 83-Z-2(part), 1983: Res. 83-10, 1983)

Chapter 17.56

FOREST AND RANGE ZONE

17.56.010 - Purpose and intent.

The purpose and intent of this zone is to provide for areas of Kittitas County wherein natural resource management is the highest priority and where the subdivision and development of lands for uses and activities incompatible with resource management are discouraged. (Ord. 92-6(part), 1992)