VANTAGE WIND POWER PROJECT

Applicant response to Comments received and SEPA

Joanna F. Valencia

From: David Iadarola [diadarola@invenergyllc.com]
Sent: Monday, January 14, 2008 3:34 PM
To: Joanna F. Valencia; Darryl Piercy
Cc: 'Mike Logsdon'; 'McGaffey, Karen (Perkins Coie)'
Subject: Vantage Comment Response
Attachments: WDFW Response.doc; Comment Response.doc

Joanna,
Good to talk to you this morning hope all is well!! I know you are probably in a meeting Darryl right now, but I thought I would submit this to you today. Attached are Invenergy's comment responses to the Vantage Application. As we talked about on the phone earlier today I'm stilling planning on January 23rd as our public meeting date. If this is not the case please let me know. I will give you a call tomorrow morning to discuss further.

Please let me know if you have any questions.

Thanks,

Dave Iadarola
Invenergy LLC
Office:(720)283-4694
Cell: (720)732-3154
diadarola@invenergyllc.com

WASHINGTON STATE DEPARTMENT OF
Natural Resources

November 20, 2007

Joanna Valencia
Kittitas County Community Development Services
411 N Ruby Street Suite 2
Ellensburg WA 98926

SUBJECT: Vantage Wind Power Project – Notice of Application

Thank you for the opportunity to provide comments on the Vantage Wind Power Project – Notice of Application. The Washington Natural Heritage Program (WNHP) is responsible for maintaining information on rare plant species and high quality native wetland and terrestrial ecosystems that occur within the state. Therefore our comments address potential impacts to rare plant species and high quality ecosystems.

The SEPA checklist that was submitted by Invenergy Wind of North America did not include information sufficient to determine how thoroughly the rare plant surveys were done, and consequently, whether the impacts to rare plants are accurately evaluated.

The checklist does not mention whether Washington Natural Heritage Program data was reviewed prior to surveys and, most importantly from a rare plant perspective, does not discuss the occurrences of Hoover's tauschia (*Tauschia hooveri*) that are known from within the project area boundary. This species is designated as Threatened in Washington and as a Species of Concern by the U.S. Fish and Wildlife Service, and is documented in WNHP records as occurring at several locations within the project boundary and other locations immediately north and south of the project area.

The checklist does not say specifically where the surveys were conducted, and it seems to indicate that the access roads, collector lines, substation, O&M facilities, and laydown areas were not known at the time of the survey and may not have been included in the survey corridors.

Another concern is the relocation of hedgehog cactus (*Pediocactus nigrispinus*), also known as snowball cactus, as mitigation. Relocation of individual hedgehog cactus plants has been successful in the Wild Horse Wind Power Project, but generally the transplanting of native plant species is not successful. The Natural Heritage Program does not support the relocation of rare plant species as an adequate mitigation measure.

In regard to high quality native ecosystems, shrubsteppe is a dwindling natural resource – nearly half of its original extent has been converted to other land uses. The windfarm is imbedded in one of the larger shrubsteppe landscapes remaining in the state. The actual take of shrubsteppe and related natural, native vegetation is small but is yet another cumulative loss not stated in the environmental checklist.

The project area has a very low cover of exotic, invasive species particularly on northerly aspects and lithosol habitats. While the direct impact of construction and operation of the wind farm is small compared to the total project area, associated soil disturbance will increase the abundance of exotic species. Experience indicates that the more weeds present, the greater the chance of invasion into less disturbed vegetation. There should be a weed control plan for the project. Also, as a matter of correction, species identified as Idaho fescue in the bunchgrass grasslands section are likely Cusick's bluegrass (*Poa cusickii*).

Please feel free to call me at (360) 902-1697 if you have any questions, or by e-mail at sandra.moody@dnr.wa.gov. For more information, you can visit our internet website at http://www.dnr.wa.gov/nhp. Thank you for your consideration of these comments.

Sincerely,

Sandy Swope Moody, Environmental Review Coordinator
Washington Natural Heritage Program
Asset Management & Protection Division
PO Box 47014
Olympia WA 98504-7014

Enclosures

C: DNR SEPA Center

Response: Washington Department of Natural Resources (November 20, 2007 Letter of Comment)

Comment No. 1: "The SEPA Checklist that was submitted by Invenergy Wind of North America did not include information sufficient to determine how thoroughly the rare plant survey was done, and consequently, whether the impacts to rare plants are accurately evaluated."

> *Response to Comment No. 1: An August 2007 baseline report prepared by WEST, Inc., entitled "Wildlife and Habitat Baseline Study for the Proposed Vantage Wind Power Project, Kittitas County, Washington", which was submitted with Invenergy's application, includes a more detailed description of rare plant survey methodology.*
>
> *That report states: "Pedestrian surveys for rare plant species were conducted on April 27 and from June 10-14, 2006. Surveys were performed by qualified WEST botanists, including Kurt Flaig, Susan Komarek, and Jay Jeffrey. The surveys were timed to locate as many target species as possible, particularly those most likely to occur in the affected habitats (sagebrush steppe and grassland). The survey was accomplished by conducting meander pedestrian transects, zigzagging back and forth across the survey corridor. The intensity of the pattern, and the speed at which the surveyor walked, was variable, and depended upon the structural complexity of the habitat, the visibility of the target species, and the probability of sensitive species occurrence in a given area. In habitats of low visibility with a high probability of sensitive species occurrence, a tighter grid pattern was walked. Care was taken to thoroughly search all unique features and habitats encountered with high probability of occurrence of sensitive species. A GPS unit showing the survey boundaries and turbine locations was used for navigation, in addition to aerial photographs and 7.5' U.S.G.S topographic maps of the site. A list of vascular*

plant species encountered during the rare plant surveys was maintained (and presented in Appendix A of that report)."

Comment No. 2: "The checklist does not mention whether the Washington Natural Heritage Program data was reviewed prior to surveys and, most importantly from a rare plant perspective, does not discuss the occurrences of Hoover's tauschia (Tauschia hooveri) that are known from within the project area boundary. This species is designated as Threatened in Washington and as a Species of Concern by the U.S. Fish and Wildlife Service, and is documented in WNHP records as occurring at several locations within the project boundary and other locations immediately north and south of the project area."

Response to Comment No. 2: Additional information from the WEST, Inc., report addresses the Washington Natural Heritage Program data review:

Target Species

"For the rare plant survey, the target species included all plant taxa listed as 'Endangered' or 'Threatened' by the U.S. Fish and Wildlife Service (USFWS) under the Endangered Species Act (ESA) that potentially occur in the project area. In addition, taxa that have been formally proposed or are candidate species for federal listing, or taxa listed as 'species of concern' that potentially occur within the project area were also considered as target species. The 'species of concern' status is an unofficial status for species that appear to be in jeopardy, but information is insufficient to support listing. Target species also included all plant taxa defined as 'Endangered', 'Threatened', 'Sensitive', Review', or 'Extirpated' by the Washington Natural Heritage Program (WHNP) that potentially occur within the project area. The WHNP, part of the WDNR, maintains the most complete database available for state-listed species. Taxa meeting the above criteria were targeted by the investigation to determine their presence or absence within the study area. Determinations of status for rare plant species were based on information provided by the USFWS and the WNHP's list of tracked plant species (WNHP 2005a)."

Prefield Review

"As part of the investigation, a review of available literature and other sources was conducted to identify the rare plant species potentially found within the project area. As per Section 7(c)(1) of the ESA, a letter was sent to the USFWS requesting a list of federally listed taxa that have potential to occur within the project area. In addition, the WNHP was contacted to obtain element occurrence records for any known rare plant populations in the project vicinity. To supplement the information provided by the above agencies, a number of other sources were consulted. These sources provided additional information such as habitat preferences, morphological characteristics, phenologic development timelines, and species ranges. Sources included taxonomic keys and species guides (USFWS, 2001; Cronquist et al. 1977; Hitchcock and Cronquist, 1973) and online databases of common and rare plant species (WHNP 2005b; USDA, 2006).

Using data collected during the pre-field review, a list of rare plant species potentially occurring in the project area was compiled (Table 1 of the WEST, Inc. report). Habitat preferences and identification periods were derived from the literature for each potential species. Using this information, along with topographic maps of the project area, a field survey plan was developed to guide the timing and intensity of the field surveys."

Hoover's tauschia was surveyed during April 2006, but was inadvertently left off the list of rare plants (Table 1 in the WEST, Inc. August 2007 report) targeted during the survey. The species was not observed during the rare plant surveys. Twelve occurrences of the species had previously been reported from portions of Sections 4 and 9, Township 17N, Range 21E, outside of the project boundaries. The species was not found during rare plant surveys on the Wild Horse wind energy project immediately north of this project.

Comment No. 3: "The checklist does not say specifically where the surveys were conducted, and it seems to indicate that the access roads, collector lines, substation, O&M facilities, and laydown areas were not known at the time of the survey and may not have been included in the survey corridors."

Response to Comment No. 3: Comment noted. Additional rare plant surveys will be conducted during spring 2008 to cover any of the proposed facilities (access roads, collector lines, substation, O&M facilities and laydown areas) not covered by the previous survey.

Comment No. 4: "Another concern is the relocation of hedgehog cactus (Pediocactus nigrispinus), also known as snowball cactus, as mitigation. Relocation of individual hedgehog cactus plants has been successful at the Wild Horse Wind Power Project, but generally the transplanting of native plant species is not successful. The Natural Heritage Program does not support the relocation of rare plant species as an adequate mitigation measure."

Response to Comment No. 4: Comment noted. The hedgehog cactus will be avoided wherever possible. The plants will be field-flagged to allow for micro-siting of the towers and other facilities during the project design phase.

Comment No. 5: "In regard to high quality native ecosystems, shrubsteppe is a dwindling natural resource – nearly half of its original extent has been converted to other land uses. The windfarm is imbedded in one of the large shrubsteppe landscapes remaining in the state. The actual take of shrubsteppe and related natural, native vegetation is small but is yet another cumulative loss not stated in the environmental checklist."

Response to Comment No. 5: Comment noted. As mentioned in the application and SEPA Checklist, information from the adjacent Wild Horse wind power project is included by reference for the proposed Vantage wind power project. The cumulative impacts of the Wild Horse, Desert Claim, and Kittitas Valley wind energy projects were previously evaluated in the May 2005 SEPA EIS for the Wild Horse Wind Power Project. Collectively, those projects would result in the permanent loss of 361 acres of shrubsteppe, grasslands, and lithosols. With the addition of the Vantage wind energy project, the four projects (assuming all would be constructed) would result in the permanent loss of approximately 479 acres of shrubsteppe, grassland and lithosols within Kittitas County. For each wind power project, the area of existing vegetation permanently displaced by the project facilities would amount to approximately 2% or less of the respective project areas. The percent loss of approximately 479 acres of existing vegetation in the greater context of the County or region would be much less. Because the precise regional extent of lithosols is not quantitatively known, it is difficult to assess the specific magnitude of cumulative impacts on lithosol habitats at the four wind power project sites within the context of the surrounding region. However, all four projects have proposed to provide mitigation consistent with the WDFW's Wind Power Guidelines.

No federally-listed special-status plants were identified at any of the wind project sites. One Washington State Review Status species, the hedgehog cactus, was found extensively on both the Wild Horse and Vantage project sites. Mitigation for that species was provided at the Wild Horse project, while avoidance and transplanting is proposed for the proposed Vantage project. Cumulatively, the potential impacts of the four wind energy projects would not represent a significant cumulative impact on any species' viability in the region.

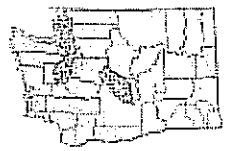
Comment No. 6: "The project area has a very low cover of exotic, invasive species particularly on northern aspects and lithosol habitats. While the direct impact of construction and operation of the wind farm is small compared to the total project area, associated soil disturbance will increase the abundance of exotic species. Experience indicates that the more weeds present, the greater the chance of invasion into less disturbed vegetation. There should be a weed control plan for the project. Also, as a matter of correction, species identified as Idaho fescue in the bunchgrass grasslands section are likely Cusick's bluegrass (Poa cusickii)."

Response to Comment No. 6: The applicant will prepare a weed control plan. Specific mitigation measures to be included in the plan will include the following:

- *The contractor will clean construction vehicles prior to bringing them in to the project area from outside areas.*
- *Disturbed areas will be reseeded as quickly as possible with native species.*
- *Seed mixes will be selected in consultation with WDFW and Kittitas County Weed Control Board.*
- *If hay is used for sediment control or other purposes, hay bales will be certified weed free.*
- *Access to the site will be controlled which may result in a lower level of disturbance and fewer opportunities for noxious weeds to be introduced and/or spread.*
- *Noxious weeds that may establish themselves as a result of the project will be actively controlled in consultation with the Kittitas County Weed Control Board.*

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
15 W Yakima Ave, Ste 200 • Yakima, WA 98902-3452 • (509) 575-2490

November 19, 2007



Your address is in the Upper Yakima watershed

Joanna Valencia
Kittitas County Community Development Services
411 N. Ruby Street, Suite 2
Ellensburg, WA 98926

Dear Ms. Valencia:

Thank you for the opportunity to comment during the optional determination of nonsignificance process for the Vantage Wind project, proposed by Invenergy Wind North American, LLC [WSA 07-01]. We have reviewed the documents and have the following comments.

Water Quality

Operation of rock crusher or concrete batch plant requires coverage under the Sand & Gravel General permit for each portable unit; an application for coverage under the Sand & Gravel General Permit needs to be submitted before quarrying or gravel mining, a site review may be needed to determine whether permit coverage is required. Applications for new permits are due 180 days prior to proposed start of operations. If portable units already have permit coverage, filing a Notice of Intent to Operate ten days prior to the start of operations is required. If you have any questions, please contact Phelps Freeborn at (509) 454-7277.

Project Greater-Than 1 Acre With Potential To Discharge Off-Site
An NPDES Construction Stormwater General Permit from the Washington State Department of Ecology is required if there is a potential for stormwater discharge from a construction site with more than one acre of disturbed ground. This permit requires that the SEPA checklist fully disclose anticipated activities including building, road construction and utility placements. Obtaining a permit is a minimum of a 38 day process and may take up to 60 days if the original SEPA does not disclose all proposed activities.

The permit requires that Stormwater Pollution Prevention Plan (Erosion Sediment Control Plan) is prepared and implemented for all permitted construction sites. These control measures must be able to prevent soil from being carried into surface water (this includes storm drains) by stormwater runoff. Permit coverage and erosion control measures must be in place prior to any clearing, grading or construction.

More information on the stormwater program may be found on Ecology's stormwater website at: http://www.ecy.wa.gov/programs/wq/stormwater/construction/ . Please submit an application or contact Cory Hixon at the Dept. of Ecology, (509) 454-4103, with questions about this permit.

Sincerely,

Gwen Clear
Environmental Review Coordinator
Central Regional Office
(509) 575-2012

1976

Response: *Comments noted. Invenergy will apply for a Sand and Gravel General Permit, as well as a NPDES permits before construction begins to satisfy the Department of Ecologies Requests.*

I have lived in the valley for four short years and just began to have a family with the intention of making this my home for many more. Currently, I am attending CWU to get my teaching degree and am writing a paper on global warming. I have been doing extensive research on the wind farm controversies in this county as well as the benefits of having the farms. The benefits of using renewable energy is better than the possibility of people's property values decreasing or disrupting their views. I know this does not have to do with the environmental impacts of the site location but I felt that all you read about is how many people do not agree with the wind farms in Kittitas County. The group that has formed an advocacy against the turbines is all you hear about in the news. One survey said that 78% of residents support the wind farms. Where are their comments to help the wind farms pass? I found it very ironic that the article in the daily record, to submit comments about wind farms, was located just above the article about how the wind cut power on the Westside Monday. In support of the wind farms being located in our county, I think we need to start thinking about the future for our children and grandchildren. With all the current problems with oil and where it is located, our Governor is doing a wonderful job at trying to have alternative energy options for our state.
Thank you for your time.

Angela Thomassen

Response: *Comment noted thank you for you support of wind energy and this project.*

The set back issue to me is a moot point. I feel that we should not
> build any wind farms in the Kittitas Valley because they are not cost
> effective. A wind turbine is a dismal 26 percent efficient if the wind
> is blowing exactly 33 miles an hour. Also these wind turbines have to
> be backed up by water turbines in our dams in case the wind dies or
> blows too hard. In comparison, an airplane propeller is 90 percent efficient.
> In my opinion no unsubsidized private company could make a profit if
> they had to pay for the construction of the wind farms unless they
> charged the power users a ridiculously high rate. My opinion is the
> only reason they are built is the government subsidies are paying for
> the wind farm construction. I would like those who think they are
> saving the world by building wind farms to show me their calculations
> on the cost effectiveness of the wind farms. Also I would like to see
> the
> following: 1. The actual annual power output from the Wild Horse Wind
> Farm we have built already, . 2. The cost of generating this power
> including the total cost of construction of the Wild Horse Wind Farm 3.
> The revenues generated in a year 4. The pay back period when this
> Wild Horse Wind Farm will pay for itself.
>
>
> Lee Bates
> P O Box 1666
> Ellensburg WA 98926
> bateslee@eburg.com
> (509) 925 5055
>

Response: *Comment noted. Washington has adopted a renewable portfolio standard which requires greater reliance upon renewable sources of electrical generation, such as wind power. Wind power facilities such as the Vantage Project provide an opportunity to economically generate substantial amounts of electric power without reliance upon fossil fuels and without the air pollutant and greenhouse gas emissions that result from burning fossil fuels. Invenergy would be happy to meet with Mr. Bates regarding the project to discuss his views and to see if there is anyway we could address his concerns.*

Community Development Services Dept.
411 N. Ruby Street, Suite 2
Ellensburg, WA 98926

November 14, 2007

Re: Invenergy wind farm

Attn: Joanna Valencia

The article in the Daily Record of Tuesday, November 13, 2007 said that the county wants to hear from citizens that have concerns about the proposed wind farm planned for the area west of Vantage. We have no concerns but hope you will accept this comment anyway.

We believe the County Commissioners and the CDS Dept. were correct in designating a area for wind farms (wind farm overlay) in the eastern part of the county. We also commend Invenergy Wind North America, LLC for applying to the county for a project within the overlay area and not following the example of Horizon who do not seem to care a whit for the citizens of Kittitas County. If we must have wind turbines in the county then this is the place to site them.

Not having seen the proposed development agreement submitted by Invenergy we cannot comment on the actions they propose to protect the environment and wildlife, etc. We will depend on the CDS Dept. and the County Commissioners to oversee these issues, making sure that the county is protected.

Again, if we must have wind farms then the eastern end of the county is the right place for them. We support the county in it's decision to use this area (which is otherwise near useless for any other purpose) for wind farms.

Thank You,

James Boyle
Eileen Boyle

Mr. and Mrs. James Boyle
P.O. Box 39
Ronald, WA 98940

Response: *Comment noted thank you for your support of wind power in Kittitas County and the Vantage Wind Project.*

Joanna Valencia, Kittitas County Planner
Community Development Service Office
411 N Ruby Street
Ellensburg, WA 98926

November 21, 2007

RE: Inverergy Wind North America's Project

Dear Joanna,

I am very concerned that (1) another wind farm is being planned on undeveloped land where little critters live that attract overhead flying raptors, (2) that one is again being located on high ridges where raptors and songbirds have migration routes, (3) that no or very little bird studies have been done, and (4) once again cumulative effects seem to be ignored.

Wind farms are best placed on flat, plowed ground where there is little wildlife to attract raptors. There is also less migration conflicts.

Bird studies should be for a minimum of 2 years with night time radar tracking for both birds and bats. Habits and migration routes vary from year to year necessitating longer studies.

So much is being heard around the nation now of the cumulative effects of wind farms. The Columbia Gorge is now threatened with a multitude of wind farms and cumulative effects is a big concern there. It should be here too in the Kittitas Valley.

Sincerely,

Gloria Lindstrom
1831 Hanson Rd.
Ellensburg, WA 98926
woodlind@charter.net

Response: *Comment No. 1: "I am very concerned that (1) another wind farm is being planned on undeveloped land where little critters live that attract overhead flying raptors, (2) that one is again being located on high ridges where raptors and songbirds have migration routes, (3) that no or very little bird studies have been done, and (4) once again cumulative effects seem to be ignored.*

Wind farms are best placed on flat, plowed ground where there is little wildlife to attract raptors. There is also less migration conflicts".

> *Response to Comment No. 1: Comments noted. The Vantage wind energy project is proposed within the Kittitas County's designated "Wind Farm Resource Overlay Zone" as defined in Chapter 17.61A.040 of the Kittitas County Code. By the very nature of the type of energy (i.e., wind), projects must be sited where the wind resource is suitable for producing electricity at competitive prices and where there is access to existing power transmission lines to allow wind-generated power to be integrated into the power grid. Such requirements are not always met on flat, plowed ground.*
>
> *Baseline avian studies conducted at the proposed Vantage wind energy site and at the adjacent Wild Horse wind energy project, did not identify any migration conflicts.*

Comment No. 2: "Bird studies should be for a minimum of 2 years with night radar tracking for both birds and bats. Habits and migration routes vary from year to year necessitating longer studies."

Response to Comment No. 2: Comments noted. The avian studies were conducted following the Washington Department of Fish and Wildlife guidelines for "Baseline and Monitoring Studies for Wind Projects" (WDFW 2003) which specifies one full season of avian use surveys.

Comment No. 3: "So much is being heard around the nation now of cumulative effects of wind farms. The Columbia Gorge is now threatened with a multitude of wind farms and cumulative effects is a big concern there. It should be here too in the Kittitas Valley."

Response to Comment No. 3: Thank you for your comments. As mentioned in the application and SEPA Checklist, information from the adjacent Wild Horse wind power project is included by reference for the proposed Vantage wind power project. The cumulative impacts of the Wild Horse, Desert Claim, and Kittitas Valley wind energy projects were evaluated in the May 2005 SEPA EIS for the Wild Horse Wind Power Project. That analysis included cumulative impacts on all elements of the environment considered in the EIS, including birds. The cumulative impact analysis for birds and other wildlife presented in the EIS was based on a cumulative impacts study prepared in 2003 by WEST, Inc. for Kittitas County and the Energy Facilities Site Evaluation Council (WEST, Inc. 2003). Risk to bald eagles would be very low, particularly at Wild Horse and the Vantage sites given the very low use in those areas. No bald eagle mortality has been reported at any wind project in the United States (WEST, Inc. 2003). The level of mortality for raptors, songbirds and bald eagles is not expected to have any population-level consequences for individual species because of the low fatality rates for most species.

November 21, 2007

Community Development Services
Kittitas County
411 N. Ruby, Suite 2
Ellensburg, Washington 98926-6300

Attention: Joanna Valencia, Staff Planner

Subject: WSA-07-01, Vantage Wind Power Project (69 Wind Turbines, 103.5 MW)
Invenergy Wind North America LLC (4,750 Acres)
I-90, MP 125.00 – 131.30 Left (Ryegrass Rest Area 125.9 Left)
I-90, Exit 115 (Kittitas interchange – Badger Pocket Rd/Cleman Rd) vicinity
I-90, Exit 136 (Vantage interchange – Huntzinger Road) greater vicinity

We have reviewed the proposed project and have the following comments.

1. The project site is adjacent to Interstate 90. I-90, including the ramps, is a fully-controlled limited access highway with a posted speed limit of 70 miles per hour. No direct access to I-90 or from the Ryegrass Rest Area will be allowed. If viewing areas are considered, access will need to be via Vantage Highway.

Response: *Invenergy will be using I-90 only for transportation. All trucks will be instructed to follow posted speed limits and follow all access requirements. No viewing area are planned along I-90.*

2. All loads transported on WSDOT rights-of-way must be within the legal size and load limits, or have a valid oversize and/or overweight permit, if allowed. The application indicates that the haul route will include I-90 and Exit 136 (Vantage). We are concerned with how the oversize items are transported. As the County is aware, recently the crossover bridge at Exit 71 (Easton) was destroyed due to an overheight load. The applicant is responsible for the safe transportation of materials and adherence to permit conditions.

   Also, there is an overheight restriction on eastbound I-90 at Exit 62. All loads over the legal height (14'0") are required to exit at the eastbound ramp and reenter the interstate via the eastbound on ramp, due to the vertical height restriction. In addition, we are concerned that Exit 136 may not be able to accommodate the turning radius of these vehicles. The applicant must notify the Department regarding the length, turning radius, and overheight dimensions.

   Response:*Invenergy and its contractors will ensure that all oversized loads and/or overweight permits are obtained and valid. Invenergy will make its best effort to provide for safe transportation using Exit 136 (Vantage). Precautions will be made so there is no damage to the exit. The overheight restriction is noted and all drivers will be notified they will be required to exit on eastbound I-90 at Exit 62 and reenter using the eastbound ramp. Once the transportation trucks are known the Transportation Department will be notified of the length, turning radius, and overheight dimensions.*

3. All traffic control requests affecting state highways must be coordinated and approved through the WSDOT South Central Region's Traffic Engineer. The proponent must submit a traffic control plan to the Traffic Office for review and approval. Please contact Rick Gifford at (509) 577-1985 for specifics.

   Once approved, traffic control implementation on must be coordinated with our Area Maintenance Superintendent, Terry Kukes. He can be reached at (509) 577-1907.

   Response:*Invenergy will be using traffic control procedures on Vantage Highway. A traffic control plan for Vantage Highway will be prepared and submitted to both Kittitas County and WSDOT before transportation efforts begin. As of right now, there are no plans for traffic control along I-90. If they do become required a traffic control plan will be submitted to the South Central Region's Traffic Engineer for approval.*

4. The applicant indicates they will prepare a Traffic Management Plan. Please submit the plan prior to implementation to this office for review and comment as it pertains to our highways.

Response: *Invenergy will prepare a Traffic Management Plan before any construction operations begin on the project and submit the plan to Kittitas County and WSDOT.*

5. We expect the County will require adequate setbacks from adjacent land owners, including WSDOT, to maintain sufficient distance from WSDOT rights-of-way as a safety buffer.

   Response: *Invenergy will adhere to any county required setbacks from WSDOT rights-of-way and adjacent land owners for safety buffers.*

6. In addition to the WSDOT projects listed on page 6 of the Traffic Analysis Report, WSDOT has the following projects that will impact the transport and/or operations of the proposed wind power project:
   a) I-90: Asahel Curtis to Easton (milepost 46.93 to 70.00). Delineation upgrade. Install recessed pavement markers and inset lane and edge stripe. Scheduled ad date: Fall 2007.

      Response: *Invenergy plans to start the transportation in the middle to late 2008. It appears this project will be concluded by then and should have little to no effect on transportation activities.*

   b) I-90: Hansen Creek Road Bridge (milepost 47.71 to 47.72). Seismic retrofit. Scheduled ad date: March 2012.

      Response: *The project is noted and will be taken into account.*

   c) I-90: Snoqualmie Pass East – Hyak to Keechelus Dam (milepost 55.10 to 59.50). Construct new roadway. Scheduled ad date: October 2009.

      Response: *This project is noted. It will begin after the construction phase of the project. Little to no impact should be created by Invenergy's operations.*

   d) I-90: Slide curve vicinity to Cabin Creek eastbound (milepost 59.55 to 64.23). Pavement restoration. Scheduled ad date: Spring 2008.

      Response: *This project will be taken into account when the transportation plan is prepared. Once more is known about the impacts Invenergy will attempt to mitigate any potential impacts.*

Thank you for the opportunity to review and comment on this proposal. If you have any questions regarding our comments, please contact Rick Holmstrom at (509) 577-1633.

Sincerely,

Bill Preston, P.E.
Regional Planning Engineer

BP: rh/jjg

cc: File #23, SR 90
Rick Gifford, Traffic Engineer
Terry Kukes, South Central Area 1 Maintenance Supervisor

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November 21, 2007

RE: Notice of Application
Vantage Wind Project
Invenergy Wind North American LLC

Staff Planner: Joanna Valencia

To Whom I May Concern,

I do not know all the environmental impacts associated with a wind farm but I believe a source of electrical energy production that does not burn fossil fuels is a very good thing.

I further believe that most if not all impacts can be mitigated and will be short term and any impacts would be offset by the clean production of electricity.

Current scientific studies show human produced gases from the burning of fossil fuels are contributing to climatic changes being experienced around the world.

I feel this proposed wind farm would be very beneficial for not only Kittitas County but on a global level.

Thank you for giving me this opportunity to comment.

Regards,
Deidre Link

Response: *Comment noted thank you for your support of wind power in Kittitas County and the Vantage Wind Project.*

From: WPWOODS@aol.com [mailto:WPWOODS@aol.com]
Sent: Wednesday, November 21, 2007 9:38 AM
To: Joanna F. Valencia; CDS User
Subject: Recommend Approval of Invenergy Vantage Windfarm Application

Kittitas County Community Development Service (Attn Joanna Valencia) -- I am writing to recommend that Kittitas County approve the application by Invenergy to establish the Vantage Wind Project. After reviewing the application material on the CDS website, having an opportunity to review the "hard copy" of the report and resolve my questions with CDS staff (Joanna Valencia) and then visiting the site on both I-90 and Vantage Highway since reading the article in the Ellensburg Daily Record on 11/13/07, I am satisfied that the project meets the appropriate goals and objectives for long term growth in Kittitas County and is consistent with the standards established in the county's new "preidentified wind farm siting ordinance."

From having worked with the Kittitas County Economic Development Group on wind farm projects over the last five years, it appears to me that the Vantage Wind Project has been intelligently conceived to meet the combined requirements for good wind resource, proximity to existing electric transmission lines and limited impact on the viewscape. I believe that it can be a broadly supported asset to the residents of the county, much like the Puget Sound Energy Wild Horse Wind Farm. Both can contribute renewable power, jobs, tax revenues and land use characteristics consistent with the wishes of their neighbors.

It is disappointing to me that the other two proposed wind farms north and west of Ellensburg (Horizon's Kittitas Valley Power Project and EnXco's Desert Claim Wind Power Project) could not have been developed with similarly well-balanced approaches that meet their commercial and the community's viewscape needs. Whereas I do support the Wild Horse and Vantage projects because they are the right projects in the right place at the right time, I do not support the Horizon and EnXco projects as they are perceived to be "in the wrong places" by many Kittitas County residents.

I would like to compliment the Community Development Service staff (especially "Tammy" and Joanna Valencia) for their timely and effective assistance in helping me access information about the Vantage project. They are both strong resources for the County.

William P. Woods, Jr., 350 Bar 14 Road, Ellensburg, WA 98926, 509 925 5508, email wpwoods@aol.com

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Response: *Comment noted thank you for your support of wind power in Kittitas County and the Vantage Wind Project.*

November 20, 2007

To: Joanna Valencia, Kittitas County Planner
Community Development Service Office
411 N Ruby Street
Ellensburg, WA 98926

Dear Ms. Valencia,

The following is Kittitas Audubon's response to the proposed Invenergy's wind project.

In the past Kittitas Audubon has requested denial of all the wind projects in Kittitas County because of the potential killing of avian species, i.e., the birds and the bats. Our concern stems from recently released research by Audubon Washington indicating approximately one-third of the species of birds that migrate through or nest in Washington State are in steep decline in numbers. Of the 365 species that nest or migrate through Washington, 247 of those species are found in Kittitas County, a bird migration route. Additionally dead bats are being collected at wind projects, both in Washington and throughout the United States, at a greater rate than predicted.

The first concern of bird-kill is the fact we do not know what birds or bats migrate or travel at the 300 to 400 foot level in the skies. No adequate studies have ever been done, and no studies have been done at night when flocks of songbirds migrate at high altitudes. The protocol in the past has been to do minimal point studies on the ground for a year, or less. Many bird experts are stating this is not enough. With the proliferation of wind towers throughout the nation, it is being discovered that towers are killing birds and large numbers of bats, some designated in the threatened and endangered categories. Equipment is available to determine the height and night activity, and it should be a standard requirement for a minimum of two years to gather those statistics. With the knowledge, the company can regulate the problem towers when needed, decreasing the negative aspect of bird and bat kills. **Kittitas Audubon strongly urges altitude day and night studies be performed, especially during the spring and fall migrations.**

The second concern is that no one has determined the cumulative effects of avian kills of all the industrial wind projects in this county. In our county alone, there is one project which will have approximately 250 towers, and three other projects proposed erecting another possible 200 towers, all in addition to Invenergy's. What is the predicted total of bird and bat kills for all these projects? The towers have the potential to eradicate avian species as the dams have done to the salmon. **This is another reason for full studies of species in the skies at 300 to 400 feet.**

Enclosed is an article from the Oregonian published on October 29th of this year which expresses the same concerns as Kittitas Audubon.

Thank you for the opportunity to comment.

Sincerely,

Gloria Baldi

Gloria Baldi
Kittitas Audubon
P.O. Box 1443
Ellensburg, WA 98926

Response: Letter from Kittitas Audubon (November 20, 2007)

Comment No. 1: "The first concern of bird-kill is the fact we do not know what birds or bats migrate or travel at the 300 to 400-foot level in the skies. No adequate studies have ever been done, and no studies have been done at night when flocks of songbirds migrate at high altitudes."

> *Response to Comment No. 1: Comment noted. The baseline avian study conducted by WEST, Inc. included the collection of species flight height data and the determination of species risk exposure. The flight height data were collected from ground level to 410 feet above the ground. The proportion of observations of a bird species to fly within the rotor swept area provides an estimate of the propensity of that species to fly within the area occupied by the turbine rotors. The "zone of risk" includes the area from approximately 82 feet above ground level to 410 feet. Information, including post-construction monitoring data from operational wind projects throughout the United States was correlated with the results of the avian use studies for the proposed project. Even though no night time studies were conducted, baseline studies, avian monitoring data, and information on species flight habits provide a good predictor of mortality.*

Comment No. 2: "The second concern is that no one has determined the cumulative effects of avian kills of all the industrial wind projects in this county."

> *Response to Comment No. 2: Thank you for your comment. Please refer to the Gloria Lindstrom letter, Response to Comment No. 3 regarding cumulative impacts.*

Washington State Patrol Comments

Joanna,

Thank you for the assistance today in navigating your web site. After review of the application WSA-07-01, we have serious reservations as to the impact of a number of the turbines on one of our existing public safety microwave paths. Our facility, ¼ mile WSW of the proposed substation, has a beam path at 123 degrees which crosses directly through the center of the west end of the planned wind farm. As we became aware of this situation only yesterday, I have not had time to analyze the exact path through the array of towers but it does not look favorable. Please

consider this as a formal comment and statement of concern from the Washington State Patrol. Your immediate reply and recommendations will be greatly appreciated.

Regards,

John Woodcock
Washington State Patrol
Electronic Services Division
425-649-4657

Response: *In response the Washington State Patrols concern regarding the microwave beam paths from the tower near our substation and our site. Invenergy will commit to maintaining the line of sight path the microwave path requires and move structures to keep this existing path serviceable. Invenergy will work hard to minimize any microwave interference, if any, and consider using fiber optic cable for its substation communications. Invenergy will work with the State Patrol to ensure all outstanding issues will be resolved prior to construction.*

International Union of Operating Engineers
LOCAL 302 • Washington and Alaska • AFL-CIO
Allan B. Darr, *Business Manager and General Vice President*

Malcolm J. Auble, *Financial Secretary* • **Charles T. Jurgens,** *President* • **Amir Gadiwalla,** *Vice President*
18701 120th Avenue NE • Bothell, Washington 98011-9514
Telephone: (425) 806-0302 • Toll-free: 1-800-521-8882 • Fax: (425) 806-0030
Washington Districts: Bellingham • Silverdale • Wenatchee • Yakima Alaska Districts: Anchorage • Fairbanks • Juneau

Kittitas County Community Development Services
Ellensburg, Washington
December 4, 2007

Hello, my name is Sean Jeffries, and I am writing this letter on behalf of the International Union of Operating Engineers, Local 302.

I appreciate this opportunity to add my comments and concerns on the development of the Vantage Wind Farm in Kittitas County. I am not here to talk for or against future wind farm projects. I do know we must continue to provide alternative ways to generate energy for the growing demands of our state and the country.

The Operating Engineers are landowners in close proximity to the project. We own 1600 hundred acres of land upon which our Training Center is located. At that site, we provide state registered apprentices with training they will need to become the next generation of Operating Engineers. We contribute to the area in many ways. Those include generating business from our training center and district office located in down town Ellensburg. Additionally, approximately 160 members of Local 302 live in Kittitas County and contribute to our local economy.

Our concerns are centered on the economic impact of these wind farms. The developers of these large projects, constructed in our county, should make a commitment to pay prevailing wages to those employed on the project. Doing so insures that contractors who are awarded the bids do not undercut the local contractors by paying less then the area standard. Kittitas County maintains the area standard at a prevailed rate. Secondly, they should commit to a percentage of local hire for the project. Doing so, will result in a highly skilled, highly trained workforce for the future of all projects. Lastly, the developer should adhere to the use of apprenticeship through a state approved program. By doing so, the younger generation will have the opportunity to learn a trade, while working and raising their families in their home community.

It should be noted that as of January, 2008 public work contracts in the state of Washington will be a required to a standard of 10% apprenticeship utilization for all hours worked on projects over 3 million.

I urge the County and Invenergy Wind North America LLC to review these matters. With these issues addressed, the project would be beneficial for our county.

Thank you,

Sean Jeffries

Response: *Invenergy will work with the county to pay prevailing wages to qualified project employees. In addition, Invenergy will work with local 302 and Invenergy will look into hiring a percentage of it employees for local hire onto the project especially during the construction period.*

WDFW Supplemental Comments And Concerns Regarding Notice of Application - Vantage Wind Project *and Invenergy's Responses*

General Comments About Documents Provided With Notice of Application

Baseline Wildlife and Vegetation Studies
The background studies and information collected on wildlife, vegetation and habitat types, are similar to those conducted for other wind power projects in Kittitas County. The studies are generally consistent with the WDFW wind power guidelines and our discussions with the proponent's consultants. We offer the following comments.

- **Eagles – Potential for Turbine Mortality and Need for Conservation Measures**: The proposal should include conservation measures for reducing the potential for golden and bald eagle mortality at the project. The baseline wildlife studies provide an explanation why the risk to eagles is not expected to be high, but a level risk remains. After years of being an ESA listed "Threatened Species", bald eagles are gradually repopulating eastern Washington. As noted in the documents provided, there is a new bald eagle nesting territory on the Columbia River not far from the wind project. We note also that bald eagles are commonly seen in the Kittitas Valley during winter.

  Response: *Ask explained in the SEPA checklist and accompanying technical report, the Project presents little risk to eagles. Use of the project site by bald and golden eagles is very low. The Project has been designed to minimize any impacts to eagles. For example, turbines will be installed on tubular steel towers instead of lattice towers, and the towers will not have open platforms that could be used for perching or nesting. Meterological towers will not have guy wires. Overhead collection lines will be minimized. As described in more detail below, Invenergy will also implement various conservation measures and practices to minimize risks to eagles. During operation,monitoring, adaptive management and the TAC process will also be used to minimize impacts.*

- **Clarification of Grassland Vegetation Type**: The term "grassland" is used in the documents to describe shrub steppe sites where the shrub canopy has been temporarily removed by fire or other temporal disturbance. The project area does not include "true grasslands" such as found in the eastern and northeastern portions of Washington or nor does it contain CRP "managed grasslands". (Please refer to Daubenmire, Steppe Vegetation of Washington, 1970 for detailed discussion of vegetation applicable to the project site). In the context of the mitigation ratios negotiated with the wind power industry and described in the WDFW wind power guidelines, a lower ratio was established for true grasslands and CRP grass plantings because of the relative difference in restoration success and length of time to maturity. Any mitigation for impacts to vegetation on the Vantage Wind Project site should be at the 2:1 ratio for shrub steppe vegetation.

Response: Invenergy understands that the WDFW guidelines recommend different mitigation ratios for grasslands and shrub steppe areas. *Invenergy will work with WDFW to indentify areas of shrub steppe vegetation within the project area, and to develop a suitable mitigation plan.*

- **Habitat Mapping**: The vegetation/habitat map units and manner of presentation of the field information reflects our discussions with WEST, Inc. and associated consultants several years ago regarding other wind projects in Kittitas County. The habitat classifications were an adaptation of range site descriptions. Since that time, aerial photography and soil survey information have become more readily available over the internet. For future projects, or where more detailed vegetation work is needed on the Vantage Wind Project, it would facilitate analysis if vegetation groups and mapping were keyed to the soils and "Ecological Sites" as mapped on the soil survey.

  Response: *Comment noted. Future work will be keyed to soils and "Ecological Sites" as mapped on the soil survey.*

- **Rare Plant Surveys**: Hoover's tauschia (*Tauschia hooveri*) is not mentioned in the document and appears to have been overlooked in surveys. Hoover's tauschia occurs on basalt lithosols within shrub-steppe habitats. It is a state listed Threatened Species and a USFWS species of concern. The plant is known to be present on lands immediately adjacent to the project, on soils and in plant communities that also occur within the project site. In the absence of conclusive information to the contrary, it shall be presumed to be present within the project on the typical sites. The project proponent shall consult with the Washington Natural Heritage Program to identify an appropriate conservation strategy for this project. (Contact information can be found on the following link: http://www.dnr.wa.gov/nhp/index.html

  Response: *Invenergy and its consultants will consult with the Washington Natural Heritage Program to identify an appropriate conservation strategy for this project. WEST Inc., surveyed the area for Hoover taushia, but found no evidence of it. In finding no evidence of this plant they did not include it into the report submitted to Invenergy and in turn submitted to the county. Attached is an updated table for record to the county.*

- **Project Footprint at Higher Resolution**. It would be helpful to the reviewers if the footprint of the project (including location of turbines, roads, overhead transmission lines and underground cable trenches) could be superimposed over current color aerial photography at a level of resolution sufficient to identify probable habitat impacts. Existing GIS data layers are likely available to create a base compatible with work done by the applicant to date.

  Response: *Once roads, overhead transmission lines and underground cable trenches are better identified, Invenergy will create a color aerial map with these features superimposed on them so possible impact areas can be identified.*

Road and Utility Stream Crossings: The application notes a number of road and utility crossings of watercourses. All of these crossings will require construction techniques that minimize channel impacts, prevent erosion and maintain water quality when flow is present in the channels. The use of "low water crossings" or fords is encouraged as a technique for crossings of ephemeral streams in lieu of culvert crossings. Ford crossings can reduces road cut/fill (thus reducing vegetation impacts) and reduce modification of watercourses (reducing both channel and vegetation impacts). A Hydraulic Project Approval (Chapter 77.55 RCW, WAC 220-110) from WDFW will be required for the anticipated work in Schnebly Coulee.

> ***Response:*** *Invenergy and its contractors will use crossing methods that will minimize or avoid channel impacts, prevent erosion and protect water quality. Invenergy will evaluate the use of "low water crossings" or fords for construction of roads Prior to work in Schnebly Coulee, Invenergy will apply for and obtain a Hydraulic Project Approval from WDFW.*

Discussion of Project Mitigation in the Documents is substantially Inadequate
The documents do not provide enough specific information regarding how adverse environmental impacts will be avoided and mitigated. The documents must unequivocally describe, for reviewers and decision makers, what mitigation measures will be included in the project and the net effect of the project on the environment. The documents need to clearly identify and describe each of the mitigation elements of the project. Where specific mitigation elements have not yet been developed, it is necessary to identify plans and processes to ensure mitigation measures are developed in a timely fashion, that they adequately address the impacts and that they are correctly implemented to be effective.

> ***Response:*** *Invenergy is in the process of developing its detailed habitat and wildlife mitigation plan for this project. Invenergy intends to follow WDFW's Wind Power Guidelines and plans to work with the WDFW on the development of the detailed plan. Attached in Exhibit A is a summary of the mitigation measures contained in previous submissions.*

Importance of the Vantage Wind Project site for Wildlife

The project area is a mosaic of shrub steppe plant communities used by native wildlife including birds of prey, song birds, bats, small mammals, herptiles and large animals including deer and elk. It is situated in a strategic location in the landscape of eastern Washington.

Shrub steppe habitat: The project is to be developed in shrub steppe habitat on the west shoulder of the Columbia River. The river corridor provides a natural migration pathway for wildlife. Shrub steppe is a State of Washington Priority Habitat because of the assemblage of wildlife dependent upon it. Over 60% of the original shrub steppe habitat in Washington has been developed. Additional loss or fragmentation of shrub steppe is of concern, particularly if it affects ecological connectivity or unique sites. While even small areas of shrub steppe are used by song birds, small animals and herptiles, many shrub steppe-associated wildlife species require

large areas of land, and thus perpetuation of shrub steppe wildlife is most likely to be successful on large tracts.

This project site warrants special consideration for wildlife as it lies within the largest remaining block of shrub steppe lands in Washington. The project occupies an east-west strip that essentially bisects this habitat block. Over the long term, the ability to sustain the full array of shrub steppe wildlife and plant species in Washington depends upon keeping such large blocks of shrub steppe habitat in good condition and ecologically connected.

> ***Response:*** *Invenergy is committed to avoiding and mitigating habitat and wildlife impacts in a manner consistent with the WDFW guidelines. However, the above comment appears to exaggerate the habitat and wildlife value of the project site. The site is located on a relatively narrow strip of land between Interstate 90 and the Vantage Highway. The area is already disturbed by heavy grazing and fragmented by cross country graded roads, the nearby county landfill, biosludge deposition sites, and several communication towers. It is not adjacent to the Columbia Rive, and is not a part of a river migration corridor.*

Sage Grouse. We note that the project lies with the state's Sage Grouse Recovery Area. Sage grouse are a state Threatened Species and have been proposed for listing under the federal Endangered Species Act. Sage grouse are present in the project vicinity (they have been repeatedly seen north and south of the project, including observations in 2007) and should be presumed to use the site at least as a connecting corridor between lands north and south of the project. The potential for sage grouse to breed, nest, rear broods or winter on or adjacent to the project should not be ruled out.

> ***Response:*** *As documented in the SEPA Checklist and accompanying technical report, sage grouse has not been observed using the project site and the project is not expected to negatively affect sage grouse given the extensive shrub-steppe habitat in the surrounding area. Invenergy will also be providing habitat mitigation consistent with the WDFW Guidelines.*

IBAs: The project lies adjacent to two areas designated by Washington Audubon as "Important Bird Areas" (Quilomene-Colockum Wildlife Areas IBA and Yakima Training Center IBA). The Important Bird Areas program is Washington Audubon's effort to scientifically identify places in the state that are essential to maintaining healthy populations of birds. As indicated above, the Vantage Wind Project lies in the corridor that maintains the "ecological connection" between these sites.

> ***Response:*** *As documented in the SEPA Checklist and accompanying technical report, use of the project area by migratory birds is relatively low. Birds make greater use of the areas closer to the river. Project design and conservation measures will minimize potential impacts to birds. Invenergy will also be providing habitat mitigation consistent with WDFW guidelines.*

Columbia River Corridor: The project lies on the west shoulder of the Columbia River. The river corridor forms a natural north-south travel path for wildlife, including waterfowl and other migratory birds, and the habitat associated with the river adds diversity to the bird life passing through the general vicinity of the project. Bald eagles use the lands along the river during the winter, and a nesting pair has established a territory not far from the project.

> ***Response:*** *The Project Site does not border the Columbia River. The eastern edge of the project site is approximately 3 miles from the river, on the other side of the City of Vantage. The Project Site is bordered by Interstate 90 and the Vantage Highway, which limit its usefulness for in facilitating north-south wildlife migration. The SEPA Checklist and accompanying technical report document limited wildlife use of the site, and in particular, extremely low use by bald eagles.*

Adverse Impacts to Wildlife and Wildlife Habitat from Wind Projects

Adverse Impacts to Wildlife and Wildlife Habitat - General
Wind power projects, including the proposed Vantage Wind Project, have adverse impacts to wildlife and wildlife habitat. Careful design and construction coupled with a conscientious mitigation plan can greatly reduce impacts. Adverse impacts to wildlife include:

a) Loss of habitat from construction of turbines, meteorological towers, roads, parking areas, buildings, substation, overhead transmission lines, and underground utilities.
b) Degradation of adjacent plant communities due to construction-related impacts and subsequent increase of noxious weeds, and
c) Direct wildlife mortality from collisions with turbines, meteorological towers and overhead transmission lines. Construction impacts, operation impacts and cumulative impacts for the project are all of concern.

> ***Response:*** *Project design and conservation measures will minimize impacts to habitat and wildlife. Invenergy is also committed to developing a mitigation plan consistent with WDFW's Wind Power Guidelines.*

Temporary Construction Impacts: In addition to the general disturbance (noise, activity, light, etc.) created by construction of the project, there will be temporary ground disturbance of the site substantially greater than the permanent project footprint. Work will occur primarily in sensitive, shrub steppe plant communities. If work is done carefully and integrated with a conscientious revegetation plan, these temporarily disturbed areas can be restored. Although construction will be completed in one year, impacts to habitat will persist until site revegetation is complete and the habitat is restored to natural-like conditions. Because of the shallow soils and near-desert environment, revegetation to a stable plant community will require five years or longer depending upon the plant community affected and the care exercised during construction and site restoration. Sensitive, shallow soil sites are difficult to revegetate. Project elements such as construction of cable trenches through bedrock create impacts such that restoration to natural-like conditions may not be successful within the initial life of the project.

Response: *Invenergy will use best management practices during construction to minimize impacts to shrub steppe habitat and facilitate habitat restoration.*

Permanent Impacts to Habitat: The permanent footprint of the project (roads, crane pads, turbines, O&M facility, etc.) will both fragment and eliminate wildlife habitat in shrub steppe plant communities.

Response: *The Project will result in some impacts to habitat, but Invenergy has committed to compensating for those impacts through mitigation consisntent with the WDFW Wind Power Guidelines. As documented in the SEPA checklist and accompanying technical report, the Project is not expected to result in significant adverse impacts to wildlife.*

Project Operation Impacts to Wildlife: Operation of the facility will have direct impacts on wildlife due to collisions.

- **Turbine Mortality**: Wind turbines have the potential to result in the death of significant numbers of resident and migrating birds and bats over the life of the project. The wind industry has improved siting and design standards such that on average, turbine mortality is expected to be in the range of four birds/bats per turbine per year. Mortality studies from other projects in the northwest have found that turbine mortality can be expected for a few species of bats and most of the avian species present in the area, ranging from large species such hawks, eagles, game birds, great blue heron, and waterfowl to small species such as horned larks and bats.
- **Overhead Utility Lines**: The project includes a 230kv overhead transmission line to connect the project substation to the PSE substation. Collisions with overhead transmission lines are expected to result in some bird mortality each year.
- **Tower and Turbine Lighting**: Tower lighting is occasionally responsible for dramatic nighttime mortality of migrating songbirds during adverse weather conditions. Large events have primarily been associated with tall, guyed communication towers. This lighting phenomenon is poorly understood, however it is clear that tower lighting creates an increased risk for night-migrating birds.

Response: *The SEPA Checklist and accompanying technical report provide additional information about the possible impacts to birds and bats from wind project operations. Project design and conservation measures will minimize these impacts, but will not prevent them completely. These impacts are not expected to be significant to the regional populations of these species.*

Cumulative impacts: The operational impacts of the project (annual mortality and loss of habitat) will affect wildlife throughout the life of the project. While these impacts are relatively small when viewed at a single moment in time, the cumulative impacts over the 20+ year life of the project are significant. Moreover, this wind power project is only one of many proposals in eastern Washington. It is important that cumulative impacts be addressed for each project in order to avoid substantial public costs to correct the aggregate of impacts from many projects.

Mitigation Measures Needed for this Project

Based on the limited information provided in the application documents, we request the following mitigation measures be incorporated in the project.

Measures to Avoid or Minimize Impacts – Design

- **Standards for Power Facility Construction**: Permittee shall ensure spacing of all overhead power line conductors minimize the potential for raptor electrocution. Overhead transmission lines and the substation shall incorporate the design guidance in the APLIC guidelines (http://www.aplic.org/SuggestedPractices2006(LR-2watermark).pdf) to minimize the risk of electrocution of birds. Permittee shall equip all overhead power lines with raptor perch guards where needed to reduce risk of predation on sage grouse or minimize risks to raptors.

  Response: *Invenergy has planned a relatively short transmission line to mitigate the risk of electrocution of birds. Invenergy will design its transmission lines and its substation using the APLIC guidelines. Invenergy will equip all overhead power lines with raptor perch guards where needed to reduce risk of predation on sage grouse.*

- **Free-Standing Meteorological Towers Required**: Only free-standing towers shall be used on the project site. (The project currently proposes the installation of three free-standing meteorological towers. Free standing towers are demonstrably less likely to result in bird mortality than guyed towers.)

  Response: *Free-standing Meteorological towers will be used on the project site where possible. In some locations free-standing towers mayn not be able to be constructed due to ground conditions.*

Measures to Avoid or Mitigate Construction-related Impacts

- **Independent Environmental Compliance Monitor.** An independent environmental firm with appropriate expertise shall be hired by the project to: a) advise the project manager, Kittitas County and regulatory agencies on minimizing environmental impacts during construction, and b) Monitor environmental permit compliance during construction. The environmental monitor shall report to Kittitas County and have authority to stop work on project elements that are not in compliance with permits and mitigation requirements. Selection of the firm shall be subject to approval of Kittitas County in consultation with WDFW and WDOE.

  Response: *Agreed, Invenergy will hire an environmental firm with the appropriate expertise for the project to Kittitas County and selection of the firm shall be subject to approval of Kittitas County is consultation with WDFW and WDOE.*

- **Environmental Expertise for Project Construction Manager.** The Contractor's Construction Manager shall have an on-site environmental manager with expertise in managing construction in sensitive, arid environments. The on-site environmental manager shall a) advise the Construction Manager to ensure work is scheduled and performed in a manner that minimizes adverse environmental impacts, b) ensure that work is scheduled with consideration of site conditions including temperatures, soil moisture, precipitation, etc., and c) ensure construction is in compliance with all environmental permits and mitigation requirements.

  Response: *Invenergy will hire a construction manager that will have environmental expertise in sensitivie, arid environments. This manager will be responsible for ensuring work is scheduled and preformed in a manner that minimizes environmental impacts, and complies with all environmental permits and mitigation requirements.*

- **Construction timing:** Construction activities outside of the hardened footprint of the project (i.e. "temporary disturbance areas") shall be done during the late spring, summer and fall when soil moisture is very low.

  For most of the project area, the time of year of construction will greatly influence the amount of long-term damage to soils and plants. Shrub steppe communities are very fragile when soils are wet. Even a single day of driving equipment on these sites when wet can result in substantial permanent damage. In contrast, during summer when soils are dry these sites can withstand traffic with minimal soil displacement and breakage of plant roots. Vegetation is more tolerant of damage during the dry period as the period of rapid growth has ended, many plants have completed flowering and setting of seed, and many are dormant.

  Response: ***Invenergy plans to construct the Project during the summer and fall of 2008.*** *If construction extends into the winter months, Invenergy will implement additional mitigation measures to minimize construction impacts.* A plan will be created with the WDFW in case this scenario occurs to ensure any construction measures will be minimized.

- **Disturbance limits and clearing.** Construction work limits shall be staked prior to any clearing or construction. Staking shall be clearly visible to equipment operators. Since revegetation of the project site is difficult (shallow soils, arid conditions), vegetation clearing shall be limited to the actual construction footprint within the project limits to the greatest extent possible. Vegetation (shrub) removal for temporary disturbances such as laydown areas, etc. shall be done with minimal ground disturbance (e.g. mowing, cutting or shallow scalping of site). Grubbing or grading of temporary disturbance areas shall be avoided.

  Response: *Agreed, Construction work limits will be staked to prior to any clearing or construction and staking will be clearly visible. Construction will stay within its designated footprint with no construction activities occurring outside of*

the footprint. Minimal ground disturbance tactics will be employed for temporary disturbance areas such as laydown areas.

- **Construction Soil Management and Project Revegetation Plan**: Prior to ground disturbance on the site, the proponent shall submit, for approval by Kittitas County and WDFW, a detailed construction soil management and site revegetation plan(s). The plan(s) shall be prepared by a firm with expertise in restoration of shrub steppe. The plan shall identify how soils will be conserved and protected from loss and erosion during construction and used to restore the site. Temporary erosion controls such as application of mulch, PAM, BMPs, etc. shall be prescribed as needed to ensure soil protection and revegetation success. The revegetation plan shall include seed mixes adapted to each site (e.g. habitat type or ecological site) and the timing and manner of application. Seed mixes shall be comprised of locally adapted biotypes to the greatest extent possible. An aggressive weed control program shall be part of this plan. Weed control shall include application of pre-emergent herbicides for control of cheatgrass and weeds, late winter control of cheatgrass with glyphoste as needed and spot herbicide applications where needed during the growing season. Personnel on site implementing the revegetation plan shall have expertise in successful restoration of Eastern Washington native plant communities. Site restoration and reseeding shall be done during weather conditions and a time of year when establishment can be successful.

  Post-construction restoration of disturbed areas shall be sufficient to achieve a robust stand of native vegetation sufficient to achieve site stability, weed control and agreed-upon similarity to suitable reference standards. The project shall identify reference standards (or a process to establish standards) within the project area for use in evaluation of site restoration success. Selection of reference standards shall be done in consultation with WDFW and the Technical Advisory Committee.

  Response: ***Invenergy will prepare a*** *revegetation plan and submit it to Kittitas County for approval and to WDFW for review and comment prior to any construction commencing. The plan will follow the above guidelines.*

- **Restoration of Trenches for Underground Cables.** Trenches for underground cables shall be placed into the roadway to the greatest extent possible. If trenches must be widely spaced to accommodate circuits, at least two circuits shall be placed in the roadway and additional circuits shall be placed in the road shoulder or along previously disturbed alignments. If installation of trenches and cables in rocky substrate results yields an unnaturally rocky surface which cannot be revegetated, soil conserved from facilities construction shall be applied over the rocky trench spoil to provide a seed bed.

  Response: *Underground cables will be placed into roadways where possible. Where appropriate conserved soil from the construction of the project shall be applied over the trenched areas to encourage revegetation.*

- **Construction-related Site Protection Plans.** The proponent shall be required to prepare the following plans and submit them to Kittitas County for approval. Kittitas County's review and approval shall be done in collaboration with WDFW and WDOE.
  - Fire Protection Plan which includes measures for minimizing the likelihood of fire starts and measures to detect and quickly suppress wildfire.
  - Construction Stormwater Pollution Prevention Plan (SWPPP). The SWPPP shall be reviewed by the project's revegetation contractor with expertise with shrub steppe restoration.
  - Construction Spill Prevention, Control and Countermeasures Plan to address spills of fuel, lubricants and other harmful materials on hardened areas of the facility and in shrub steppe areas in a manner which minimizes long-term impacts to vegetation and wildlife habitat.

    Response: *Invenergy intends to prepare each of these plans but does not believe it is appropriate to establish duplicative review processes. Invenergy will submit a Fire Protection Plan to Kittitas County. Invenergy will apply for coverage under WDOE's General NPDES Permit for Construction Stormwater and prepare a SWPPP as required by that permit. Invenergy will prepare a Spill Prevention, Control and Countermeasures (SPCC) Plan.*

Measures to mitigate for loss of wildlife and shrub steppe wildlife habitat

- **Mitigation Plan**: Proponent shall prepare a wildlife and habitat mitigation plan and subject to approval by Kittitas County in collaboration with WDFW.

  We recommend the plan's primary focus be protection and restoration of shrub steppe habitat and maintaining ecological connectivity of shrub steppe within the landscape that incorporates the project. Such a plan might include acquisition of conservation easements, development rights or lands, and management of those lands in a manner that ensures ecological connectivity and perpetuation of shrub steppe-dependent wildlife.

  Response: *Invenergy will work with WDFW to prepare a wildlife and habitat mitigation plan that is consistent with the WDFW Guidelines.*

Measures to Mitigate Operation and Maintenance of the Project

- **Conservation Measures to Reduce Risk to Avian Scavangers.** Project operation shall include conservation measures for managing risk to scavaging birds of prey including eagles, vultures and ravens. Such measures shall include removal of big game and livestock carcasses within the project boundary which could attract eagles and other avian scavengers to the project. Since bald eagles are attracted to Kittitas Valley pastures during calving because of the opportunity to scavenge afterbirth, conservation measures should also include a prohibition on using pastures on the project site for livestock caving operations.

Response: *Agreed, during operation conservation measures for managing risk to scavenging birds of prey will be taken.*

- **Management of Deer and Elk in Collaboration with WDFW**. Permittee shall collaborate with WDFW regarding management of deer and elk and prevent wildlife damage to lands surrounding Vantage Wind Project. Vantage Wind Project shall allow public hunting to control big game numbers on the project or provide acceptable alternative control of big game so as to prevent animal damage to adjacent properties. The measures used to address big game damage concerns shall be reviewed by the Technical Advisory Committee.

There is potential for deer and elk to use project lands as a refuge from which to foray out to adjacent agricultural and residential lands and cause damage to landscaping, crops and irrigated pasture. WDFW is liable for damages caused by dear and elk. Public hunting is the primary tool available to WDFW to minimize damage caused by game animals. WDFW requests that as a condition of project approval, the Permittee not preclude public hunting as a means of dispersing animals or reducing herd size. Hunting can be prescribed to be compatible with the Vantage Wind Project objectives. For example, access control can ensure hunters are conscientious in their use of project lands, and choice of weapons can minimize risk to project facilities.

Response: *Invenergy does not own the project site; it merely has an easement to allow for the installation and operation of turbines and related facilities. The property owners do not currently allow hunting on their lan, so there is no reason to believe that the Project would increase deer and elk damage to neighboring properties.*

- **Post-construction wildlife monitoring plan.** The permittee shall develop a post-construction monitoring plan for the project to quantify impacts to avian species and assess the adequacy of mitigation measures implemented. The plan shall be subject to review and approval by WDFW. 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 Wild Horse Wind Project.

Response: *Invenergy has committed to developing a post-construction monitoring plan consistent with the WDFW Wind Power Guildelines and it will submit that plan to Kittitas County.*

- **Technical Advisory Committee.** Permittee shall convene a Technical Advisory Committee (TAC) to review pertinent monitoring and scientific data and to develop

appropriate responses to impacts that exceed projections for avian mortality and habitat impacts made in the Application. The TAC will monitor all mitigation measures and efforts and examine information relevant to assessing Project impacts to habitat, birds, bats 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 Kittitas County which shall retain the authority to require additional mitigation measures as part of the development agreement, including any recommended by the TAC.

The purpose of the Technical Advisory Committee (TAC) shall be to ensure that monitoring data is considered in a forum in which independent and informed parties can collaborate with the Permittee, and make recommendations to Kittitas County if the TAC deems additional studies or mitigation are warranted to address impacts that were either not foreseen in the Application or exceed impacts that were projected. In order to make recommendations, the TAC will review and consider: results of Project monitoring studies, including post-construction avian and bat mortality surveys, to evaluate impacts to habitat and wildlife, including avian and bat species; new scientific findings made at wind generation facilities with respect to the impacts on habitat and wildlife, as they may relate to the VantageWind Power Project; assess whether the post construction restoration and mitigation and monitoring programs for wildlife that have been identified and implemented merit further studies or additional mitigation, taking into consideration factors such as the species involved, the nature of the impact, monitoring trends, and new scientific findings. The TAC will coordinate with the Permittee to review drafts of the following plans: the Post-Construction Rangeland Management and Grazing Plan, the Hunting Plan for the Project Area and the Post-Construction Avian Monitoring Plan. The TAC will also review the Permittee's implementation of the Post-Construction Restoration Plan.

The TAC may include, but need not be limited to, representatives from WDFW, U.S. Fish and Wildlife Service, Kittitas County, DNR, the Kittitas Field and Stream Club, the Audubon Society, the Kittitas County Farm Bureau and the Permittee. Kittitas County, at its discretion, may add additional representatives with appropriate expertise to the TAC. No individual representative to the TAC may be party to a turbine lease agreement, or any other contractual obligation with the Permittee. All TAC members shall be approved by Kittitas County.

No later than sixty (60) days after the beginning of Construction, the Permittee shall submit to Kittitas County proposed Rules of Procedure describing how the TAC shall operate, including but not limited to a schedule for meetings, a meeting procedure, a process for recording meeting discussions, a process for making, and presenting timely TAC recommendations to the Council, and other procedures that will assist the TAC to function properly and efficiently. No later than sixty (60) days prior to the beginning of Commercial Operation, the Permittee shall convene the first meeting of the TAC. The Permittee will provide a copy of the proposed Rules of Procedure to the TAC at their first meeting for their review and comment. The TAC may suggest modifications of the plan

to be approved by Kittitas County. The TAC will be convened for the life of the Project, except that Kittitas County may terminate the TAC if: the TAC has ceased to meet due to member attrition; or, the TAC determines that all of the pre-permitting and post operational monitoring has been completed and further monitoring is not necessary; or the TAC members recommend that it be terminated. The failure of the TAC to meet and/or members to participate at any meeting shall not be deemed a violation of the Development Agreement, any condition of approval, or any mitigation measure. If the TAC is terminated or dissolved, Kittitas County may reconvene and reconstitute the TAC at its discretion.

Response: *Invenergy will convene a Technical Advisory Committee (TAC) to review pertinent monitoring and scientific data and to develop appropriate responses to impacts created by the project. Invenergy is currently in discussions abou the possibility of expanding the existing Wild Horse Wind Project TAC to cover the Vantage Wind Project as well. If that is not possible, then Invenergy will retain an environmental consultant to develop rules and procedures for a Vantage Project TAC .*

Mitigation for Project Implemented at Decommissioning

- **Restoration Plan for Decommissioning**: As part of the decommissioning plan, Permittee shall submit for approval by Kittitas County in collaboration with WDFW and WDOE, a final site restoration plan to ensure proper revegetation of the site when the project ceases operations. The plan shall be prepared by a firm with proven expertise in restoration of shrub steppe lands. The final site restoration plan shall provide for the return of the project site to pre-project, native shrub steppe habitat in good condition, following removal of turbines and infrastructure.

  Response: *Invenergy will have an environmental firm that has expertise in restoration of shrub steppe to prepare the portion of the decommissioning plan. The plan will provide guidance for the return of the project site as close to pre-project condition as possible.*

EXHIBIT A
PROPOSED SEPA MITIGATION MEASURES

PROPOSED MITIGATION MEASURES

This document is a summary listing of the State Environmental Policy Act (SEPA) mitigation measures proposed by the Applicant and included in the Mitigated Determination of Non-significance (MDNS) issued by Kittitas County in [INSERT DATE].

1 EARTH

1.1 Erosion Control during Project Construction

The following Mitigation Measures are proposed by the applicant.

Before construction begins, the Applicant will apply for coverage under the Washington Department of Ecology's Construction Stormwater General NPDES Permit. The Applicant will develop a detailed SWPPP meeting the requirements of the General Permit.

The SWPPP would include both structural and non-structural BMPs. Examples of structural BMPs include installation of silt fences and other physical controls to divert flows from exposed soils or otherwise limit runoff and pollutants from exposed portions of the site. Examples of nonstructural BMPs include materials handling protocols, disposal requirements, and spill prevention methods,

The SWPPP would be prepared along with a detailed project grading plan by the Engineering, Procurement, and Construction (EPC) contractor when design-phase topographic surveying and mapping are completed for the site. The EPC contractor would implement the construction BMPs, with enforcement by the Project's environmental monitor, who would be responsible for implementing the SWPPP.

Site-specific BMPs would be identified on the construction plans for site slopes, construction activities, weather conditions, and vegetative buffers. The sequence and methods of construction activities would be controlled to limit erosion. Also, the majority of areas that would be disturbed by the project are sloped at 20% or less. Clearing, excavation, and grading would be limited to the smallest areas necessary to construct the project. Surface protection measures such as erosion control blankets or straw mulching may also be required during construction or before restoration if the potential for erosion is high in a particular portion of the site.

All construction practices would emphasize erosion control through such measures as:

- using straw mulch and vegetating disturbed surfaces,
- retaining original vegetation wherever possible,
- directing surface water runoff away from denuded areas, keeping runoff velocities low by minimizing slope steepness and length, and
- providing and maintaining stabilized construction entrances.

Work on the access roads would include grading and resurfacing (with additional gravel) existing roads and constructing new roads. The site would generally have gravel roadways with a low-profile design, allowing water to flow over them in most areas. Erosion control measures to be installed during work on the access roads include the following:

- maintaining vegetative buffer strips between the affected areas and any nearby receiving waterways;
- installing sediment fence/straw bale barriers on disturbed slopes and other locations shown in the SWPPP;
- installing silt fences on steep, exposed slopes; and
- planting affected areas with designated seed mixes,

At each turbine location, a crane pad area of approximately 4,000 square feet would be graded and covered with crushed rock. During construction, silt fences, hay bales, or matting would be placed on the down-slope side of the crane pad. Wind turbine equipment such as blades, tower sections, and nacelles would be transported and off-loaded at each turbine location near the foundation and crane pad. After construction, disturbed areas at and around all crane pad staging areas would be reseeded as necessary to restore the area as closely as possible to its original condition.

Design specifications and further details for excavation, blasting, and other activities associated with the removal and preparation of quarry materials for project construction will be included in the project plans and specifications.

1.2 Erosion Control during Project Operation

The project operations group would be responsible for monitoring the SWPPP measures that are implemented during construction to ensure that they continue to function properly. Final designs for the permanent BMPs would be incorporated into the final construction plans and specifications prepared by the engineering team's civil design engineer. The EPC contractor's civil design engineer and the project's engineering team will prepare an operations manual for permanent BMPs. The permanent stormwater BMPs would include erosion and sedimentation control through site landscaping, grass, and other vegetative cover. The final designs for these permanent BMPs would conform to the Washington State Department of Ecology Stormwater Management Manual for Eastern Washington (September 2004).

Operational BMPs will be adopted, as part of the SWPPP, to prevent stormwater pollution by implementing good housekeeping, preventative, and corrective maintenance procedures; steps for spill prevention and emergency cleanup; employee training programs; and inspection and record-keeping practices as necessary. Examples of good

operational housekeeping practices identified by the Applicant that would be used by the project include the following:

- prompt cleanup and removal of spillage,
- regular pickup and disposal of garbage,
- regular sweeping of floors,
- HAZMAT data sheet cataloguing and recording, and
- Proper storage of containers.

The project operators would periodically review the SWPPP against actual practice. The plant operators would determine if the controls identified in the plan are adequate and if employees are following them.

1.3 Earthquakes

The Applicant proposes to-design and construct project facilities in accordance with engineering standards in effect at the time of construction, which would be either the Uniform Building code (UBC) or the International Building Code (IBC) requirements. The wind turbines would be equipped with vibration sensors that would automatically shut down the turbine in the event of a severe earthquake.

Additional mitigation measures that would minimize risks from earthquakes would also be implemented and are discussed below.

Prior to final project design, a detailed geotechnical evaluation and field survey would be completed so that no turbine locations or other project elements lie immediately above a high-risk fault. Geotechnical explorations would be conducted at each location where a deep foundation is required (i.e., at each turbine and meteorological tower location) and at the substations and O&M facility.

In addition, current engineering standards applicable in Kittitas County (the 1997 UBC) would be used in design of the project facilities, to assure that the facility performance is acceptable during a design earthquake. Given the relatively low level of earthquake risk for the site, application of the UBC in project design would provide adequate protection for the project facilities and for human safety.

The Applicant would prepare on-site emergency plans to protect the public health and safety and environment on and off the project site in case of a major natural disaster such as an earthquake. The Applicant proposes that detailed emergency plans developed prior to project construction and operation contain the following measures to mitigate for potential hazards during an earthquake:

- Personnel would seek safety at the nearest protected location.
- Personnel would take cover to avoid falling debris.
- Personnel would check the immediate area to identify injuries and equipment failures and report to the site construction manager, O&M manager, or designee,
- Personnel would be instructed to report to a protected area, as necessary, or would continue monitoring the operating equipment.
- A determination would be made about missing personnel, and a search and rescue effort would be initiated if safe and appropriate.
- If the conditions warranted, the Kittitas County Emergency Communications Center and BPA or PSE (the electric transmission line operator) would be notified.
- Turbines could also be shut down manually as required depending on the severity of the earthquake and brought back online after they have been cleared for restart.
- Off-duty personnel would report to the site, if they are able, as designated in the emergency plan.
- If the structures are intact and other plant safety issues are under control, the O&M manager would approve re-entry of personnel to any turbines for search and rescue efforts.

1.4 Volcanic Eruptions

In the event of damage or potential impact from a volcanic eruption, the project facilities would be shut down until safe operating conditions returned. If an eruption occurred during construction, a temporary shutdown would most likely be required to protect equipment and human health.

To help protect against the impacts of dust and ash all key outdoor project facilities would be coated with corrosion-resistant materials. The turbine rotor blades and other fiberglass shrouds, such as those on the nacelles for example, are resistant to wind-blown dust and precipitation. The turbine towers would have venting and filtering in the doors to prevent wind blown dust from reaching the internal electrical equipment and machinery.

The Applicant would prepare on-site emergency plans to protect the human health and safety and the environment on and off the project site in case of a major natural disaster such as a volcanic eruption. The Applicant proposes the following actions be taken to reduce potential impacts from a volcanic eruption:

- Close all O&M facility vents to prevent ash from entering buildings.

- Cover data processing equipment and computers not required for safe project operation or shutdown, and shutdown other electronic equipment sensitive to dust (ash).
- If the dust load is heavy, shut down the project facilities.
- If the conditions warrant, notify the Kittitas County Emergency Communications Center and BPA or PSE (the electric transmission line operator).
- Determine whether employees should be sent home immediately before roads become unsafe or if personnel must be sheltered on-site.
- Initiate ash cleaning operations by personnel wearing protective equipment.
- Coordinate all ash disposal activities with local Kittitas County officials.

1.5 Landslides

The Applicant proposes to locate project facilities in areas with relatively low-gradient topography with a thin cover of soil that overlies basalt bedrock. No project facilities would be constructed on unstable slopes or landslide-susceptible terrain. A sufficient setback distance would be provided between the landslide identified in the southern portion of the project site and the nearest project facilities.

In addition, the following mitigation measure would be implemented. Prior to project construction, additional geotechnical explorations, including drilling and ground-penetrating radar (GPR) surveys, would be completed as necessary to delineate the limits of the landslide area to verify that the turbines are not placed in potentially unstable terrain and to provide final recommendations for safe setback distances from known or suspected slide areas:

1.6 Unique Features

In the unlikely event that unique physical or unique geological features such as petrified gingko deposits were discovered at the site during construction, the Applicant has stated that construction personnel would stop work at that location and notify the project manager. The project manager would immediately contact appropriate personnel at the Washington State Historic Preservation Office to coordinate an appropriate response.

1.7 Contaminated Soils

The Applicant commissioned WEST, Inc. to conduct a Phase I Environmental Site Assessment (ESA) of the site to be developed. The Phase I ESA was performed in accordance with the scope and limitations of American Society of Testing and Materials Practice E 1527. The results of the Phase I ESA indicated no evidence of environmental contamination within the project site. Based on these findings, the potential for

encountering environmental contamination during project construction or operation is low. In the unlikely event that contaminated soils are encountered, the Applicant has stated that they will notify appropriate personnel with the Washington State Department of Ecology. Contaminated soils would be handled and disposed of according to state and local requirements.

1.8 Decommissioning Plans

Prior to commencement of construction, the Applicant will prepare a detailed Initial Site Restoration Plan. The plan shall be developed with the active participation of the County, and shall be submitted to the County for its review and approval, provided however such approval shall not be unreasonably withheld.

If the project were to terminate operations, the Applicant would obtain the necessary authorization from the appropriate regulatory agencies to decommission the facilities.

All foundations for above-grade facilities would be removed to a depth of 3 feet below grade and unsalvageable material would be sent to authorized sites for disposal. The soil surface would be restored as close as reasonably possible to its original condition. The project's substation(s) is generally valuable and, as is often the case on older power projects, the-substation would revert to the ownership of the utility (PSE and/or BPA). If the overhead transmission feeder lines could not be used by the utility, all structures (including the portion of pole foundations within 3 feet below the ground surface), conductors and cables would be removed.

Reclamation procedures would be based on site-specific requirements and techniques commonly employed at the time the area is to be reclaimed, and would include regrading, adding topsoil, and reseeding all disturbed areas. Reseeding would be done with appropriate seed mixes, based on native plant types in the project site vicinity. Decommissioned roads would be reclaimed or left in place based on landowner preferences, and rights of way would be vacated and surrendered to the landowners.

Although no hazardous materials will be used on the site, an audit will be performed of the relevant operation records and a project site survey will be performed to determine if a release of any hazardous material has occurred. An inspection of all facilities will be performed to determine if any hazardous or dangerous materials (as then defined by regulation) are present. The inspection will record the location, quantity, and status of all identified materials

2 AIR QUALITY

The Applicant proposes the following mitigation measures for construction-related air emissions and dust:

- All vehicles used during construction will comply with applicable federal and state air quality regulations for tailpipe emissions;
- Operational measures such as limiting engine idling time and shutting down equipment when not in use will be implemented;
- Active dust suppression will be implemented on unpaved construction access roads, parking areas and staging areas, possibly using water-based dust suppression materials in compliance with state and local regulations;
- Housekeeping measures around batch plant and rock crushing facilities to prevent buildup of fine materials;
- Traffic speeds on unpaved access roads will be kept to 25 mph to minimize generation of dust,
- Carpooling among construction workers will be encouraged to minimize construction-related traffic and associated emissions;
- Disturbed areas will be replanted or graveled to reduce wind-blown dust; and
- Erosion control measures will be implemented to limit deposition of silt to roadways.

The air quality permit for the temporary rock crusher and the temporary concrete batch plant will require the use of emission control devices to reduce dust generated by these processes. Water sprays will be used on the rock crusher and the concrete batch plant dry loading operations, and a fabric filter will be used for the Portland cement silo.

No air quality mitigation is proposed for project operations as there would be no air or odor emissions generated by stationary sources. Dust abatement measures implemented during operation would be continued as appropriate.

3 WATER RESOURCES

Mitigation measures proposed by the Applicant are described in the following sections.

The proposed design of the project incorporates numerous features to avoid and/or minimize impacts on water resources. The project layout has been designed to avoid any impacts on surface waters and groundwater. Features of the project that are designed to avoid or minimize impacts include:

- minimizing new road construction by improving and using existing roads and trails instead of constructing new roads;
- not developing wells on site, and using only off-site sources of water for construction and operation; and

- Locating roads, underground cables, turbine foundations, transmission poles and other associated infrastructure outside any surface water or other sensitive resources.

Other mitigation measures include avoiding drainage crossings to the maximum extent feasible; complying with federal, state, and local ordinances; and implementing a formal SWPPP and BMPs during construction.

3.1 Construction General Stormwater Pollution Prevention Measures

Stormwater Pollution Prevention Plan

A detailed Construction SWPPP will be developed for the project to help minimize the potential for discharge of pollutants from the site during construction activities. The SWPPP will be designed to meet the requirements of the Ecology General Permit to Discharge Stormwater through its stormwater pollution control program (Chapter 173-220 WAC) associated with construction activities. Applicant will obtain coverage under the Washington Department of Ecology Construction Stormwater General Permit prior to the start of project construction. Similar to the Construction SWPPP, an Industrial SWPPP meeting the conditions of the Stormwater General Permit for Industrial Activities will be prepared and Applicant will obtain coverage under the Washington Department of Ecology Industrial Stormwater General Permit.

Ecology's *Stormwater Management Manual for Eastern Washington* will be used for developing the SWPPP and BMPs.

The SWPPP will include both structural and nonstructural BMPs. Examples of structural BMPS could include the installation of silt curtains and/or other physical controls to divert flows from exposed soils or otherwise limit runoff and pollutants from exposed areas of the site. Examples of nonstructural BMPs include management practices such as implementation of appropriate materials handling, disposal requirements, and spill prevention methods.

The SWPPP will be prepared along with a detailed project grading plan designed by the EPC Contractor when design-level topographic surveying and mapping are prepared for the project site. The final configuration of proposed improvements will be overlaid onto the detailed topographic maps, and the project civil design engineer will establish the locations and types of construction BMPs to be required of the EPC Contractor. These details will be included on an overall map of the project site and submitted to EFSEC prior to construction.

A narrative section of the SWPPP will describe the intended installation sequence and function of the selected BMPs, and present the sizing calculations. The plan will also identify the selected minimum standards to which each of the BMPs is to be constructed or installed. When prepared at this level of detail, the document would meet the requirements of the Stormwater Construction Activity NPDES permit system, and would

accurately describe to the EPC Contractor and the project site construction management team the improvements and actions required during construction. The SWPPP will then be included in the construction bid and contract documents. The EPC Contractor will implement the construction BMPs, with enforcement supervised by the project's environmental monitor, who would be responsible for implementing the SWPPP.

General Stormwater Pollution Control Measures

Site-specific BMPs will be identified on the construction plans for the site slopes, construction activities, weather conditions, and vegetative buffers. The sequence and methods of construction activities will be controlled to limit erosion. Clearing, excavation, and grading will be limited to the minimum areas necessary for construction of the project. Surface protection measures, such as erosion control blankets or straw matting, also may be required prior to final disturbance and restoration if potential for erosion is high.

All construction practices will emphasize erosion control over sediment control through such non-quantitative activities as:

- straw mulching and vegetating disturbed surfaces,
- retaining original vegetation wherever possible,
- directing surface runoff away from denuded areas,
- keeping runoff velocities low through minimization of slope steepness and length, and
- providing and maintaining stabilized construction entrances.

A more detailed description of the materials, methods, and approaches used as part of the BMPs for effective stormwater pollution prevention and erosion control are as follows:

- **Rain Level Monitoring**—The environmental monitor will be responsible for checking and recording precipitation levels at the project site using a rain gage. This benchmark will be used to determine the performance of the SWPPP measures that have been implemented during construction. After construction, the O&M group will also continue to monitor rainfall amounts and monitor the in-place erosion control systems while re-seeded areas become more established. Modifications will be performed where needed by the O&M group after project construction is completed.
- **Mulching**—Loose straw will be spread and punched into the ground in all areas where vegetation has been cleared.
- **Temporary Straw Bale and Silt Fence Sediment Barriers**—Temporary straw bale barriers and sediment fences will be inspected by the Contractor immediately after

each rainfall and at least daily during prolonged rainfall. Any required repairs, relocations, or additions will be made promptly. No more than 1 foot of sediment will be allowed to accumulate behind straw bales or silt fence sediment barriers. Sediment will be removed and re-graded into slopes. New lines of barriers installed uphill of sediment-laden barriers will be considered based on the rate at which the 1 foot of sediment accumulates.

Silt fences and straw bale sediment barriers will be maintained throughout the construction period and beyond, until disturbed surfaces have been stabilized with vegetation. Silt fence construction specifications, including fabric type, support spacing, and total length will be determined by actual construction conditions during final design of the facilities.

- **Check Structures and Sediment Traps**—Check structures, such as rock dams, hay bale check dams, dikes and swales will be-used, where appropriate, to reduce runoff velocity as well as to direct surface runoff around and away from cut-and-fill slopes. Swales and dikes may also be used to direct surface water toward sediment traps.

- **Matting and Erosion Control Blankets**—Depending on weather conditions during the construction period, straw or jute matting or other suitable erosion control blankets will be used on the pad slopes and the drainage channel slopes if direct rainfall on the slopes would result in erosion prior to stabilization.

- **Control of Excavation Dewatering**—Although no dewatering is anticipated, excavation work requiring dewatering discharge will be directed to the surrounding upland areas, away from sensitive resources (e.g., wetlands, drainages, and seeps). Dewatering water will be pumped through a hose that will be moved as the water is pumped out to distribute the groundwater over a large surface area to allow it to evaporate and/ or infiltrate and avoid causing increased erosion or stormwater pollution. There will be no direct discharge to surface waters or riparian areas from dewatering activities.

  No project facility would be located closer than approximately 200 feet from a riparian area, although the maximum setback that would be required by WDOE guidelines would be only 50 feet.

- **Stormwater Pollutants (Waste, Debris, Chemicals)**—In addition to erosion and sedimentation control on the project site, it is important to reduce potential for chemical pollution of surface waters and groundwaters during construction. Source control is the most effective method of preventing chemical water pollution. All potential pollutants, including waste materials and demolition debris, that occur on site during construction will be handled and disposed of in a manner that does not cause contamination of stormwater.

The only potential water pollutants that would be transported and used in significant quantities during construction are diesel fuels and gasoline, which will be transported and stored in accordance with state and federal regulations by appropriately licensed and trained petroleum transport professionals. Other potential water pollutants include lubricating and mineral oils, chemical cleaners, and herbicides in small quantites below state and federal regulatory thresholds. Handling of these materials will be conducted in a manner that is protective of the environment and in accordance with applicable federal and state requirements and with the BMPs and the Spill Prevention, Containment, and Control Plan.

In the unlikely event of a fuel, oil, or chemical spill, project personnel will activate the Spill Prevention, Containment, and Control Plan.

- **Environmental Monitor**—The proposed environmental monitor will be responsible for locating any necessary clean fill disposal sites for excess excavation spoils. To control the release of sediment from the disposal sites, silt fencing with a straw bale barrier will be installed on the downslope side of all disposal areas if additional sediment or erosion control measures are determined to be necessary. The site environmental monitor will be responsible for planning, implementing, and maintaining BMPs for:

  neat and orderly storage of any construction chemicals and spent containers in lined, bermed areas;

  materials handling and spill prevention procedures; and

  regular disposal of construction garbage and debris using on-site dumpsters.

- **Revegetation**—All areas that are affected by the construction outside of the graveled areas and rock quarries will be seeded when there is adequate soil moisture. They will be re-seeded if healthy cover vegetation does not grow. The sediment fence and check dams will remain in place until the affected areas are well vegetated and the risk of erosion has been eliminated. The project operations group will remove the sediment fence at this time.

In addition the following specific facility control measures and BMPs for effective stormwater pollution prevention and erosion control measures will be implemented as part of the SWPPP:

- **Foundation Construction Stormwater Pollution Control Measures**— Foundation construction would require significant excavation at each wind turbine location. Excavation materials will be stored adjacent to the foundation holes as the forms, rebar and bolts are assembled and as the concrete cures after it is cast in place. Sediment fences, hay bales or matting will be installed on steeper down slopes near

the storage piles as necessary. Once the concrete cures, excavated materials would be used for backfilling.

- **Access Roads Stormwater Pollution Control Measures**—Work on the access roads would include grading and re-graveling existing roads and constructing new roads. The site would have gravel roadways that generally would be a low-profile design, allowing water to flow over them in most areas. Erosion control measures to be installed during the work on the access roads include:

  maintaining vegetative buffer strips between the affected areas and any nearby waterways;

  installing sediment fence/straw bale barriers on disturbed slopes and other locations shown on the SWPPP;

  providing temporary sediment traps and sediment type mats downstream of seasonal stream crossings;

  installing silt fencing on steeper exposed slopes; and

  planting designated seed mixes at impacted areas.

- **Turbines**— At each turbine location, a crane pad area of approximately 4,000 square feet would be graded in place and covered with road rock. During construction, silt fences, hay bales, or matting will be placed on the down slope side of the crane pad areas. Wind turbine equipment such as the blades, tower sections, and nacelles would be transported and off-loaded at each turbine location near the foundation and crane pad. After construction, disturbed areas around all crane pad staging areas will be re-seeded with an appropriate seed mix.

- **Underground Cable Trenching Stormwater Pollution Control Measures**—Underground electrical and communications cables would be placed in 3- to 5-foot-wide trenches along the length of each wind turbine string corridor. In some cases, trenches would run from the end of one turbine string to the end of an adjacent turbine string to link turbines via the underground network. Trenches would be excavated from 1.5 to 4 feet deep, depending on the underlying soil/rock conditions. Excavated materials would be piled alongside the cable trenches for backfilling after cable installation, the excavated materials typically would remain in an exposed state for approximately 2 weeks. Sediment fences, hay bales, or matting will be installed on steeper downslopes near the storage piles. After backfilling is completed, excess excavated soils will be spread around the surrounding area and contoured to the natural grade. Finally, the area will be re-seeded with an appropriate seed mix.

- **Overhead Collector Line Construction Stormwater Pollution Control Measures**—Construction of the overhead pole lines would require excavation for

setting the poles. Excavated materials would be piled alongside the excavations for backfilling after pole installation. Sediment fences, hay bales, or matting will be installed on any steep downslopes near the storage piles. After backfilling, excess excavated soils will be spread around the surrounding area and contoured to the natural grade. Cobbles and rocks too large for backfilling will be crushed for gravel and used in rock check dams or to support other on-site erosion control measures. Finally, the area will be re-seeded with an appropriate seed mix.

- **Substation Construction Stormwater Pollution Control Measures**—The substation is generally flat, and the base area would be graded and covered with a sub-base rock and a graveled surface on top. Foundation and underground trenching excavation spoils would be handled in the same manner as described in the above sections regarding foundations and underground cable trenches. Disturbed areas surrounding the substation perimeter will be contoured to the natural grade, covered in straw mulch, protected for erosion control, and re-seeded as appropriate to the adjacent slopes. The main substation transformers, which are filled with mineral oil, are equipped with an oil level meter and float switch. Oil containment catch trenches would surround the outer foundation perimeters of transformers.

- **Final Road Grading and Site Clean Up Stormwater Pollution Control Measures**— A final site cleanup will be made before turning the project over to the O&M group. In accordance with the Erosion and Sediment Control Plan for access road improvement and construction, County roads will be restored to at least their preproject condition and to the satisfaction of the County Public Works Department.

- **Cement Batch Plant Stormwater Pollution Control Measures**—The batch plant would use outdoor stockpiles of sand and aggregate. These stockpiles would be located to minimize exposure to wind. Sediment fences, hay bales, or matting will be installed near the storage areas as necessary. Cement would be discharged via screw conveyor directly into an elevated storage silo without outdoor storage. Construction managers will exercise good housekeeping practices and conduct regular cleanings of the plant, storage, and stockpile areas to minimize buildup of fine materials.

  Following completion of construction activities the Applicant's contractor will rehabilitate the sites by dragging the top of both of the 500-square foot crushing and batch plant areas with a blade machine and re-seeding the area with a designated seed mixture..

It is not anticipated that surface runoff control facilities beyond the control measures described above would be required. Project engineers will determine specific siting of the control measures after final design has been completed. The Applicant will provide design assumptions, including storm events and plans, when they have been completed.

3.2 Operational General Stormwater Pollution Prevention Measures

As described above, the Applicant will prepare a SWPPP as part of the final design. The project operations group will be responsible for monitoring the SWPPP measures that were implemented during construction to ensure they continue to function properly. Final designs for the permanent BMPs will be incorporated into the final construction plans and specifications prepared by the civil design engineer. An operations manual for the permanent BMPs will be prepared by the EPC Contractor civil design engineer and the project's enginering team.

Operational BMPs will be adopted, as part of the SWPPP, to implement good housekeeping, preventive and corrective maintenance procedures, steps for spill prevention and emergency cleanup, employee training programs, and inspection and recordkeeping practices, as necessary, to prevent stormwater and groundwater pollution.

Examples of good operational housekeeping practices, which will be employed by the project, include the fallowing:

- prompt cleanup and removal of spillage;
- regular pickup and disposal of garbage;
- regular sweeping of floors;
- HAZMAT data sheet cataloging and recording; and
- proper storage of containers.

No project facility would be located closer than approximately 200 feet from a riparian area.

Transformer Oil Containment

The oil containment system for the substations would consist of a perimeter containment system, large enough to contain the full volume of transformer mineral oil with a margin of safety, surrounding the main substation transformers. The trough would be poured as part of the transformer concrete foundation or would consist of a heavy oil-resistant membrane that is buried around the perimeter of the transformer foundation,

The trough and/or membrane would drain into a common collection sump area that would be equipped with a sump pump designed to pump rainwater out of the trough to the surrounding area away from nearby surface waters or sensitive areas (e.g., wetlands, springs, seeps). In order to prevent the sump from pumping oil out to the surrounding area, it will be fitted with a sensor that would shut off the sump if oil is detected. A failsafe system with redundancy is built into the sump controls—the transformers are also equipped with oil-level sensors. If the oil level inside a transformer drops as a result of a

leak in the transformer tank, it would also shut off the sump pump system to prevent it from pumping oil, and an alarm would be activated at the substation and in the main project control (SCADA) system. The trough would be large enough to contain the full volume of oil plus 10% reserve volume.

Discharges from the containment system would be directed to upland areas and away from nearby surface waters or sensitive areas (e.g., wetlands, springs, seeps). Discharge from the containment system will be in compliance with laws governing the discharge of oil as specified in the Code of Federal Regulations (CFR) under 40 CFR Part 110.3:

> § 110.3 Discharge of oil in such quantities as "may be harmful" pursuant to section 311(b)(4) of the Act. [See below Note]
>
> For purposes of section 311(b)(4) of the Act, discharges of oil in such quantities that the Administrator has determined may be harmful to the public health or welfare or the environment of the United States include discharges of oil that:
>
> (a) Violate applicable water quality standards; or
>
> (b) Cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines. [61 FR 7421, Feb. 28, 1996]
>
> Note: Act means the Federal Water Pollution Control Act, as amended 33 U.S.C. 1251 et seq., also known as the Clean Water Act.

Water in the containment system that shows obvious indicators of potentially violating appreciable water quality standards, i.e., the water exhibits an oily sheen as specified under 40 CFR Part 110(b), will be removed from the containment system and disposed of in accordance with applicable federal, state and local laws.

4 VEGETATION AND WETLANDS

Shrub steppe is considered a priority habitat by WDFW. As such, the Applicant has proposed 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 (WDFW, August 2003) for siting and mitigating wind power projects east of the Cascades.

These guidelines include implementing a WDFW approved restoration plan for the impacted areas that will include:

- site preparation,
- reseeding with appropriate vegetation,

- noxious weed control, and
- protection from degradation

Best management practices (BMPs) will be implemented during construction to control erosion and surface water runoff, and as presented below for noxious weed control.

4.1 Wetlands

Since no impacts on wetlands are anticipated, no mitigation is proposed. During the design of the project, all project facilities, including access roads, electric lines, and turbine strings, were intentionally laid out to avoid the limited water features in the project area.

4.2 Special-Status Plants

The only special-status plant species that may be impacted by the project is hedgehog cactus, a Washington State Review listed species. Access to the site will be controlled during both construction and operations, which should provide greater protection than is currently afforded to this species. As collection of this species for gardens has been cited as a reason for its decline, if such collection becomes a problem at the project site despite the, controlled access, the Applicant proposed to post signage indicating that collection of any plants in the project area is prohibited.

4.3 Noxious Weeds

To avoid, minimize, or reduce the impacts of noxious weeds, the Applicant proposes the following mitigation measure:

- The contractor will clean construction vehicles prior to bringing them in to the project area from outside areas.
- Disturbed areas will be reseeded as quickly as possible with native species.
- Seed mixes will be selected in consultation with WDFW and Kittitas County Weed Control Board.
- If hay is used for sediment control or other purposes, hay bales will be certified weed free.
- Access to the site will be controlled which may result in a lower level of disturbance and fewer opportunities for noxious weeds to be introduced and/or spread.
- Noxious weeds that may establish themselves as a result of the project will be actively controlled in consultation with the Kittitas County Weed Control Board.

5 WILDLIFE

The potential direct wildlife impacts from the project can be grouped into two main categories, loss of habitat from construction and operation of the project, and potential mortality to individual birds or other animals from construction and operation of the project. The loss of habitat associated with the project can be further broken down into "temporary" and "permanent" habitat impacts. "Temporary" impacts are those arising from ground disturbance necessary for the construction of project infrastructure but that will be not be permanently occupied once construction is complete. Examples include trenches for underground electrical collector cables and construction staging areas. These areas will be disturbed during the construction period but will be reseeded and restored after construction is finished. The vast majority (approximately 75%) of the total area impacted by construction of the project would be temporarily disturbed (i.e., for less than one year.) The remainder (approximately 25%) will continue to be occupied by the project, such as string roads, turbine foundation pads, project substation, and the O&M facility. These are considered "permanent" impacts for the purpose of this analysis.

The Applicant has proposed a comprehensive mitigation package for plants and animals for this project. It consists of several categories of actions that include the following list, and described in greater detail in the following sections:

- Thorough study and analysis to avoid impacts;
- Project design features to minimize impacts;
- Construction techniques and Best Management Practices (BMPs) to minimize impacts;
- Post-construction restoration of temporarily disturbed areas;
- Operational BMPs to minimize impacts;
- Monitoring and adaptive management to minimize impacts during operations; and

5.1 Study and Analysis

Studies have been conducted on the project site by qualified wildlife biologists and data gathered was used in the project design to avoid impacts on sensitive populations. These studies include the following:

- Rare plant surveys;
- Habitat mapping;
- Avian use point count surveys;

- Aerial raptor nest surveys;
- Sage grouse surveys;
- Big game surveys;
- Non-avian wildlife surveys;

The results and recommendations of these studies have been incorporated into the proposed design, construction, operation and mitigation for the project.

5.2 Project Design

The proposed design of the project incorporates numerous features to avoid and/or minimize impacts on plants and wildlife. These features are based on site surveys, experience at other wind power projects, and recommendations from consultants performing studies at the site. Features of the project that are designed to avoid or minimize impacts on wildlife include the following:

- Avoidance of construction in sensitive areas such as streams, riparian zones, wetlands, and forested areas;
- Minimization of new road construction by improving and using existing roads and trails instead of constructing new roads;
- Use of unguyed permanent meteorological towers to minimize potential for avian collisions with guy wires where possible;
- 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.

Construction Techniques

Construction of the project has the potential to impact both habitat and wildlife in a variety of ways. The Applicant proposes the use of construction techniques and BMPs to minimize these potential impacts. These include the following:

- Use of BMPs to minimize construction-related surface water runoff and soil;
- Use of certified "weed free" straw bales during construction to avoid introduction of noxious or invasive weeds;

- Flagging of any sensitive habitat areas (e.g., springs, raptor nests, wetlands) near proposed areas of construction activity and designation of such areas as "off limits" to all construction personnel;
- Development and implementation of a fire control plan, in coordination with local fire districts, to minimize risk of accidental fire during construction and respond effectively to any fire that does occur;
- Establishment and enforcement of reasonable driving speed limits (max 25 mph) during construction to minimize potential for road kills;
- Proper storage and management of all wastes generated during construction;
- Require construction personnel to avoid driving over or otherwise disturbing areas outside the designated construction areas;
- Limiting construction activities during winter months to minimize impacts;
- Designation of an environmental monitor during construction to monitor construction activities and ensure compliance with mitigation measures.

Postconstruction Restoration

All temporarily disturbed areas which have been cleared of vegetation will be reseeded with an appropriate mix of native plant species as soon as possible after construction is completed to accelerate the revegetation of these areas and to the prevent spread of noxious weeds. The Applicant will consult with Washington Department of Fish and Wildlife regarding the appropriate seed mixes for the project area.

5.3 Operational BMPs

During project operations, appropriate operational BMPs will be implemented to minimize impacts on plants and animals, these include the following:

- Implementation of a fire control plan, in coordination with local fire districts, to avoid accidental wildfires and respond effectively to any fire that might occur;
- Establishment and enforcement of reasonable driving speed limits (max 25 mph) during operations to minimize potential for road kills;
- Operational BMPs to minimize storm water runoff and soil erosion;
- Implementation of an effective noxious weed control program, in coordination with the Kittitas County Noxious Weed Control Board, to control the spread and prevent the introduction of noxious weeds;

- Identification and removal of all carcasses of livestock, big game, etc. from within the project that may attract foraging bald eagles or other raptors;

- Control public access to the site to minimize disturbance impacts on wildlife, especially in the winter months;

5.4 Monitoring and Adaptive Management

The Applicant plans to convene a Technical Advisory Committee (TAC) to evaluate the mitigation and monitoring program and determine the need for further studies or mitigation measures. The TAC will be composed of representatives from Washington Department of Fish and Wildlife, Kittitas County, local interest groups (e.g., Kittitas Audubon Society), project landowners, and the Applicant. The role of the TAC will be to review results of monitoring studies to evaluate impacts on wildlife and habitat, and address issues that arise regarding wildlife impacts during operation of the project. The post-construction monitoring plan will be developed in coordination with the TAC.

The Applicant proposes to develop a postconstruction monitoring plan for the project to quantify impacts on 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; and 2) a minimum of one breeding season raptor nest survey of the study area and a 1-mile buffer to locate and monitoring active raptor nests potentially affected by the construction and operation of the project.

The protocol for the fatality monitoring study will be similar to protocols used at the Vansycle Wind Plant in northeastern Oregon (Erickson et al. 2000) and the Stateline Wind Plant in Washington and Oregon (FPL et al. 2001).

6 FISHERIES

The proposed design of the project incorporates numerous features to avoid and/or minimize impacts on fisheries. The project layout has been designed to avoid any impacts to streams and riparian areas. Features of the project that are designed to avoid or minimize impacts include:

- Minimizing new road construction by improving and using existing roads and trails instead of constructing new roads.

- Roads, underground cables, turbine foundations, transmission poles, and other associated infrastructure will not be located within any riparian areas or streams or other sensitive resources.

A formal SWPPP would be implemented and BMPs would be initiated to retain sediment from disturbed areas and minimize areas of disturbance. In addition, the proposed construction activities for the transmission feeder lines would not involve the use of any heavy equipment in streambeds or riparian areas.

6.1 Construction Techniques and BMPs to Minimize Impacts

Constructing the project has the potential to impact fisheries in a variety of ways. Even though no fisheries issues were identified in the project area, the Applicant proposes using construction techniques and BMPs to minimize these potential impacts. These include the following:

- Using BMPs to minimize construction-related surface water runoff and soil erosion.
- Flagging sensitive habitat areas (e.g., wetlands, seeps, and drainages) near proposed areas of construction activity and designating such areas as "off limits" to all construction personnel.
- Properly storing and managing all wastes generated during construction.
- Requiring construction personnel to avoid driving over or otherwise disturbing areas outside the designated construction areas.
- Designating an environmental monitor during construction to monitor construction activities and ensuring compliance with mitigation measures.

6.2 Post-Construction Restoration of Temporarily Disturbed Areas

The following measures would be taken to restore temporarily disturbed areas after construction:

- All temporarily disturbed areas would be reseeded with an appropriate mix of native plant species as soon as possible after construction is completed to accelerate the revegetation of these areas and to prevent the spread of noxious weeds.
- The Applicant would consult with WDFW regarding the appropriate seed mixes for the project area.

7 ENERGY AND NATURAL RESOURCES

As the project would have a positive impact overall on the use of non-renewable resources, no mitigation is necessary or proposed.

During construction, conservation measures will include recycling of construction wastes where possible and encouraging carpooling among construction workers to reduce emissions and traffic.

The Applicant proposes several conservation measures that will be undertaken during operations:

- Carpooling among operations workers will be encouraged.
- High-efficiency electrical fixtures and appliances in the O&M facility and substation control house will be used.
- Low-water-use-flush toilets will be used in the O&M facilities
- Recycling of waste office paper and aluminum will be encouraged.

8 NOISE

Although no specific receivers are identified as being impacted by construction noise at the remote project site, and the Applicant has not proposed any mitigation measures associated with noise impacts, the following contractor practices are recommended to minimize the effects of construction noise in the project area:

- Implement work-hour controls so that noisy activities occur between 7 a.m. and 10 p.m., which would reduce the impact during sensitive nighttime hours.
- Do not allow heavy-duty haul trucks to travel through the town of Kittitas during evening or nighttime hours.
- Conduct blasting only during daylight hours.
- Maintain equipment in good working order and use adequate mufflers and engine enclosures to reduce equipment noise during operation.
- Coordinate construction vehicle travel to reduce the number of passes by sensitive receivers.

9 LAND USE.

- After construction is completed, disturbed areas would be returned as closely as possible to their original state, excluding service and access roads, which would remain in place for the life of the facility.

10 VISUAL RESOURCES/LIGHT AND GLARE

Mitigation measures proposed by the Applicant and incorporated into the project's design include the following:

- Active dust suppression will be implemented to minimize the creation of dust clouds during the construction period.

- Areas temporarily disturbed during the construction process will be reseeded to facilitate their return to natural-appearing conditions when construction is complete.

- The wind turbine towers, nacelles, and rotors used will be uniform and will conform to the highest standards of industrial design to present a trim, uncluttered, aesthetically attractive appearance.

- A low-reflectivity finish will be used for all surfaces of the turbines to minimize the reflections that can call attention to structures in a landscape setting..

- The only exterior lighting on the turbines will be the aviation warning lighting required by the FAA. This lighting will be kept to the minimum required intensity to meet FAA standards. It is anticipated that the FAA will soon be issuing new standards for marking of wind turbines that will entail lighting fewer turbines in a large wind farm than is now required, as well as synchronizing all the lights. These potential regulatory changes are being closely monitored and if, as is likely, they are made before project construction begins, the aviation safety marking lighting will be designed to meet these revised standards.

- Where feasible, existing road alignments will be used to provide access to the turbines, minimizing the amount of additional surface disturbance required. The access roads will have a gravel surface and will have grades of no more than 15%, minimizing erosion and its visual effects.

- The O&M facility building will have a low-reflectivity earth-tone finish to maximize its visual integration into the surrounding landscape.

- Outdoor night lighting at the O&M facility and the substation(s) will be kept to the minimum required for safety and security, sensors and switches will be used to keep lighting turned off when not required, and all lights will be hooded and directed to minimize backscatter and offsite light trespass.

- All equipment at the substation(s) will have a low-reflectivity neutral finish to minimize visual sensitivity.

- The control buildings located at each substation will have a low-reflectivity earth-tone finish.

11 PUBLIC SERVICES AND UTILITIES/RECREATION

Potential impacts to public services and utilities will be mitigated by tax revenues generated by the project. Fiscal impacts of the project are addressed in Section 3.11, "Population, Housing and Economics."

11.1 Construction

Because construction activities at the project are not expected to result in significant impacts to medical services, schools, public utilities, communications, water supplies, sewage/solid waste disposal, or stormwater systems, no mitigation measures will be necessary for those services or utilities.

The following mitigation measures will be implemented to reduce impacts to public services resulting from construction of the project:

- All operations personnel working on the turbines will work in pairs. In the unlikely event that an injury occurs while working in the nacelle, all staff will be trained in lowering injured colleagues from the nacelle. A rescue basket, specially designed for this purpose, will be kept at the operations and maintenance facility and will be available for use by local emergency medical services personnel. Training in rescue basket recovery will also be provided to local EMS personnel by the Applicant.
- The Applicant will provide all police, fire, and emergency medical personnel with emergency response details for the project including detailed maps of the project site access roads, Applicant contact information, procedures for rescue operations to the nacelles, and location of the rescue basket.
- Potential impacts on fire services will be mitigated by the following:
- Provisions for special training of fire district personnel for fires related to wind turbines;
- Training for EMS personnel in the use of a rescue basket that will be kept at the operations and maintenance facility for the purpose of removing injured employees from the WTGs;
- Providing detailed maps to fire districts that show all access roads to the project;
- Providing keys to a master lock system to fire districts that will enable emergency personnel to unlock gates that would otherwise limit access to the project;
- Use of spark arresters on all power equipment (e.g., cutting torches and cutting tools), when necessary due to extreme fire danger conditions;
- Informing workers at the project of emergency contact phone numbers and training them in emergency response procedures;
- Carrying fire extinguishers in all maintenance vehicles;
- Providing water supply for fire fighting locations beyond the contracted fire districts;

- Conducting FCC-style communication study or appropriate study to ensure that emergency responders communications will riot be derogated by the wind generators, thus eliminating or reducing all communications on site by any emergency responders;

- Implementing an FAA-style lighting plan to prevent aircraft mishaps to limit fire response;

- Having an environmental clean-up company under contract to provide services to protect the environment up to and beyond small incidents, including planning, implementing, and storing of all material considered to be harmful; and

- Supplying water for fire fighting at locations up and beyond the contracted fire districts to keep the fire in a manageable size incident;

11.2 Operation and Maintenance

During operation of the project, impacts to local services and utilities are expected to be insignificant. However, emergency preparedness planning will be implemented as mentioned above, to reduce potential impacts in the event of an emergency.

- The Applicant will work with Kittitas County Fire Marshal and effected fire districts for all aspects of operations.

12 CULTURAL RESOURCES

The Applicant has identified the mitigation measures described below.

Ground disturbing actions within a specified radius of any archaeological sites, either recorded during the initial survey or previously documented, will be monitored by a professional archaeologist to prevent damage or destruction to both known and unanticipated archaeological resources.

If any archaeological materials, including but not limited to human remains, are observed, excavation in that area will cease, and OAHP, the affected tribes and the Applicant will be notified. At that time, appropriate treatment and mitigation measures will be developed and implemented. If the project cannot be moved or re-routed 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 OAHP per RCW 27.53.060. The 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 their representatives present during earth-disturbing construction activities, the Applicant will comply with their wishes. In all cases, the project shall note all concerns raised through tribe requests.

13 TRAFFIC AND TRANSPORTATION

No significant unavoidable adverse impacts on traffic and transportation are associated with construction or operation of the proposed action. However, the Applicant has proposed the implementation of the following measures.

13.1 Construction

- The Applicant will prepare a Traffic Management Plan (to be submitted to Kittitas County prior to construction for review), with the construction contractor outlining steps for minimizing construction traffic impacts;
- The Applicant will provide notice to adjacent landowners when construction takes place to help minimize access disruptions;
- The Applicant will provide proper road signage and warnings of "Equipment on Road," "Truck Access," or "Road Crossings" along Vantage Highway;
- When slow or oversized wide loads are being hauled, appropriate vehicle and roadside signing and warning devices will be deployed per the Traffic Management Plan. Pilot cars will be used as the DOT dictates, depending on load size and weight;
- The Applicant will construct necessary site access roads and an entrance driveway that will be able to service truck movements of legal weight and provide adequate sight distance;
- The Applicant will encourage carpooling for the construction workforce to reduce traffic volume;
- In consultation with Kittitas County, the Applicant will provide detour plans and warning signs in advance of any traffic disturbances;
- The Applicant will employ flaggers as necessary to direct traffic when large equipment is exiting or entering public roads to minimize risk of accidents;
- Where construction may occur near the roadway, one travel lane will be maintained at all times;

In addition to mitigation measures proposed by the Applicant, the following will be implemented:

- Applicant will videotape Transporter Route 1 roadways to document pavement conditions before and after construction and address changes in discussions with the City of Kittitas and Kittitas County.

13.2 Operation

Operation and maintenance of the WHWPP would not significantly affect traffic, However, the following measure is proposed.

- Follow FAA guideline for a wind turbine lighting and warning system.

14 HEALTH AND SAFETY

In addition to those mitigation measures already identified above, the following would be implemented to reduce the risks to health and safety.

Fire and Explosion

The following provides the mitigation measures that would be implemented to reduce risk of fire and explosion.

Fire and Explosion Risk Mitigation Measures

Type of Impact Construction (C) Operation (O) Decommissioning (D)	Potential Fire or Explosion Source	Mitigation Measures
C,O,D	General Fire Protection	All onsite service vehicles will be fitted with fire extinguishers. Fire station boxes with shovels, water tank sprayers, etc., will be installed at multiple locations on site along roadways during summer fire season. A minimum of one water truck with sprayers will be present on each turbine string road during constriction activities during fire season
C,O,D	Dry vegetation in contact with hot exhaust catalytic converters under vehicles	No gas-powered vehicles will be allowed outside of graveled areas. Mainly diesel vehicles (i.e., without catalytic converters) will be used on site. Any vehicles used off road on site will be high-clearance vehicles.

Type of Impact Construction (C) Operation (O) Decommissioning (D)	Potential Fire or Explosion Source	Mitigation Measures
C,O,D	Smoking	Restricted to designated areas (outdoor gravel covered areas).
C,O	Explosives used during blasting for excavation work	Only state-licensed explosive specialist contractors are allowed to perform this work. Explosives require special detonation equipment with safety lockouts. Vegetation will be cleared from the general footprint area surrounding the excavation zone to be blasted. Standby water spray trucks and fire suppression equipment will be present during blasting activities.
C,O	Electrical fires	All equipment will be designed to meet NEC and NFPA standards. All area surrounding substation, fused switch risers on overhead pole line, junction boxes and pad switches will be graveled with no vegetation. A fire suppressing, rock-filled oil containment trough will be created around the substation transformer.
C,O,D	Lightning	Specially engineered lightning protection and grounding systems will be used at wind turbines and at substation. Footprint areas around turbines and substation will be graveled with no vegetation.
C,D	Portable generators – hot exhaust	Generators will not be allowed to operate on open grass areas. All portable generators will be fitted with

Type of Impact Construction (C) Operation (O) Decommissioning (D)	Potential Fire or Explosion Source	Mitigation Measures
		spark arrestors on exhaust system.
C,D	Torches or field welding on site	Immediate surrounding area will be wetted with water sprayer. Fire suppression equipment will be present at location of welder/torch activity.
C,O	Electrical arcing	Electrical designs and construction specifications will meet or exceed requirements of NEC and NFPA.

Release or Potential Release of Hazardous Materials

Emergency Medical Response

Medical emergencies would normally be handled by calling 911 and alerting the Emergency Medical Services (EMS) system. Ambulances are located in Ellensburg and Kittitas; Cascade Search and Rescue is located in Ellensburg. Emergency calls are dispatched through the sheriff's office to the fire districts that provide search and rescue support.

Kittitas Valley Community Hospital in Ellensburg serves the entire County. The hospital has level four trauma service, with a limited number of specialists available. Patients with head injuries; severe bums, and/or trauma are transported to a different facility, usually Harbor View Medical Center in Seattle. Less severe accident victims are sometimes transported to Yakima for hospitalization and treatment. There is a heliport on the roof of the hospital, and a helicopter is available for emergency response.

MedStar, a critical care transport service located in Moses Lake, Washington, also provides air ambulance support services to the County.

All operations personnel working on the turbines would work in pairs. All turbine maintenance staff would be trained in lowering injured personnel should an injury occur while working in the nacelle. A rescue basket, specifically designed for that purpose, would be kept at the operations and maintenance facility and would be available for use by local EMS staff. Training in use of the basket would be provided to local EMS staff.

Compliance with Standards

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.

Aircraft Impact

The 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.

Transmission Line Audible Noise and Electromagnetic Interference

The conductors for the proposed transmission line would be of sufficient diameter to control corona effects. Also, the applicant has indicated that special care would be employed during construction to minimize nicks and scrapes to the conductors.

Emergency Plans

Emergency plans would be prepared by the applicant to protect public health and safety, and the environment on and off the site in the case of a major natural disaster or industrial accident relating to or affecting the proposed project. The applicant would be responsible for implementing the plans in coordination with the local emergency response support organizations. The plans would address the following:

- medical emergencies;
- construction emergencies;
- project evacuation;
- fire protection and prevention;
- floods;
- extreme weather abnormalities;
- earthquakes;
- volcanic eruption;
- facility blackout;
- spill prevention, control, and countermeasures;
- blade or tower failure;

- aircraft impact;
- terrorism, sabotage, or vandalism; and
- bomb threat.

Local emergency response organizations will review and approve all plans before they were implemented. During the construction and startup period, the emergency plans would be revised, as needed, to conform to manufacturer and vendor safety information for the specific equipment installed. Preliminary operations and maintenance emergency plans would similarly be developed and approved prior to the start of project operations.

The project operating and maintenance group and all contractors would receive regular emergency response training as part of the regular safety-training program to ensure that effective and safe response actions would be taken to reduce and limit the impact of emergencies at the project site.

Exhibit B
Updated Table

Table 1. Rare plant target species for which surveys were conducted on the proposed Vantage Wind Energy Facility site, spring season 2006.

Scientific Name/ Common Name	Flowering/ Fruiting Period	Status	Habitat	Species Encountered (Yes/No)
Agoseris elata Tall agoseris	June-August	S	Meadows, open woods, and exposed rocky ridgetops	No
Anemone nuttalliana Pasque flower	May-August	S	Prairies to mountain slopes, typically on well-drained soils	No
Astragalus arrectus Palouse milk-vetch	April-July	S	Grassy hillsides, sagebrush flats, river bluffs, and openings in ponderosa pine and Douglas fir forests	No
Astragalus columbianus Columbia milk-vetch	March-June	SOC/T	Sagebrush steppe	No
Astragalus misellus var. pauper Pauper milk-vetch	April-mid June	S	Open ridgetops and slopes	No
Camissonia pygmaea Dwarf evening-primrose	June-August	T	Unstable soil or gravel in steep talus, dry washes, banks and roadcuts	No
Camissonia scapoidea Naked-stemmed evening primrose	May-July	S	Sagebrush desert, typically in sandy, gravelly areas	No
Collomia macrocalyx Bristle-flowered collomia	Late May-early June	S	Dry, open habitats	No
Corydalis aurea Golden corydalis	May-July	R1	Varied habitats, moist to dry and well-drained soils	No

Cryptantha rostellata Beaked cryptantha	Late April-mid June	S	Very dry microsites within sagebrush steppe	No

Table 1 (continued). Rare plant target species for which surveys were conducted on the proposed Vantage Wind Energy Facility site, spring season 2006.

Scientific Name/ Common Name	**Flowering/ Fruiting Period**	**Status**	**Habitat**	**Species Encountered (Yes/No)**
Cyperus bipartitus Shining flatsedge	August-September	S	Streambanks and other wet, low places in valleys and lowlands	No
Delphinium viridescens Wenatchee larkspur	July	SOC/T	Moist meadows, moist microsites in coniferous forest, springs, seeps, and riparian areas	No
Eatonella nivea White eatonella	May	T	Dry, sandy or volcanic areas within sagebrush-steppe	No
Erigeron basalticus Basalt daisy	May-June	C/T	Crevices in basalt cliffs on canyon walls	No
Erigeron piperianus Piper's daisy	May-June	S	Dry, open places, often with sagebrush	No
Hackelia hispida var. *disjuncta* Sagebrush stickseed	May-June	S	Rocky talus	No
Iliamna longisepala Longsepal globemallow	June-August	S	Sagebrush steppe and open ponderosa pine and Douglas fir forest	No
Lomatium tuberosum Hoover's desert-parsley	March-early April	SOC/T	Loose talus and drainage channels of open ridgetops within sagebrush steppe	No

Mimulus suksdorfii Suksdorf's monkey-flower	Mid April-July	S	Open, moist to rather dry places in sagebrush steppe	No
Nicotiana attenuata Coyote tobacco	June-September	S	Dry, sandy bottom lands, dry rocky washes, and other dry open places	No
Oenothera cespitosa ssp. *cespitosa* Cespitose evening-primrose	Late April-mid June	S	Open sites on talus or other rocky slopes, roadcuts, and the Columbia River terrace	No

Table 1 (continued). Rare plant target species for which surveys were conducted on the proposed Vantage Wind Energy Facility site, spring season 2006.

Scientific Name/ Common Name	**Flowering/ Fruiting Period**	**Status**	**Habitat**	**Species Encountered (Yes/No)**
Pediocactus simpsonii var. *robustior* Hedgehog cactus	May-July	R1	Desert valleys and low mountains	Yes
Pellaea breweri Brewer's cliff-brake	April-August	S	Rock crevices, ledges, talus slopes, and open rocky soils	No
Penstemon eriantherus var. *whitedii* Fuzzytongue penstemon	May-July	R1	Dry open places	No
Phacelia minutissima Least phacelia	July	SOC/S	Moist to fairly dry open places	No
Pyrrocoma hirta var. *sonchifolia* Sticky goldenweed	July-August	R1	Meadows and open or sparsely wooded slopes	No
Silene seelyi Seely's silene	May-August	SOC/T	Shaded crevices in ultramafic to basaltic cliffs and rock outcrops, and among boulders in talus	No
Tauschia hooveri Hoover's tauschia	March-mid-April	SOC/T	Basalt lithosols within sagebrush steppe	No

Joanna F. Valencia

From: David Iadarola [diadarola@invenergyllc.com]
Sent: Tuesday, February 12, 2008 4:53 PM
To: Joanna F. Valencia
Subject: RE: DAHP Comments
Attachments: DAHP Comments- Vantage.pdf; DAHP_comments_02_12_08.doc

Joanna,

Here is our response I guess I just for got to attach them with everything else if anything else comes up please let me know.

Thanks,

Dave Iadarola
Invenergy LLC
Office:(720)283-4694
Cell: (303)585-1406
diadarola@invenergyllc.com

From: Joanna F. Valencia [mailto:joanna.valencia@co.kittitas.wa.us]
Sent: Tuesday, February 12, 2008 12:19 PM
To: David Iadarola
Subject: RE: DAHP Comments

Dave,

Here are the comments. I don't anticipate any holds up. I was preparing packets to the Board and PC and just noticed that they weren't addressed. There were some questions that were raised by DAHP that I think might be helpful to be addressed.

Thanks,

Joanna

Joanna Valencia
Planner II
Kittitas County Community Development Services
[P] 509.962.7046
[F] 509.962.7682
www.co.kittitas.wa.us/cds

From: David Iadarola [mailto:DIadarola@invenergyllc.com]
Sent: Tuesday, February 12, 2008 11:04 AM
To: Joanna F. Valencia
Subject: Re: DAHP Comments

I believe we did have comments on that. Could you please forward mr the comment again and I will get you a response. I'm o the road right now so I will try and email it to you tonight.

Hope this isn't an issue and doesn't hold us up. Have a good one and I will talk to you soon.

Thanks,
Dave

----- Original Message -----
From: Joanna F. Valencia <joanna.valencia@co.kittitas.wa.us>
To: David Iadarola
Sent: Tue Feb 12 11:56:01 2008
Subject: DAHP Comments

Hi Dave,

I was just noticing that your response didn't include Dept. of Arch and Historic Preservation comments. Just curious. There was a mitigation response addressing cultural resources, but just wondering if you had any specific comments to the letter. I think I may have sent it to you in an email format.

Thanks,

Joanna

Joanna Valencia

Planner II

Kittitas County Community Development Services

411 N Ruby Street #2

Ellensburg, WA 98926

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STATE OF WASHINGTON

DEPARTMENT OF ARCHAEOLOGY & HISTORIC PRESERVATION

1063 S. Capitol Way, Suite 106 • Olympia, Washington 98501
Mailing address: PO Box 48343 • Olympia, Washington 98504-8343
(360) 586-3065 • Fax Number (360) 586-3067 • Website: www.dahp.wa.gov

November 19, 2007

Ms. Joanna Valencia
Planner
Kittitas County Community Development Services
411 N. Ruby, Ste. 2
Ellensburg, WA 98926

In future correspondence please refer to:
Log: 111907-12-KT
Property: Invenergy Vantage Wind Power Project
Re: Archaeological Review and Comment

Dear Ms. Valencia:

Thank you for contacting our office. We have reviewed the materials you provided for this project. We offer the following comments and concerns:

1. The report indicates that additional areas of effect such as staging areas, access roads, and turnarounds have not yet been surveyed. These areas will need to be surveyed prior to any ground disturbing activities, and we will need time to review the findings in these areas.
2. Is there Federal involvement or permitting required for this project, and if so, by what agency? The archaeological survey report discusses the sites in terms of their eligibility to the National Register of Historic Places (NRHP), but this only applies if there is Federal involvement. If not, under RCW27.53 all the archaeological sites are granted equal protection.
3. Five archaeological sites and 19 isolates have been located in the project footprint. Those sites should be avoided. If they cannot safely be avoided, then testing and possibly data recovery will be required prior to any ground disturbing actions within the boundaries of the archaeological sites, regardless of the sites' eligibility to the NRHP. This testing will require an excavation permit from this office per RCW 27.53 and WAC 25-48.
4. We do not concur that sites 45-KT-2762 through 2764 require no further work or are not eligible to the NRHP, as no subsurface testing was conducted at these sites.
5. We recommend a professional archaeologist monitor ground disturbing activities, including road building, turbine pad preparation, and utility line trenching. The monitor can assist in insuring the archaeological sites are avoided. General exclusion zones for both pedestrians and equipment should be established as part of this process.
6. Due to the large scale of this project, we recommend a written monitoring plan be developed to outline monitoring methods, expectations and procedures to follow in the event of a discovery. The monitor should attend pre-construction meetings and inform the contractors of this protocol and archaeological rules.
7. We also recommend close consultation with the Yakama Nation cultural committees and staff regarding the project and cultural landscape and other cultural resource issues.

These comments are based on the information available at the time of this review and on behalf of the State Historic Preservation. Please feel free to contact me should you have any specific questions about our request and we look forward to receiving this material. Thank you for the opportunity to review and comment. Should you have any questions, please feel free to contact me.

Sincerely,

Scott Williams
Assistant State Archaeologist
(360) 586-3088
scott.williams@dahp.wa.gov

CC: Johnson Meninick, YIN

February, 2008
Invenergy LLC Vantage Wind Power Project
Jones & Stokes Responses to SEPA Review Comments –

Washington Department of Archaeology & Historic Preservation (November 19, 2007 Letter of Comment)

Comment No. 1: "The report indicates that additional areas of effect such as staging areas, access roads, and turnarounds have not yet been surveyed. These areas will need to be surveyed prior to any ground-disturbing activities, and we will need to review findings in these areas"

> Response to Comment No. 1: Survey of additional project areas (e.g., staging, final access road alignments, etc.) will be conducted early in the design phase to allow for final modifications to the project to avoid cultural resources and for DAHP to review and approve the survey. It is currently anticipated that this will occur in March and April 2008.

Comment No. 2: "Is there Federal involvement or permitting required for this project, and if so, by what agency? The report discusses the sites in terms of their eligibility to the National Register of Historic Places (NRHP), but this only applies if there is Federal involvement. If not, under RCW27.53 all of the archaeological sites are granted equal protection."

> Response to Comment No. 2: There is no Federal land involved with the proposed project, however as noted in the SEPA Checklist, there may be need for a Section 10/404 permit from the U.S. Army Corps of Engineers for access improvements (e.g., culvert replacement or extension) from the Vantage Highway across Schnebly Coulee. NRHP was mentioned in the event such a federal permit is required.

Comment No. 3: "Five archaeological sites and 19 isolates have been located in the project footprint. Those sites should be avoided. If they cannot be safely avoided, then testing and possible data recovery will be required prior to any ground disturbing actions within the boundaries of the archaeological sites, regardless of the sites' eligibility to the NRHP. This testing will require an excavation permit from this office per RCW 27.53 and WAC 25-48."

> Response to Comment No. 3: Comments noted. The sites and isolates will be avoided wherever possible. All sites that cannot be avoided will be tested and results reported to DAHP during the project design phase. All required excavation permits will be obtained from DAHP prior to testing.

Comment No. 4: "We do not concur that sites 45-KT-2762 through 2764 require no further work or are not eligible to the NRHP, as no subsurface testing was conducted at these sites."

Response to Comment No. 4: Comment noted. Sites 45-KT-2762 through 2764 will be avoided. See response to Comment No. 3 above.

Comment No. 5: "We recommend a professional archaeologist monitor ground-disturbing activities, including road building, turbine pad preparation, and utility line trenching. The monitor can assist in insuring that the archaeological sites are avoided. General exclusion zones for both pedestrians and equipment should be established as part of this process."

Response to Comment No. 5: Recommendation noted. As recommended by DAHP, exclusion zones will be maintained around the archaeological and historical sites identified during the cultural resource survey, even though the resources may not meet the standard qualifications for NRHP. The project archaeologist will flag off or otherwise delineate the archaeological sites with a 100-foot buffer. To prevent damage or destruction to both known and unanticipated archaeological resources, a professional archaeologist will monitor ground-disturbing activities (e.g., road building, turbine pad preparation, utility line trenching, etc.) within a specified radius of any archaeological sites, either those previously recorded or recorded during the initial or any subsequent surveys. If any archaeological materials, including but not limited to human remains, are observed, DAHP, the Yakama Tribe and the applicant will be notified. At that time, appropriate treatment and mitigation measures will be developed and implemented. The archaeologist will remove any flagging tape or pin flags at the end of the construction-monitoring phase of the project.

The report will be changed to state that further testing is recommended for sites 45KT2762 through 2764 in order to determine status.

Comment No. 6: "Due to the large scale of this project, we recommend a written monitoring plan be developed to outline monitoring methods, expectations, and procedures to follow in the event of discovery. The monitor should attend pre-construction meetings and inform the contractors of this protocol and archaeological rules."

Response to Comment No. 6: The applicant will prepare a written monitoring plan of methods, expectations, and procedures to follow in the event of discovery. The monitoring plan will be developed following protocols that have been successfully applied for other wind energy projects (e.g., Wild Horse) in Kittitas County.

Comment No. 7: "We also recommend close consultation with the Yakama Nation cultural committees and staff regarding the project and cultural landscape and other cultural resource issues."

Response to Comment No. 7: Recommendation noted. The applicant will establish a line of communication with the Yakama Nation, and will comply with tribal requests to the best of our abilities. In all cases, the project shall note all concerns raised through tribe requests.

Joanna F. Valencia

From: David Iadarola [diadarola@invenergyllc.com]
Sent: Monday, February 25, 2008 7:15 PM
To: Joanna F. Valencia
Subject: RE: SEPA 2-25-08 Draft
Attachments: SEPA MDNS Vantage Wind Power Project 2-25-08 w redline.doc

Joanna,
Here are our final comments. In the document also. Here are a couple of questions for you.

1. I think the requirement to provide fire water supply to areas beyond the contracted fire districts is a little unusual. Not sure how this is to be interpreted. Are you expecting us to run a fire main out to each turbine location?

Let me know if you have any questions for me. Have a great week.

Thanks,

Dave Iadarola
Invenergy LLC
Office:(720)283-4694
Cell: (303)585-1406
diadarola@invenergyllc.com

From: Joanna F. Valencia [mailto:joanna.valencia@co.kittitas.wa.us]
Sent: Monday, February 25, 2008 4:27 PM
To: David Iadarola
Subject: SEPA 2-25-08 Draft

Dave,

Please find attached. I couldn't find the specific language regarding the collector system/lines to address so if you could give me a specific reference point that would be great.

If you have any further comments, it would be great if we could touch base by 10am tomorrow.

Thanks,

Joanna

Joanna Valencia
Planner II
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SEPA
MITIGATED DETERMINATION OF NONSIGNIFICANCE

File: Vantage Wind Power Project (File No. WSA-07-01): A Wind Farm Siting Application: Pre-Identified Areas pursuant to Kittitas County Code 17.61A.035.

Proponent: Dave Iadarola- Invenergy Wind North America, LLC
2580 W. Main Street
Littleton, CO 80120

Location: North of I-90 and south of Vantage Highway between Kittitas and Vantage and is approximately 7 miles west of the Columbia River and approximately 3 miles southeast of the Wild Horse Wind Power Project.

Lead Agency: Kittitas County Community Development Services

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030 (2) (c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request. The lead agency for this proposal has also determined that certain mitigation measures are necessary in order to issue a Determination of Non-Significance for this proposal. Failure to comply with the mitigation measures identified hereafter will result in the issuance of a Determination of Significance (DS) for this project. These mitigation measures for the project are as follows:

1 EARTH

1.1 Erosion Control during Project Construction

- Before construction begins, the Applicant will apply for coverage under the Washington Department of Ecology's Construction Stormwater General NPDES Permit. The Applicant will develop a detailed SWPPP meeting the requirements of the General Permit.
- The SWPPP would include both structural and non-structural BMPs. Examples of structural BMPs include installation of silt fences and other physical controls to divert flows from exposed soils or otherwise limit runoff and pollutants from exposed portions of the site. Examples of nonstructural BMPs include materials handling protocols, disposal requirements, and spill prevention methods,
- The SWPPP would be prepared along with a detailed project grading plan by the Engineering, Procurement, and Construction (EPC) contractor when design-phase topographic surveying and mapping are completed for the site. The EPC contractor would implement the construction BMPs, with enforcement by the Project's environmental monitor, who would be responsible for implementing the SWPPP.

- Site-specific BMPs would be identified on the construction plans for site slopes, construction activities, weather conditions, and vegetative buffers. The sequence and methods of construction activities would be controlled to limit erosion. Also, the majority of areas that would be disturbed by the project are sloped at 20% or less. Clearing, excavation, and grading would be limited to the smallest areas necessary to construct the project. Surface protection measures such as erosion control blankets or straw mulching may also be required during construction or before restoration if the potential for erosion is high in a particular portion of the site.

- All construction practices would emphasize erosion control through such measures as:

    - using straw mulch and vegetating disturbed surfaces,

    - retaining original vegetation wherever possible,

    - directing surface water runoff away from denuded areas, keeping runoff velocities low by minimizing slope steepness and length, and

    - providing and maintaining stabilized construction entrances.

- Work on the access roads would include grading and resurfacing (with additional gravel) existing roads and constructing new roads. The site would generally have gravel roadways with a low-profile design, allowing water to flow over them in most areas. Erosion control measures to be installed during work on the access roads include the following:

    - maintaining vegetative buffer strips between the affected areas and any nearby receiving waterways;

    - installing sediment fence/straw bale barriers on disturbed slopes and other locations shown in the SWPPP;

    - installing silt fences on steep, exposed slopes; and

    - planting affected areas with designated seed mixes,

- At each turbine location, a crane pad area of approximately 4,000 square feet would be graded and covered with crushed rock. During construction, silt fences, hay bales, or matting would be placed on the down-slope side of the crane pad. Wind turbine equipment such as blades, tower sections, and nacelles would be transported and off-loaded at each turbine location near the foundation and crane pad. After construction, disturbed areas at and around all crane pad staging areas would be reseeded as necessary to restore the area as closely as possible to its original condition.

- Design specifications and further details for excavation, blasting, and other activities associated with the removal and preparation of quarry materials for project construction will be included in the project plans and specifications.

- The applicant shall apply for a Sand and Gravel General Permit with the Department of Ecology before any quarrying or gravel mining.

1.2 Erosion Control during Project Operation

- The project operations group would be responsible for monitoring the SWPPP measures that are implemented during construction to ensure that they continue to function properly. Final designs for the permanent BMPs would be incorporated into the final construction plans and specifications prepared by the engineering team's civil design engineer. The EPC contractor's civil design engineer

and the project's engineering team will prepare an operations manual for permanent BMPs. The permanent stormwater BMPs would include erosion and sedimentation control through site landscaping, grass, and other vegetative cover. The final designs for these permanent BMPs would conform to the Washington State Department of Ecology Stormwater Management Manual for Eastern Washington (September 2004).

- Operational BMPs will be adopted, as part of the SWPPP, to prevent stormwater pollution by implementing good housekeeping, preventative, and corrective maintenance procedures; steps for spill prevention and emergency cleanup; employee training programs; and inspection and record-keeping practices as necessary. Examples of good operational housekeeping practices identified by the Applicant that would be used by the project include the following:
    - prompt cleanup and removal of spillage,
    - regular pickup and disposal of garbage,
    - regular sweeping of floors,
    - HAZMAT data sheet cataloguing and recording, and
    - Proper storage of containers.
- The project operators would periodically review the SWPPP against actual practice. The plant operators would determine if the controls identified in the plan are adequate and if employees are following them.

1.3 Earthquakes

- The Applicant shall design and construct project facilities in accordance with engineering standards in effect at the time of construction, which would be International Building Code (IBC) requirements. The wind turbines would be equipped with vibration sensors that would automatically shut down the turbine in the event of a severe earthquake.
- Prior to final project design, a detailed geotechnical evaluation and field survey would be completed so that no turbine locations or other project elements lie immediately above a high-risk fault. Geotechnical explorations would be conducted at each location where a deep foundation is required (i.e., at each turbine and meteorological tower location) and at the substations and O&M facility.
- Current engineering standards applicable in Kittitas County would be used in design of the project facilities, to assure that the facility performance is acceptable during a design earthquake. Given the relatively low level of earthquake risk for the site, application of the IBC in project design would provide adequate protection for the project facilities and for human safety.
- The Applicant would prepare on-site emergency plans to protect the public health and safety and environment on and off the project site in case of a major natural disaster such as an earthquake. The Applicant proposes that detailed emergency plans developed prior to project construction and operation contain the following measures to mitigate for potential hazards during an earthquake:
    - Personnel would seek safety at the nearest protected location.
    - Personnel would take cover to avoid falling debris.
    - Personnel would check the immediate area to identify injuries and equipment failures and report to the site construction manager, O&M manager, or designee,

- Personnel would be instructed to report to a protected area, as necessary, or would continue monitoring the operating equipment.
- A determination would be made about missing personnel and a search and rescue effort would be initiated if safe and appropriate.
- If the conditions warranted, the Kittitas County Emergency Communications Center and BPA or PSE (the electric transmission line operator) would be notified.
- Turbines could also be shut down manually as required depending on the severity of the earthquake and brought back online after they have been cleared for restart.
- Off-duty personnel would report to the site, if they are able, as designated in the emergency plan.
- If the structures are intact and other plant safety issues are under control, the O&M manager would approve re-entry of personnel to any turbines for search and rescue efforts.

1.4 Volcanic Eruptions

- In the event of damage or potential impact from a volcanic eruption, the project facilities would be shut down until safe operating conditions returned. If an eruption occurred during construction, a temporary shutdown would most likely be required to protect equipment and human health.
- To help protect against the impacts of dust and ash all key outdoor project facilities would be coated with corrosion-resistant materials. The turbine rotor blades and other fiberglass shrouds, such as those on the nacelles for example, are resistant to wind-blown dust and precipitation. The turbine towers would have venting and filtering in the doors to prevent wind blown dust from reaching the internal electrical equipment and machinery.
- The Applicant would prepare on-site emergency plans to protect the human health and safety and the environment on and off the project site in case of a major natural disaster such as a volcanic eruption. The Applicant proposes the following actions be taken to reduce potential impacts from a volcanic eruption:
    - Close all O&M facility vents to prevent ash from entering buildings.
    - Cover data processing equipment and computers not required for safe project operation or shutdown, and shutdown other electronic equipment sensitive to dust (ash).
    - If the dust load is heavy, shut down the project facilities.
    - If the conditions warrant, notify the Kittitas County Emergency Communications Center and BPA or PSE (the electric transmission line operator).
    - Determine whether employees should be sent home immediately before roads become unsafe or if personnel must be sheltered on-site.
    - Initiate ash cleaning operations by personnel wearing protective equipment.
    - Coordinate all ash disposal activities with local Kittitas County officials.

1.5 Landslides

- The Applicant proposes to locate project facilities in areas with relatively low-gradient topography with a thin cover of soil that overlies basalt bedrock. No project facilities would be constructed on unstable slopes or landslide-susceptible terrain. A sufficient setback distance would be provided between the landslide identified in the southern portion of the project site and the nearest project facilities.

- In addition, the following mitigation measure would be implemented. Prior to project construction, additional geotechnical explorations, including drilling and ground-penetrating radar (GPR) surveys, would be completed as necessary to delineate the limits of the landslide area to verify that the turbines are not placed in potentially unstable terrain and to provide final recommendations for safe setback distances from known or suspected slide areas:

1.6 Unique Features

- In the unlikely event that unique physical or unique geological features such as petrified gingko deposits were discovered at the site during construction, the Applicant has stated that construction personnel would stop work at that location and notify the project manager. The project manager would immediately contact appropriate personnel at the Washington State Historic Preservation Office to coordinate an appropriate response.

1.7 Contaminated Soils

- The Applicant commissioned WEST, Inc. to conduct a Phase I Environmental Site Assessment (ESA) of the site to be developed. The Phase I ESA was performed in accordance with the scope and limitations of American Society of Testing and Materials Practice E 1527. The results of the Phase I ESA indicated no evidence of environmental contamination within the project site. Based on these findings, the potential for encountering environmental contamination during project construction or operation is low. In the unlikely event that contaminated soils are encountered, the Applicant shall notify appropriate personnel with the Washington State Department of Ecology. Contaminated soils would be handled and disposed of according to state and local requirements.

1.8 Decommissioning Plans

- Prior to commencement of construction, the Applicant will prepare a detailed Initial Site Restoration Plan. The plan shall be developed with the active participation of the County, and shall be submitted to the County for its review and approval, provided however such approval shall not be unreasonably withheld.

- If the project were to terminate operations, the Applicant would obtain the necessary authorization from the appropriate regulatory agencies to decommission the facilities.

- All foundations for above-grade facilities would be removed to a depth of 3 feet below grade and unsalvageable material would be sent to authorized sites for disposal. The soil surface would be restored as close as reasonably possible to its original condition. The project's substation(s) is generally valuable and, as is often the case on older power projects, the-substation would revert to the ownership of the utility (PSE and/or BPA). If the overhead transmission feeder lines could not be used by the utility, all structures (including the portion of pole foundations within 3 feet below the ground surface), conductors and cables would be removed.

- Reclamation procedures would be based on site-specific requirements and techniques commonly employed at the time the area is to be reclaimed, and would include regrading, adding topsoil, and reseeding all disturbed areas. Reseeding would be done with appropriate seed mixes, based on native

plant types in the project site vicinity. Decommissioned roads would be reclaimed or left in place based on landowner preferences, and rights of way would be vacated and surrendered to the landowners.

- Although no hazardous materials will be used on the site, an audit will be performed of the relevant operation records and a project site survey will be performed to determine if a release of any hazardous material has occurred. An inspection of all facilities will be performed to determine if any hazardous or dangerous materials (as then defined by regulation) are present. The inspection will record the location, quantity, and status of all identified materials

- As part of the decommissioning plan, Permittee shall submit for approval by Kittitas County in collaboration with WDFW and WDOE, a final site restoration plan to ensure proper revegetation of the site when the project ceases operations. The plan shall be prepared by a firm with proven expertise in restoration of shrub steppe lands. The final site restoration plan shall provide for the return of the project site to pre-project, native shrub steppe habitat in good condition, following removal of turbines and infrastructure.

2 AIR QUALITY

- All vehicles used during construction will comply with applicable federal and state air quality regulations for tailpipe emissions;

- Operational measures such as limiting engine idling time and shutting down equipment when not in use will be implemented;

- Active dust suppression will be implemented on unpaved construction access roads, parking areas and staging areas, possibly using water-based dust suppression materials in compliance with state and local regulations;

- Housekeeping measures around batch plant and rock crushing facilities to prevent buildup of fine materials;

- Traffic speeds on unpaved access roads will be kept to 25 mph to minimize generation of dust,

- Carpooling among construction workers will be encouraged to minimize construction-related traffic and associated emissions;

- Disturbed areas will be replanted or graveled to reduce wind-blown dust; and

- Erosion control measures will be implemented to limit deposition of silt to roadways.

- The air quality permit for the temporary rock crusher and the temporary concrete batch plant will require the use of emission control devices to reduce dust generated by these processes. Water sprays will be used on the rock crusher and the concrete batch plant dry loading operations, and a fabric filter will be used for the Portland cement silo.

- No air quality mitigation is proposed for project operations as there would be no air or odor emissions generated by stationary sources. Dust abatement measures implemented during operation would be continued as appropriate.

3 WATER RESOURCES

- The proposed design of the project incorporates numerous features to avoid and/or minimize impacts on water resources. The project layout has been designed to avoid any impacts on surface waters and groundwater. Features of the project that are designed to avoid or minimize impacts include:

    - minimizing new road construction by improving and using existing roads and trails instead of constructing new roads;

    - not developing wells on site for construction, and using only off-site sources of water for construction ~~and operation~~; Wells will be considered for potable water supply and domestic use for the O&M building. All required permits and studies will be obtained as needed. and

    - Locating roads, underground cables, turbine foundations, transmission poles and other associated infrastructure outside any surface water or other sensitive resources.

- The applicant shall avoid drainage crossings to the maximum extent feasible; complying with federal, state, and local ordinances; and implementing a formal SWPPP and BMPs during construction.

3.1 Construction General Stormwater Pollution Prevention Measures

Stormwater Pollution Prevention Plan

- A detailed Construction SWPPP will be developed for the project to help minimize the potential for discharge of pollutants from the site during construction activities. The SWPPP will be designed to meet the requirements of the Ecology General Permit to Discharge Stormwater through its stormwater pollution control program (Chapter 173-220 WAC) associated with construction activities. Applicant will obtain coverage under the Washington Department of Ecology Construction Stormwater General Permit prior to the start of project construction. A SWPPP meeting the conditions of the Stormwater General Permit for Construction Activities shall be prepared and submitted to the County along with a Notice of Intent (NOI) for construction activities prior to the start of project construction. Similar to the Construction SWPPP, an Industrial SWPPP meeting the conditions of the Stormwater General Permit for Industrial Activities will be prepared and Applicant will obtain coverage under the Washington Department of Ecology Industrial Stormwater General Permit.

- Ecology's Stormwater Management Manual for Eastern Washington will be used for developing the SWPPP and BMPs.

- The SWPPP will include both structural and nonstructural BMPs. Examples of structural BMPS could include the installation of silt curtains and/or other physical controls to divert flows from exposed soils or otherwise limit runoff and pollutants from exposed areas of the site. Examples of nonstructural BMPs include management practices such as implementation of appropriate materials handling, disposal requirements, and spill prevention methods.

- The SWPPP will be prepared along with a detailed project grading plan designed by the EPC Contractor when design-level topographic surveying and mapping are prepared for the project site. The final configuration of proposed improvements will be overlaid onto the detailed topographic maps, and the project civil design engineer will establish the locations and types of construction BMPs to be required of the EPC Contractor. These details will be included on an overall map of the project site and submitted to the County prior to construction.

- A narrative section of the SWPPP will describe the intended installation sequence and function of the selected BMPs, and present the sizing calculations. The plan will also identify the selected minimum

standards to which each of the BMPs is to be constructed or installed. When prepared at this level of detail, the document would meet the requirements of the Stormwater Construction Activity NPDES permit system, and would accurately describe to the EPC Contractor and the project site construction management team the improvements and actions required during construction. The SWPPP will then be included in the construction bid and contract documents. The EPC Contractor will implement the construction BMPs, with enforcement supervised by the project's environmental monitor, who would be responsible for implementing the SWPPP.

General Stormwater Pollution Control Measures

- Site-specific BMPs will be identified on the construction plans for the site slopes, construction activities, weather conditions, and vegetative buffers. The sequence and methods of construction activities will be controlled to limit erosion. Clearing, excavation, and grading will be limited to the minimum areas necessary for construction of the project. Surface protection measures, such as erosion control blankets or straw matting, also may be required prior to final disturbance and restoration if potential for erosion is high.

- All construction practices will emphasize erosion control over sediment control through such non-quantitative activities as:

    - straw mulching and vegetating disturbed surfaces,
    - retaining original vegetation wherever possible,
    - directing surface runoff away from denuded areas,
    - keeping runoff velocities low through minimization of slope steepness and length, and
    - providing and maintaining stabilized construction entrances.

A more detailed description of the materials, methods, and approaches used as part of the BMPs for effective stormwater pollution prevention and erosion control are as follows:

- **Rain Level Monitoring**—The environmental monitor will be responsible for checking and recording precipitation levels at the project site using a rain gage. This benchmark will be used to determine the performance of the SWPPP measures that have been implemented during construction. After construction, the O&M group will also continue to monitor rainfall amounts and monitor the in-place erosion control systems while re-seeded areas become more established. Modifications will be performed where needed by the O&M group after project construction is completed.

- **Mulching**—Loose straw will be spread and punched into the ground in all areas where vegetation has been cleared.

- **Temporary Straw Bale and Silt Fence Sediment Barriers**—Temporary straw bale barriers and sediment fences will be inspected by the Contractor immediately after each rainfall and at least daily during prolonged rainfall. Any required repairs, relocations, or additions will be made promptly. No more than 1 foot of sediment will be allowed to accumulate behind straw bales or silt fence sediment barriers. Sediment will be removed and re-graded into slopes. New lines of barriers installed uphill of sediment-laden barriers will be considered based on the rate at which the 1 foot of sediment accumulates.

  Silt fences and straw bale sediment barriers will be maintained throughout the construction period and beyond, until disturbed surfaces have been stabilized with vegetation. Silt fence construction

specifications, including fabric type, support spacing, and total length will be determined by actual construction conditions during final design of the facilities.

- **Check Structures and Sediment Traps**—Check structures, such as rock dams, hay bale check dams, dikes and swales will be-used, where appropriate, to reduce runoff velocity as well as to direct surface runoff around and away from cut-and-fill slopes. Swales and dikes may also be used to direct surface water toward sediment traps.

- **Matting and Erosion Control Blankets**—Depending on weather conditions during the construction period, straw or jute matting or other suitable erosion control blankets will be used on the pad slopes and the drainage channel slopes if direct rainfall on the slopes would result in erosion prior to stabilization.

- **Control of Excavation Dewatering**—Although no dewatering is anticipated, excavation work requiring dewatering discharge will be directed to the surrounding upland areas, away from sensitive resources (e.g., wetlands, drainages, and seeps). Dewatering water will be pumped through a hose that will be moved as the water is pumped out to distribute the groundwater over a large surface area to allow it to evaporate and/ or infiltrate and avoid causing increased erosion or stormwater pollution. There will be no direct discharge to surface waters or riparian areas from dewatering activities.

No project facility would be located closer than approximately 200 feet from a riparian area, although the maximum setback that would be required by WDOE guidelines would be only 50 feet.

- **Stormwater Pollutants (Waste, Debris, Chemicals)**—In addition to erosion and sedimentation control on the project site, it is important to reduce potential for chemical pollution of surface waters and groundwaters during construction. Source control is the most effective method of preventing chemical water pollution. All potential pollutants, including waste materials and demolition debris, that occur on site during construction will be handled and disposed of in a manner that does not cause contamination of stormwater.

The only potential water pollutants that would be transported and used in significant quantities during construction are diesel fuels and gasoline, which will be transported and stored in accordance with state and federal regulations by appropriately licensed and trained petroleum transport professionals. Other potential water pollutants include lubricating and mineral oils, chemical cleaners, and herbicides in small quantities below state and federal regulatory thresholds. Handling of these materials will be conducted in a manner that is protective of the environment and in accordance with applicable federal and state requirements and with the BMPs and the Spill Prevention, Containment, and Control Plan.

In the unlikely event of a fuel, oil, or chemical spill, project personnel will activate the Spill Prevention, Containment, and Control Plan.

- **Environmental Monitor**—The proposed environmental monitor will be responsible for locating any necessary clean fill disposal sites for excess excavation spoils. To control the release of sediment from the disposal sites, silt fencing with a straw bale barrier will be installed on the downslope side of all disposal areas if additional sediment or erosion control measures are determined to be necessary. The site environmental monitor will be responsible for planning, implementing, and maintaining BMPs for:

    - neat and orderly storage of any construction chemicals and spent containers in lined, bermed areas;

    - materials handling and spill prevention procedures; and

    - regular disposal of construction garbage and debris using on-site dumpsters.

- **Revegetation**—All areas that are affected by the construction outside of the graveled areas and rock quarries will be seeded when there is adequate soil moisture. They will be re-seeded if healthy cover vegetation does not grow. The sediment fence and check dams will remain in place until the affected areas are well vegetated and the risk of erosion has been eliminated. The project operations group will remove the sediment fence at this time.

In addition the following specific facility control measures and BMPs for effective stormwater pollution prevention and erosion control measures will be implemented as part of the SWPPP:

- **Foundation Construction Stormwater Pollution Control Measures**— Foundation construction would require significant excavation at each wind turbine location. Excavation materials will be stored adjacent to the foundation holes as the forms, rebar and bolts are assembled and as the concrete cures after it is cast in place. Sediment fences, hay bales or matting will be installed on steeper down slopes near the storage piles as necessary. Once the concrete cures, excavated materials would be used for backfilling.

- **Access Roads Stormwater Pollution Control Measures**—Work on the access roads would include grading and re-graveling existing roads and constructing new roads. The site would have gravel roadways that generally would be a low-profile design, allowing water to flow over them in most areas. Erosion control measures to be installed during the work on the access roads include:

    - maintaining vegetative buffer strips between the affected areas and any nearby waterways;

    - installing sediment fence/straw bale barriers on disturbed slopes and other locations shown on the SWPPP;

    - providing temporary sediment traps and sediment type mats downstream of seasonal stream crossings;

    - installing silt fencing on steeper exposed slopes; and

    - planting designated seed mixes at impacted areas.

- **Turbines**— At each turbine location, a crane pad area of approximately 4,000 square feet would be graded in place and covered with road rock. During construction, silt fences, hay bales, or matting will be placed on the down slope side of the crane pad areas. Wind turbine equipment such as the blades, tower sections, and nacelles would be transported and off-loaded at each turbine location near the foundation and crane pad. After construction, disturbed areas around all crane pad staging areas will be re-seeded with an appropriate seed mix.

- **Underground Cable Trenching Stormwater Pollution Control Measures**— Underground electrical and communications cables would be placed in 3- to 5-foot-wide trenches along the length of each wind turbine string corridor. In some cases, trenches would run from the end of one turbine string to the end of an adjacent turbine string to link turbines via the underground network. Trenches would be excavated from 1.5 to 4 feet deep, depending on the underlying soil/rock conditions. Excavated materials would be piled alongside the cable trenches for backfilling after cable installation, the excavated materials typically would remain in an exposed state for approximately 2 weeks. Sediment fences, hay bales, or matting will be installed on steeper downslopes near the storage piles. After backfilling is completed, excess excavated soils will be spread around the surrounding area and contoured to the natural grade. Finally, the area will be re-seeded with an appropriate seed mix.

- **Overhead Collector Line Construction Stormwater Pollution Control Measures**—Construction of the overhead pole lines would require excavation for setting the poles. Excavated materials would be piled alongside the excavations for backfilling after pole installation. Sediment fences, hay bales, or matting will be installed on any steep downslopes near the storage piles. After backfilling, excess excavated soils will be spread around the surrounding area and contoured to the natural grade. Cobbles and rocks too large for backfilling will be crushed for gravel and used in rock check dams or to support other on-site erosion control measures. Finally, the area will be re-seeded with an appropriate seed mix.

- **Substation Construction Stormwater Pollution Control Measures**—The substation is generally flat, and the base area would be graded and covered with a sub-base rock and a graveled surface on top. Foundation and underground trenching excavation spoils would be handled in the same manner as described in the above sections regarding foundations and underground cable trenches. Disturbed areas surrounding the substation perimeter will be contoured to the natural grade, covered in straw mulch, protected for erosion control, and re-seeded as appropriate to the adjacent slopes. The main substation transformers, which are filled with mineral oil, are equipped with an oil level meter and float switch. Oil containment catch trenches would surround the outer foundation perimeters of transformers.

- **Final Road Grading and Site Clean Up Stormwater Pollution Control Measures**— A final site cleanup will be made before turning the project over to the O&M group. In accordance with the Erosion and Sediment Control Plan for access road improvement and construction, County roads will be restored to at least their pre-project condition and to the satisfaction of the County Public Works Department.

- **Cement Batch Plant Stormwater Pollution Control Measures**—The batch plant would use outdoor stockpiles of sand and aggregate. These stockpiles would be located to minimize exposure to wind. Sediment fences, hay bales, or matting will be installed near the storage areas as necessary. Cement would be discharged via screw conveyor directly into an elevated storage silo without outdoor storage. Construction managers will exercise good housekeeping practices and conduct regular cleanings of the plant, storage, and stockpile areas to minimize buildup of fine materials.

- For areas used for crushing and the batch plant, ~~F~~following completion of construction activities the Applicant's contractor will rehabilitate the sites by dragging the top of both of the 500-square foot crushing and batch plant areas with a blade machine and re-seeding the area with a designated seed mixture as applicable.~~.~~

- It is not anticipated that surface runoff control facilities beyond the control measures described above would be required. Project engineers will determine specific siting of the control measures after final design has been completed. The Applicant will provide design assumptions, including storm events and plans, when they have been completed.

3.2 Operational General Stormwater Pollution Prevention Measures

- Suggest deleting this first line as BMPs implemented during construction will not be relevant once construction is complete.]~~As described above, the Applicant will prepare a SWPPP as part of the final design. The project operations group will be responsible for monitoring the SWPPP measures that were implemented during construction to ensure they continue to function properly.~~ Final designs for the permanent BMPs, to the extent they are required will be incorporated into the final construction plans and specifications prepared by the civil design engineer. An operations manual for the permanent BMPs will be prepared by the EPC Contractor civil design engineer and the project's engineering team.

- Operational BMPs will be adopted, as part of the SWPPP, to implement good housekeeping, preventive and corrective maintenance procedures, steps for spill prevention and emergency cleanup, employee training programs, and inspection and recordkeeping practices, as necessary, to prevent stormwater and groundwater pollution.

- Examples of good operational housekeeping practices, which will be employed by the project, include the fallowing:

    - prompt cleanup and removal of spillage;
    - regular pickup and disposal of garbage;
    - regular sweeping of floors;
    - HAZMAT data sheet cataloging and recording; and
    - proper storage of containers.

- No project facility would be located closer than approximately 200 feet from a riparian area.

Transformer Oil Containment

The oil containment system for the substations would consist of a perimeter containment system, large enough to contain the full volume of transformer mineral oil with a margin of safety, surrounding the main substation transformers. The trough would be poured as part of the transformer concrete foundation or would consist of a heavy oil-resistant membrane that is buried around the perimeter of the transformer foundation,

The trough and/or membrane would drain into a common collection sump area that would be equipped with a sump pump designed to pump rainwater out of the trough to the surrounding area away from nearby surface waters or sensitive areas (e.g., wetlands, springs, seeps). In order to prevent the sump from pumping oil out to the surrounding area, it will be fitted with a sensor that would shut off the sump if oil is detected. A failsafe system with redundancy is built into the sump controls—the transformers are also equipped with oil-level sensors. If the oil level inside a transformer drops as a result of a leak in the transformer tank, it would also shut off the sump pump system to prevent it from pumping oil, and an alarm would be activated at the substation and in the main project control (SCADA) system. The trough would be large enough to contain the full volume of oil plus 10% reserve volume.

Discharges from the containment system would be directed to upland areas and away from nearby surface waters or sensitive areas (e.g., wetlands, springs, seeps). Discharge from the containment system will be in compliance with laws governing the discharge of oil as specified in the Code of Federal Regulations (CFR) under 40 CFR Part 110.3:

> § 110.3 Discharge of oil in such quantities as "may be harmful" pursuant to section 311(b) (4) of the Act. [See below Note]
>
> For purposes of section 311(b) (4) of the Act, discharges of oil in such quantities that the Administrator has determined may be harmful to the public health or welfare or the environment of the United States include discharges of oil that:
>
> (a) Violate applicable water quality standards; or
>
> (b) Cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines. [61 FR 7421, Feb. 28, 1996]

Note: Act means the Federal Water Pollution Control Act, as amended 33 U.S.C. 1251 et seq., also known as the Clean Water Act.

Water in the containment system that shows obvious indicators of potentially violating appreciable water quality standards, i.e., the water exhibits an oily sheen as specified under 40 CFR Part 110(b), will be removed from the containment system and disposed of in accordance with applicable federal, state and local laws.

4 VEGETATION AND WETLANDS

- Shrub steppe is considered a priority habitat by WDFW. As such, the Applicant has proposed 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 (WDFW, August 2003) for siting and mitigating wind power projects east of the Cascades. These guidelines include implementing a WDFW approved restoration plan for the impacted areas that will include:
    - site preparation,
    - reseeding with appropriate vegetation,
    - noxious weed control, and
    - protection from degradation
- Any mitigation for impacts to vegetation on the project site should at the 2:1 ratio for shrub steppe vegetation.
- Best management practices (BMPs) will be implemented during construction to control erosion and surface water runoff, and as presented below for noxious weed control.
- The applicant will use BMPs during construction to minimize impacts to shrub steppe habitat and facilitate habitat restoration.
- Construction activities outside of the hardened footprint of the project (i.e. "temporary disturbance areas") shall be done during the late spring, summer and fall when soil moisture is very low in order to minimize damage to soils and plants. In the event that construction extends into the winter months, the applicant shall implement additional measures to minimize construction impacts. The applicant will work with WDFW if such a scenario occurs to ensure impacts are addressed and appropriately mitigated for.
- Additional rare plant surveys shall be conducted during Spring 2008 to cover any of the proposed facilities, including, but not limited to access roads, collector lines, substation, O&M Facilities and laydown areas not covered by the previous survey. The survey shall be submitted to the County, the Washington State Department of Natural Resources, and the Washington State Department of Fish and Wildlife for review.
- The hedgehog cactus (Pediocactus nigrispinus), also known as snowball cactus, shall be avoided wherever possible. The plants shall be field-flagged to allow for micro-sitting of the towers and other facilities during the project design phase.
- The applicant will prepare a weed control plan. Specific mitigation measures to be included in the plan will include the following:
    - The contractor will clean construction vehicles prior to bringing them in to the project area from outside areas.

- Disturbed areas will be reseeded as quickly as possible with native species.
- Seed mixes will be selected in consultation with WDFW and Kittitas County Weed Control Board.
- If hay is used for sediment control or other purposes, hay bales will be certified weed free.
- Access to the site will be controlled which may result in a lower level of disturbance and fewer opportunities for noxious weeds to be introduced and/or spread.
- Noxious weeds that may establish themselves as a result of the project will be actively controlled in consultation with the Kittitas County Weed Control Board.

4.1 Wetlands

Since no impacts on wetlands are anticipated, no mitigation is proposed. During the design of the project, all project facilities, including access roads, electric lines, and turbine strings, were intentionally laid out to avoid the limited water features in the project area.

4.2 Special-Status Plants

The only special-status plant species that may be impacted by the project is hedgehog cactus, a Washington State Review listed species. Access to the site will be controlled during both construction and operations, which should provide greater protection than is currently afforded to this species. As collection of this species for gardens has been cited as a reason for its decline, if such collection becomes a problem at the project site despite the, controlled access, the Applicant proposed to post signage indicating that collection of any plants in the project area is prohibited.

4.3 Noxious Weeds

To avoid, minimize, or reduce the impacts of noxious weeds, the following mitigation measures shall apply:

- The contractor will clean construction vehicles prior to bringing them in to the project area from outside areas.
- Disturbed areas will be reseeded as quickly as possible with native species.
- Seed mixes will be selected in consultation with WDFW and Kittitas County Weed Control Board.
- If hay is used for sediment control or other purposes, hay bales will be certified weed free.
- Access to the site will be controlled which may result in a lower level of disturbance and fewer opportunities for noxious weeds to be introduced and/or spread.
- Noxious weeds that may establish themselves as a result of the project will be actively controlled in consultation with the Kittitas County Weed Control Board.

5 WILDLIFE

The potential direct wildlife impacts from the project can be grouped into two main categories, loss of habitat from construction and operation of the project, and potential mortality to individual birds or other animals from

construction and operation of the project. The loss of habitat associated with the project can be further broken down into "temporary" and "permanent" habitat impacts. "Temporary" impacts are those arising from ground disturbance necessary for the construction of project infrastructure but that will be not be permanently occupied once construction is complete. Examples include trenches for underground electrical collector cables and construction staging areas. These areas will be disturbed during the construction period but will be reseeded and restored after construction is finished. The vast majority (approximately 75%) of the total area impacted by construction of the project would be temporarily disturbed (i.e., for less than one year.) The remainder (approximately 25%) will continue to be occupied by the project, such as string roads, turbine foundation pads, project substation, and the O&M facility. These are considered "permanent" impacts for the purpose of this analysis.

The Applicant has proposed a comprehensive mitigation package for plants and animals for this project. It consists of several categories of actions that include the following list, and described in greater detail in the following sections:

- Thorough study and analysis to avoid impacts;
- Project design features to minimize impacts;
- Construction techniques and Best Management Practices (BMPs) to minimize impacts;
- Post-construction restoration of temporarily disturbed areas;
- Operational BMPs to minimize impacts;
- Monitoring and adaptive management to minimize impacts during operations; and

5.1 Study and Analysis

Studies have been conducted on the project site by qualified wildlife biologists and data gathered was used in the project design to avoid impacts on sensitive populations. These studies include the following:

- Rare plant surveys;
- Habitat mapping;
- Avian use point count surveys;
- Aerial raptor nest surveys;
- Sage grouse surveys;
- Big game surveys;
- Non-avian wildlife surveys;

The results and recommendations of these studies have been incorporated into the proposed design, construction, operation and mitigation for the project.

5.2 Project Design

The proposed design of the project incorporates numerous features to avoid and/or minimize impacts on plants and wildlife. These features are based on site surveys, experience at other wind power projects, and

recommendations from consultants performing studies at the site. Features of the project that are designed to avoid or minimize impacts on wildlife include the following:

- Avoidance of construction in sensitive areas such as streams, riparian zones, wetlands, and forested areas;
- Minimization of new road construction by improving and using existing roads and - trails instead of constructing new roads;
- Use of unguyed permanent free-standing meteorological towers to minimize potential for avian collisions with guy wires where possible;
- Equipping all overhead power lines with raptor perch guards to minimize risks to raptors;
- Spacing of all overhead power line conductors to minimize potential for raptor electrocution;
- Turbines will be installed on tubular steel towers instead of lattice towers. The towers will not have open platforms that could be used for perching or nesting; and,
- Ensure spacing of all overhead power line conductors shall minimize the potential for raptor electrocution. Overhead transmission lines and the substation shall incorporate the design guidance in the APLIC guidelines to minimize the risk of electrocution of birds.

Construction Techniques

Construction of the project has the potential to impact both habitat and wildlife in a variety of ways. The Applicant proposes the use of construction techniques and BMPs to minimize these potential impacts. These include the following:

- Use of BMPs to minimize construction-related surface water runoff and soil;
- Use of certified "weed free" straw bales during construction to avoid introduction of noxious or invasive weeds;
- Flagging of any sensitive habitat areas (e.g., springs, raptor nests, wetlands) near proposed areas of construction activity and designation of such areas as "off limits" to all construction personnel;
- Development and implementation of a fire control plan, in coordination with local fire districts, to minimize risk of accidental fire during construction and respond effectively to any fire that does occur;
- Establishment and enforcement of reasonable driving speed limits (max 25 mph) during construction to minimize potential for road kills;
- Proper storage and management of all wastes generated during construction;
- Require construction personnel to avoid driving over or otherwise disturbing areas outside the designated construction areas;
- Limiting construction activities during winter months to minimize impacts;
- Designation of an environmental monitor during construction to monitor construction activities and ensure compliance with mitigation measures.

- Construction work limits shall be staked prior to any clearing or construction. Staking shall be clearly visible to equipment operators. Since revegetation of the project site is difficult (shallow soils, arid conditions), vegetation clearing shall be limited to the actual construction footprint within the project limits to the greatest extent possible. Vegetation (shrub) removal for temporary disturbances such as laydown areas, etc. shall be done with minimal ground disturbance (e.g. mowing, cutting or shallow scalping of site). Grubbing or grading of temporary disturbance areas shall be avoided.

- Prior to ground disturbance on the site, the proponent shall submit, for approval by Kittitas County and WDFW, a detailed construction soil management and site revegetation plan(s). The plan(s) shall be prepared by a firm with expertise in restoration of shrub steppe. The plan shall identify how soils will be conserved and protected from loss and erosion during construction and used to restore the site. Temporary erosion controls such as application of mulch, PAM, BMPs, etc. shall be prescribed as needed to ensure soil protection and revegetation success. The revegetation plan shall include seed mixes adapted to each site (e.g. habitat type or ecological site) and the timing and manner of application. Seed mixes shall be comprised of locally adapted biotypes to the greatest extent possible. An aggressive weed control program shall be part of this plan. Weed control shall include application of pre-emergent herbicides for control of cheatgrass and weeds, late winter control of cheatgrass with glyphoste as needed and spot herbicide applications where needed during the growing season. Personnel on site implementing the revegetation plan shall have expertise in successful restoration of Eastern Washington native plant communities. Site restoration and reseeding shall be done during weather conditions and a time of year when establishment can be successful.

  Post-construction restoration of disturbed areas shall be sufficient to achieve a robust stand of native vegetation sufficient to achieve site stability, weed control and agreed-upon similarity to suitable reference standards. The project shall identify reference standards (or a process to establish standards) within the project area for use in evaluation of site restoration success. Selection of reference standards shall be done in consultation with WDFW and the Technical Advisory Committee.

- Underground cables will be placed ~~into~~ around roadways where possible. Where appropriate conserved soil from the construction of the project shall be applied over the trenched areas to encourage re-vegetation.

- The proponent shall be required to prepare the following plans:

  - Fire Protection Plan which includes measures for minimizing the likelihood of fire starts and measures to detect and quickly suppress wildfire.

  - Construction Stormwater Pollution Prevention Plan (SWPPP). The SWPPP shall be reviewed by the project's revegetation contractor with expertise with shrub steppe restoration.

  - Construction Spill Prevention, Control and Countermeasures Plan to address spills of fuel, lubricants and other harmful materials on hardened areas of the facility and in shrub steppe areas in a manner which minimizes long-term impacts to vegetation and wildlife habitat.

- Project operation shall include conservation measures for managing risk to scavaging birds of prey including eagles, vultures and ravens. Such measures shall include removal of big game and livestock carcasses within the project boundary which could attract eagles and other avian scavengers to the project. Since bald eagles are attracted to Kittitas Valley pastures during calving because of the opportunity to scavenge afterbirth, conservation measures should also include a prohibition on using pastures on the project site for livestock caving operations.

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Postconstruction Restoration

All temporarily disturbed areas which have been cleared of vegetation will be reseeded with an appropriate mix of native plant species as soon as possible after construction is completed to accelerate the revegetation of these areas and to the prevent spread of noxious weeds. The Applicant will consult with Washington Department of Fish and Wildlife regarding the appropriate seed mixes for the project area.

5.3 Operational BMPs

During project operations, appropriate operational BMPs will be implemented to minimize impacts on plants and animals, these include the following:

- Implementation of a fire control plan, in coordination with local fire districts, to avoid accidental wildfires and respond effectively to any fire that might occur;
- Establishment and enforcement of reasonable driving speed limits (max 25 mph) during operations to minimize potential for road kills;
- Operational BMPs to minimize storm water runoff and soil erosion from project facilities;
- Implementation of an effective noxious weed control program, in coordination with the Kittitas County Noxious Weed Control Board, to control the spread and prevent the introduction of noxious weeds;
- Identification and removal of all carcasses of livestock, big game, etc. from within the project that may attract foraging bald eagles or other raptors;
- Control public access to the site to minimize disturbance impacts on wildlife, especially in the winter months;

5.4 Monitoring and Adaptive Management

- The applicant shall convene a Technical Advisory Committee (TAC) to review pertinent monitoring and scientific data and to develop appropriate responses to impacts that exceed projections for avian mortality and habitat impacts made in the Application. The TAC will monitor all mitigation measures and efforts and examine information relevant to assessing Project impacts to habitat, birds, bats 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 Kittitas County which shall retain the authority to require additional mitigation measures as part of the development agreement, including any recommended by the TAC.

  The purpose of the Technical Advisory Committee (TAC) shall be to ensure that monitoring data is considered in a forum in which independent and informed parties can collaborate with the Permittee, and make recommendations to Kittitas County if the TAC deems additional studies or mitigation are warranted to address impacts that were either not foreseen in the Application or exceed impacts that were projected. In order to make recommendations, the TAC will review and consider: results of Project monitoring studies, including post-construction avian and bat mortality surveys, to evaluate impacts to habitat and wildlife, including avian and bat species; new scientific findings made at wind generation facilities with respect to the impacts on habitat and wildlife, as they may relate to the Vantage Wind Power Project; assess whether the post construction restoration and mitigation and

monitoring programs for wildlife that have been identified and implemented merit further studies or additional mitigation, taking into consideration factors such as the species involved, the nature of the impact, monitoring trends, and new scientific findings. The TAC will coordinate with the Permittee to review drafts of the following plans: the Post-Construction Rangeland Management and Grazing Plan, and the Post-Construction Avian Monitoring Plan. The TAC will also review the Permittee's implementation of the Post-Construction Restoration Plan.

The TAC may include, but need not be limited to, representatives from WDFW, U.S. Fish and Wildlife Service, Kittitas County, DNR, the Kittitas Field and Stream Club, the Audubon Society, the Kittitas County Farm Bureau and the Permittee. Kittitas County, at its discretion, may add additional representatives with appropriate expertise to the TAC. No individual representative to the TAC may be party to a turbine lease agreement, or any other contractual obligation with the Permittee. All TAC members shall be approved by Kittitas County.

No later than sixty (60) days after the beginning of Construction, the Permittee shall submit to Kittitas County proposed Rules of Procedure describing how the TAC shall operate, including but not limited to a schedule for meetings, a meeting procedure, a process for recording meeting discussions, a process for making, and presenting timely TAC recommendations to the Council, and other procedures that will assist the TAC to function properly and efficiently. No later than sixty (60) days prior to the beginning of Commercial Operation, the Permittee shall convene the first meeting of the TAC. The Permittee will provide a copy of the proposed Rules of Procedure to the TAC at their first meeting for their review and comment. The TAC may suggest modifications of the plan to be approved by Kittitas County. The TAC will be convened for the life of the Project, except that Kittitas County may terminate the TAC if: the TAC has ceased to meet due to member attrition; or, the TAC determines that all of the pre-permitting and post operational monitoring has been completed and further monitoring is not necessary; or the TAC members recommend that it be terminated. The failure of the TAC to meet and/or members to participate at any meeting shall not be deemed a violation of the Development Agreement, any condition of approval, or any mitigation measure. If the TAC is terminated or dissolved, Kittitas County may reconvene and reconstitute the TAC at its discretion.

In an effort to maximize the resources of the various agencies and groups represented on the TAC for this project the TAC may combine with the TAC developed for the Wildhorse Wind Power Project but there is no specific requirement to do so. If combined the TAC shall meet all requirements for both projects and shall issue separate reports and recommendations for each project as appropriate. The cost of a combined TAC shall be shared between the two projects in a proportional manner.

- The Applicant shall develop a post construction monitoring plan for the project to quantify impacts on 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; and 2) a minimum of one breeding season raptor nest survey of the study area and a 1-mile buffer to locate and monitoring active raptor nests potentially affected by the construction and operation of the project.

- The protocol for the fatality monitoring study will be similar to protocols used at the Vansycle Wind Plant in northeastern Oregon (Erickson et al. 2000) and the Stateline Wind Plant in Washington and Oregon (FPL et al. 2001) and for the Wildhorse Wind Power Project in Kittitas County .

- An independent environmental firm with appropriate expertise shall be hired by the project to: a) advise the project manager, Kittitas County and regulatory agencies on minimizing environmental impacts during construction, and b) Monitor environmental permit compliance during construction. The environmental monitor shall report to Kittitas County and have authority to stop work on project

elements that are not in compliance with permits and mitigation requirements. Any stop work order shall be lifted upon compliance with requirements. Selection of the firm shall be subject to approval of Kittitas County in consultation with WDFW and WDOE.

- Once roads, overhead transmission lines and underground cable trenches are better identified, the applicant shall create a color aerial map with the features superimposed at a level or resolution sufficient to identify probable habitat impacts so possible impact areas can be identified. This map shall be submitted to the County and the Washington State Department of Fish and Wildlife for review.

- The applicant shall develop a detailed habitat and wildlife mitigation plan for the project that follows Washington State Department of Fish and Wildlife Wind Power Guidelines. The plan shall be developed cooperatively with WDFW and shall be submitted to WDFW and the County.

- The applicants Contractor~~'s Construction Manager~~ shall be experienced and have an on-site environmental manager with expertise in managing construction in sensitive, arid environments, or the applicant shall hire a construction manager with environmental expertise in sensitive, arid environments. The role of this person shall be responsible for a) advising to ensure work is scheduled and performed in a manner that minimizes adverse environmental impacts, b) ensure that work is scheduled with consideration of site conditions including temperatures, soil moisture, precipitation, etc., and c) ensure construction is in compliance with all environmental permits and mitigation requirements.

6 FISHERIES

The proposed design of the project incorporates numerous features to avoid and/or minimize impacts on fisheries. The project layout has been designed to avoid any impacts to streams and riparian areas. Features of the project that are designed to avoid or minimize impacts include:

- Minimizing new road construction by improving and using existing roads and trails instead of constructing new roads.

- Roads, underground cables, turbine foundations, transmission poles, and other associated infrastructure will not be located within any riparian areas or streams or other sensitive resources.

- Use crossing methods that minimize or avoid channel impacts, prevent erosion and protect water quality.

- Prior to work in Schnebly Coulee, the applicant will apply for and obtain a Hydraulic Project Approval from WDFW.

A formal SWPPP would be implemented and BMPs would be initiated to retain sediment from disturbed areas and minimize areas of disturbance. In addition, the proposed construction activities for the transmission feeder lines would not involve the use of any heavy equipment in streambeds or riparian areas.

6.1 Construction Techniques and BMPs to Minimize Impacts

Constructing the project has the potential to impact fisheries in a variety of ways. Even though no fisheries issues were identified in the project area, the Applicant proposes using construction techniques and BMPs to minimize these potential impacts. These include the following:

- Using BMPs to minimize construction-related surface water runoff and soil erosion.

- Flagging sensitive habitat areas (e.g., wetlands, seeps, and drainages) near proposed areas of construction activity and designating such areas as "off limits" to all construction personnel.
- Properly storing and managing all wastes generated during construction.
- Requiring construction personnel to avoid driving over or otherwise disturbing areas outside the designated construction areas.
- Designating an environmental monitor during construction to monitor construction activities and ensuring compliance with mitigation measures.

6.2 Post-Construction Restoration of Temporarily Disturbed Areas

The following measures would be taken to restore temporarily disturbed areas after construction:

- All temporarily disturbed areas would be reseeded with an appropriate mix of native plant species as soon as possible after construction is completed to accelerate the revegetation of these areas and to prevent the spread of noxious weeds.
- The Applicant would consult with WDFW regarding the appropriate seed mixes for the project area.

7 ENERGY AND NATURAL RESOURCES

As the project would have a positive impact overall on the use of non-renewable resources, no mitigation is necessary or proposed.

During construction, conservation measures will include recycling of construction wastes where possible and encouraging carpooling among construction workers to reduce emissions and traffic.

The Applicant proposes several conservation measures that will be undertaken during operations:

- Carpooling among operations workers will be encouraged.
- High-efficiency electrical fixtures and appliances in the O&M facility and substation control house will be used.
- Low-water-use-flush toilets will be used in the O&M facilities
- Recycling of waste office paper and aluminum will be encouraged.

8 NOISE

Although no specific receivers are identified as being impacted by construction noise at the remote project site, and the Applicant has not proposed any mitigation measures associated with noise impacts, the following contractor practices are recommended to minimize the effects of construction noise in the project area:

- Implement work-hour controls so that noisy activities occur between 7 a.m. and 10 p.m., which would reduce the impact during sensitive nighttime hours.
- Do not allow heavy-duty haul trucks to travel through the town of Kittitas during evening or nighttime hours.
- Conduct blasting only during daylight hours.

- Maintain equipment in good working order and use adequate mufflers and engine enclosures to reduce equipment noise during operation.

- Coordinate construction vehicle travel to reduce the number of passes by sensitive receivers.

- Do not allow haul trucks to park and idle within 100 feet of a residential dwelling.

9 LAND USE.

- After construction is completed, disturbed areas would be returned as closely as possible to their original state, excluding service and access roads, which would remain in place for the life of the facility.

- In addition to the development agreement required under county code, the applicant shall enter into a staffing agreement with Kittitas County to reimburse the cost of Project Management during and after construction.

10 VISUAL RESOURCES/LIGHT AND GLARE

Mitigation measures proposed by the Applicant and incorporated into the project's design include the following:

- Active dust suppression will be implemented to minimize the creation of dust clouds during the construction period.

- Areas temporarily disturbed during the construction process will be reseeded to facilitate their return to natural-appearing conditions when construction is complete.

- The wind turbine towers, nacelles, and rotors used will be uniform and will conform to the highest standards of industrial design to present a trim, uncluttered, aesthetically attractive appearance.

- A low-reflectivity finish will be used for all surfaces of the turbines to minimize the reflections that can call attention to structures in a landscape setting.

- The only exterior lighting on the turbines will be the aviation warning lighting required by the FAA. This lighting will be kept to the minimum required intensity to meet FAA standards. It is anticipated that the FAA will soon be issuing new standards for marking of wind turbines that will entail lighting fewer turbines in a large wind farm than is now required, as well as synchronizing all the lights. These potential regulatory changes are being closely monitored and if, as is likely, they are made before project construction begins, the aviation safety marking lighting will be designed to meet these revised standards.

- Where feasible, existing road alignments will be used to provide access to the turbines, minimizing the amount of additional surface disturbance required. The access roads will have a gravel surface and will have grades of no more than 15%, minimizing erosion and its visual effects.

- The O&M facility building will have a low-reflectivity earth-tone finish to maximize its visual integration into the surrounding landscape.

- Outdoor night lighting at the O&M facility and the substation(s) will be kept to the minimum required for safety and security, sensors and switches will be used to keep lighting turned off when not required, and all lights will be hooded and directed to minimize backscatter and offsite light trespass.

- All equipment at the substation(s) will have a low-reflectivity neutral finish to minimize visual sensitivity.

- The control buildings located at each substation will have a low-reflectivity earth-tone finish.

11 PUBLIC SERVICES AND UTILITIES/RECREATION

11.1 Construction

Because construction activities at the project are not expected to result in significant impacts to medical services, schools, public utilities, communications, water supplies, sewage/solid waste disposal, or stormwater systems, no mitigation measures will be necessary for those services or utilities.

The following mitigation measures will be implemented to reduce impacts to public services resulting from construction of the project:

- All operations personnel shall use prudent utility practices for a safe work environment. ~~working on the turbines will work in pairs as appropriate~~. In the unlikely event that an injury occurs while working in the nacelle, all staff will be trained in lowering injured colleagues from the nacelle. A rescue basket, specially designed for this purpose, will be kept at the operations and maintenance facility and will be available for use by local emergency medical services personnel. Training in rescue basket recovery will also be provided to local EMS personnel by the Applicant as applicable.

- The Applicant will provide all police, fire, and emergency medical personnel with emergency response details for the project including detailed maps of the project site access roads, Applicant contact information, procedures for rescue operations to the nacelles, and location of the rescue basket.

- Potential impacts on fire services will be mitigated by the following:

- Prior to construction the applicant shall enter into an agreement with Fire District 2 (Kittitas Valley Fire and Rescue) and/or Fire District 4 (Vantage) to provide emergency response services to the site during construction and operation of the facility.

- Provisions for special training of fire district personnel for fires related to wind turbines;

- Training for EMS personnel in the use of a rescue basket that will be kept at the operations and maintenance facility for the purpose of removing injured employees from the WTGs;

- Providing detailed maps to fire districts that show all access roads to the project;

- Providing keys to a master lock system to fire districts that will enable emergency personnel to unlock gates that would otherwise limit access to the project;

- Use of spark arresters on all power equipment (e.g., cutting torches and cutting tools), when necessary due to extreme fire danger conditions;

- Informing workers at the project of emergency contact phone numbers and training them in emergency response procedures;

- Carrying fire extinguishers in all maintenance vehicles;

- Providing water supply for fire fighting locations beyond the contracted fire districts;

- Conducting FCC-style communication study or appropriate study to ensure that emergency responders communications will riot be derogated by the wind generators, thus eliminating or reducing all communications on site by any emergency responders;

- Implementing an FAA-style lighting plan to prevent aircraft mishaps to limit fire response; and

- ~~Having an environmental clean-up company under contract to provide services to protect the environment up to and beyond small incidents, including planning, implementing, and storing of all material considered to be harmful; and~~ .

- Supplying water for fire fighting at locations up and beyond the contracted fire districts to keep the fire in a manageable size incident;

11.2 Operation and Maintenance

During operation of the project, impacts to local services and utilities are expected to be insignificant. However, emergency preparedness planning will be implemented as mentioned above, to reduce potential impacts in the event of an emergency.

- The Applicant will work with Kittitas County Fire Marshal and aeffected fire districts for all aspects of operations.

12 CULTURAL RESOURCES

The mitigation measures are described below.

- Ground disturbing actions within a specified radius of any archaeological sites, either recorded during the initial survey or previously documented, will be monitored by a professional archaeologist to prevent damage or destruction to both known and unanticipated archaeological resources.

- If any archaeological materials, including but not limited to human remains, are observed, excavation in that area will cease, and Washington State Department of Archaeology and Historic Preservation (DAHP), the County, the affected tribes and the Applicant will be notified. At that time, appropriate treatment and mitigation measures will be developed and implemented. If the project cannot be moved or re-routed 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 Washington State Department of Archaeology and Historic Preservation (DAHP) per RCW 27.53.060. The 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 their representatives present during earth-disturbing construction activities, the Applicant will comply with their wishes. In all cases, the project shall note all concerns raised through tribe requests.

- The Applicant will survey project areas, including staging and final access road alignments, etc. Surveying will be conducted early in the design phase to allow for final modifications to the project to avoid cultural resources and for Washington State Department of Archaeology and Historic Preservation (DAHP) to review and approve the survey. It is currently anticipated that this will occur in March and April of 2008;

- Five archaeological sites and 19 isolates have been located in the project footprint. The sites and isolates shall be avoided. Sites that cannot be avoided shall be tested and results reported to the Washington State Department of Archaeology and Historic Preservation (DAHP) during the project design phase. All excavation permits shall be obtained from DAHP prior to testing.

- Sites 45-KT-2762 through 2764 shall be avoided.

- General exclusion zones for both pedestrians and equipment shall be maintained around the archaeological and historical sites identified during the cultural resource survey, even though the resources may not meet the standard qualifications for the National Register of Historic Places (NHRP). The project archaeologist shall flag off or otherwise delineate the archaeological sites with a 100-foot buffer. To prevent damage or destruction to both known and unanticipated archaeological resources, a professional archaeologist will monitor ground-disturbing activities (e.g., road building, turbine pad preparation, utility line trenching, etc.0 within a specified radius of any archaeological sites, either those previously recorded or recorded during the initial or any subsequent surveys. If any archaeological materials, including but not limited to human remains, are observed, DAHP, the County, the Yakama Tribe and the applicant will be notified. At that time, appropriate treatment and mitigation measures will be developed and implemented. The archaeologist will remove any flagging tape or pin flags at the end of the construction-monitoring phase of the project.

- The applicant shall prepare a written monitoring plan of methods, expectations, and procedures to follow in the event of discovery. The monitoring plan will developed following protocols that have been successfully applied for other wind energy projects (e.g., Wild Horse) in Kittitas County.

13 TRAFFIC AND TRANSPORTATION

13.1 Construction

- The Applicant will prepare a Traffic Management Plan (to be submitted to Kittitas County Public Works and Washington State Department of Transportation (WSDOT) prior to construction for review), with the construction contractor outlining steps for minimizing construction traffic impacts;

- All traffic control requests affecting state highways must be coordinated and approved through WSDOT South Central Region's Traffic Engineer. The applicant shall submit a traffic control plan to the Traffic Office for review and approval.

- WSDOT projects as identified in comments dated November 21, 2007 shall be taken into account in preparation of the Transportation Plan for the project.

- Approved traffic control implementation shall be coordinated with the WSDOT Area Maintenance Superintendant.

- The applicant shall provide a roadway pavement analysis and visually inspect the condition of pavement and the quantity and severity of pavement distresses utilizing an accepted rating system. The analysis shall document roadway and shoulder conditions before and after construction and shall include the Vantage Highway from the I-90 Vantage Interchange to the City of Ellensburg and the route along Main Street, Patrick Avenue, and No. 81 Road from the I-90 Kittitas Interchange to the Vantage Highway. The applicant shall be responsible for restorative work made necessary by the project;

- The Applicant will provide notice to adjacent landowners when construction takes place to help minimize access disruptions;

- The applicant shall prepare a road signage plan for Vantage Highway that conforms to the most recent edition of the Manual on Uniform Traffic Control Devices. The road signage plan shall be submitted to the Department of Public Works prior to construction for review;

- When slow or oversized wide loads are being hauled, appropriate vehicle and roadside signing and warning devices will be deployed per the Traffic Management Plan. Pilot cars will be used as the WSDOT dictates, depending on load size and weight;

- The Applicant will construct necessary site access roads and an entrance driveway that will be able to service truck movements of legal weight and provide adequate sight distance. The site access roads shall be constructed to Kittitas County Road Standards Table 12-1, Low Density Private Roads. The entrance driveway shall be constructed to commercial access standards as specified in WSDOT Design Manual Figure 920-5 and intersect with the Vantage Highway at no more than 10 degrees from perpendicular;

- The Applicant will encourage carpooling for the construction workforce to reduce traffic volume;

- In consultation with Kittitas County, the Applicant will provide detour plans and warning signs in advance of any traffic disturbances. When temporary road closures cannot be avoided the applicant shall post "To Be Closed" signs and place a legal notice in the newspaper a minimum of five working days prior to the closing. The types and locations of the signs shall be shown on a detour plan. A detour plan must be prepared and submitted to the Department of Public Works at least ten working days in advance of the proposed closure, and approved prior to closing any County roadway. In addition, the contractor must notify, in writing, local fire, school, law enforcement authorities, postal service and any other affected persons as directed by the Department of Public Works at least five working days prior to the closing;

- The Applicant will employ flaggers as necessary to direct traffic when large equipment is exiting or entering public roads to minimize risk of accidents;

- Where construction may occur near the roadway, one travel lane will be maintained at all times;

- No direct access to I-90 or from the Ryegrass Rest Area will be allowed. If viewing areas are considered, access will need to be via Vantage Highway.

- All loads transported on WSDOT rights-of-way must be within the legal size and load limits, or have a valid oversize and/or overweight permit, if allowed. Once the transportation trucks for the project are known, WSDOT shall be notified of the length, turning radius and overheight dimensions.

- A sufficient distance from WSDOT rights-of-way shall be maintained as a safety buffer and is to be identified as part of the Development Agreement.

13.2 Operation

Operation and maintenance of the Vantage Wind Power Project~~WHWPP~~ would not significantly affect traffic, However, the following measure is proposed.

- Follow FAA guideline for a wind turbine lighting and warning system.

14 HEALTH AND SAFETY

In addition to those mitigation measures already identified above, the following would be implemented to reduce the risks to health and safety.

Fire and Explosion

The following provides the mitigation measures that would be implemented to reduce risk of fire and explosion.

Fire and Explosion Risk Mitigation Measures

Type of Impact Construction (C) Operation (O) Decommissioning (D)	Potential Fire or Explosion Source	Mitigation Measures
C,O,D	General Fire Protection	All onsite service vehicles will be fitted with fire extinguishers. Fire station boxes with shovels, water tank sprayers, etc., will be installed at multiple locations on site along roadways during summer fire season. A minimum of one water truck with sprayers will be present on each turbine string road during constriction activities during fire season
C,O,D	Dry vegetation in contact with hot exhaust catalytic converters under vehicles	No gas-powered vehicles will be allowed outside of graveled areas. Mainly diesel vehicles (i.e., without catalytic converters) will be used on site. Any vehicles used off road on site will be high-clearance vehicles.
C,O,D	Smoking	Restricted to designated areas (outdoor gravel covered areas).
C,O	Explosives used during blasting for excavation work	Only state-licensed explosive specialist contractors are allowed to perform this work. Explosives require special detonation equipment with safety lockouts. Vegetation will be cleared from the general footprint area surrounding the excavation zone to be blasted. Standby water spray trucks and fire suppression equipment will be present during blasting activities.
C,O	Electrical fires	All equipment will be designed to meet NEC and NFPA standards. All area surrounding substation, fused switch risers on overhead pole line, junction boxes and pad switches will be graveled with no vegetation. A fire suppressing, rock-filled oil containment trough will be created around the substation transformer.
C,O,D	Lightning	Specially engineered lightning protection and grounding systems will be used at wind turbines and at substation. Footprint areas around turbines and substation will be

Type of Impact Construction (C) Operation (O) Decommissioning (D)	Potential Fire or Explosion Source	Mitigation Measures
		graveled with no vegetation.
C,D	Portable generators – hot exhaust	Generators will not be allowed to operate on open grass areas. All portable generators will be fitted with spark arrestors on exhaust system.
C,D	Torches or field welding on site	Immediate surrounding area will be wetted with water sprayer. Fire suppression equipment will be present at location of welder/torch activity.
C,O	Electrical arcing	Electrical designs and construction specifications will meet or exceed requirements of NEC and NFPA.

Release or Potential Release of Hazardous Materials

Emergency Medical Response

Medical emergencies would normally be handled by calling 911 and alerting the Emergency Medical Services (EMS) system. Ambulances are located in Ellensburg and Kittitas; Cascade Search and Rescue is located in Ellensburg. Emergency calls are dispatched through the sheriff's office to the fire districts that provide search and rescue support.

Kittitas Valley Community Hospital in Ellensburg serves the entire County. The hospital has level four trauma service, with a limited number of specialists available. Patients with head injuries; severe bums, and/or trauma are transported to a different facility, usually Harbor View Medical Center in Seattle. Less severe accident victims are sometimes transported to Yakima for hospitalization and treatment. There is a heliport on the roof of the hospital, and a helicopter is available for emergency response.

MedStar, a critical care transport service located in Moses Lake, Washington, also provides air ambulance support services to the County.

All operations personnel working on the turbines would work in pairs. All turbine maintenance staff would be trained in lowering injured personnel should an injury occur while working in the nacelle. A rescue basket, specifically designed for that purpose, would be kept at the operations and maintenance facility and would be available for use by local EMS staff. Training in use of the basket would be provided to local EMS staff.

Compliance with Standards

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.

Aircraft Impact

The 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.

Transmission Line Audible Noise and Electromagnetic Interference

- The conductors for the proposed transmission line shall be of sufficient diameter to control corona effects. Also, the applicant has indicated that special care would be employed during construction to minimize nicks and scrapes to the conductors.

- To address Washington State Patrol's concern regarding the microwave paths from the tower near the project substation and site, the applicant shall maintain the sight path the microwave path requires and structures shall be moved to keep this path serviceable. The applicant shall minimize any microwave interference, if any, and implement techniques such as using fiber optic cable for its substation communications. The applicant shall work with the Washington State Patrol to ensure that all issues are resolved prior to construction.

Emergency Plans

- Emergency plans shall be prepared by the applicant to protect public health and safety, and the environment on and off the site in the case of a major natural disaster or industrial accident relating to or affecting the proposed project. The applicant would be responsible for implementing the plans in coordination with the local emergency response support organizations. The plans shall address the following:
  - medical emergencies;
  - construction emergencies;
  - project evacuation;
  - fire protection and prevention;
  - floods;
  - extreme weather abnormalities;
  - earthquakes;
  - volcanic eruption;
  - facility blackout;
  - spill prevention, control, and countermeasures;
  - blade or tower failure;
  - aircraft impact;
  - terrorism, sabotage, or vandalism; and
  - bomb threat.

- The County and local emergency response organizations will review and approve all plans before they were implemented. During the construction and startup period, the emergency plans would be

revised, as needed, to conform to manufacturer and vendor safety information for the specific equipment installed. Preliminary operations and maintenance emergency plans would similarly be developed and approved prior to the start of project operations.

- The project operating and maintenance group and all contractors would receive regular emergency response training as part of the regular safety-training program to ensure that effective and safe response actions would be taken to reduce and limit the impact of emergencies at the project site.

This MDNS is issued under WAC 197-11-350. Any action to set aside, enjoin, review, or otherwise challenge this administrative SEPA action's procedural compliance with the provisions of Chapter 197-11 WAC shall be commenced before 5:00 PM, March 11~~7~~, 2008.

Responsible Official: Joanna Valencia

Title: Staff Planner

Address: Kittitas County Community Development Services
411 North Ruby St., Suite 2
Ellensburg, WA 98926
(509) 962-7506 FAX 962-7682

Date: ~~February 20, 2008~~February 26, 2008

Pursuant to Chapter 15A.07 KCC, this MDNS may be appealed by submitting specific factual objections in writing with a fee of $300.00 to the Kittitas County Board of Commissioners, Kittitas County Courthouse Room 110, Ellensburg, WA 98926. Timely appeals must be received no later than 5:00 PM, March ~~7~~11, 2008. Aggrieved parties are encouraged to contact the Board at (509) 962-7508 for more information on appeal process.