KITTITAS COUNTY COMMUNITY DEVELOPMENT SERVICES
411 N. Ruby St., Suite 2, Ellensburg, WA 98926
CDS@CO.KITTITAS.WA.US
Office (509) 962-7506
Fax (509) 962-7682

NOTICE OF SEPA ACTION/PUBLIC HEARING

TO:

Federal Aviation Administration
Bonneville Power Administration
Federal Communication Commission
Kittitas Reclamation District
Wa St Dept. Ecology – SEPA Registrar
City of Ellensburg
WA St Dept. Ecology - Yakima
City of Cle Elum
WA State Dept. of Fish and Wildlife
City of Roslyn
WA St Dept. Natural Resources
City of Kittitas
Kittitas Co. Enforcement & Investigation
Kittitas Co. Environmental Health
KITTCOM
Kittitas Co. Prosecuting Attorney
Yakama Nation
Kittitas Co. Public Works
Kittitas County Sheriff's Dept.
Puget Sound Energy
Kittitas County Commissioners Office
Kittitas County Fire Dist. No. 2
Kittitas County Fire Dist. No. 4
Kittitas County PUD
Yakima Firing Center
Adjacent Property Owners
CTED
Interested Parties
Town of South Cle Elum
Applicant

FROM: Joanna Valencia, Staff Planner JV

DATE: February 26, 2008

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

A copy of the submitted environmental checklist and related application materials for this proposal were previously mailed to you for review on November 2, 2007 as part of a Notice of Application. If you did not receive any of these documents, or require additional information, please contact our office.

Enclosed please find a Notice of Action/Public Hearing and Mitigated Determination of Non-Significance (MDNS) for the referenced proposal. These documents do not constitute approval of this application, but rather a threshold determination that the proposed project would not have a significant adverse environmental impact.

Any action to set aside, enjoin, review, or otherwise challenge such administrative SEPA action on the grounds of noncompliance with the provisions of chapter 43.21RCW shall be commenced on or before **March 11, 2008 at 5:00 p.m.** to the Kittitas County Board of Commissioners, Rm. 108, County Courthouse, Ellensburg, WA 98926.

A joint open record hearing with the Kittitas County Planning Commission and Kittitas County Board of County Commissioners has been scheduled for March 12, 2008 at 6:00 p.m. at the Manastash Room, Kittitas County Events Center, Ellensburg, WA 98926. Anyone with an interest in this matter is urged to attend said hearing where testimony will be taken. Interested parties are encouraged to verify the hearing time and date prior to attending by contacting Kittitas County Community Development Services at (509)962-7506.

If you have any questions please do not hesitate to contact us at (509) 962-7506. **Please retain all enclosed materials.**

Notice of SEPA Action/Public Hearing

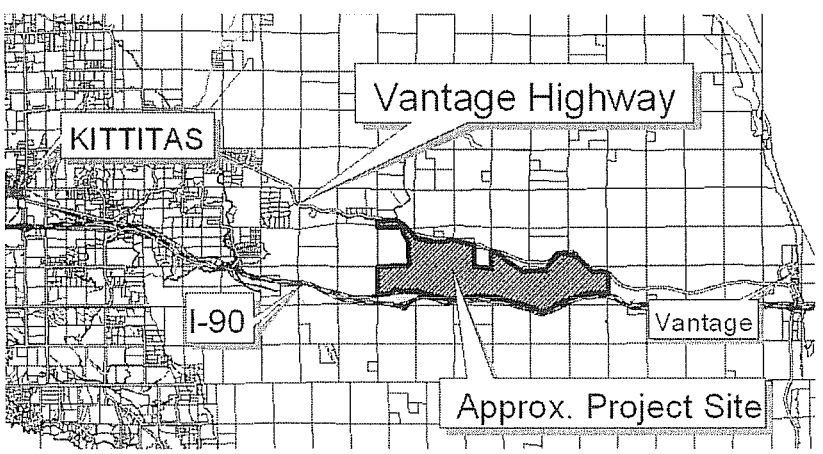
Vantage Wind Power Project

NOTICE IS HEREBY given that pursuant to 43.21C RCW (SEPA), Kittitas County Community Development Services did on February 26, 2008 make a Mitigated Determination of Nonsignificance (MDNS) on an application from Invenergy Wind North America LLC (IWNA) for a wind farm consisting of a maximum of 69 wind turbines located on approximately 4,750 acres with a maximum height of 389 feet (Ground to Blade Tip). 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.

Any action to set aside, enjoin, review, or otherwise challenge such administrative SEPA action on the grounds of noncompliance with the provisions of chapter 43.21RCW shall be commenced on or before **March 11, 2008 at 5:00 p.m.** to the Kittitas County Board of Commissioners, Rm. 108, County Courthouse, Ellensburg, WA. 98926. The complete application file may be viewed at Kittitas County Community Development Services, 411 N. Ruby St. Suite 2, Ellensburg, WA 98926. Staff Planner: Joanna Valencia.

NOTICE IS HEREBY given that a joint open record hearing with the Kittitas County Planning Commission and Kittitas County Board of County Commissioners has been scheduled for March 12, 2008 at 6:00 p.m. at the Manastash Room, Kittitas County Events Center, Ellensburg, WA 98926. Anyone with an interest in this matter is urged to attend said hearing where testimony will be taken. Interested parties are encouraged to verify the hearing time and date prior to attending by contacting Kittitas County Community Development Services at (509)962-7506.

Date: February 26, 2008
Publish: February 27and March 5, 2008 Daily Record and February 28 and March 6, 2008 Northern Kittitas County Tribune



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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; 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, 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

- 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 around roadways to the greatest extent 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.

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 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. 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) 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
- 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 affected 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 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.

Type of Impact Construction (C) Operation (O) Decommissioning (D)	Potential Fire or Explosion Source	Mitigation Measures
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 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:

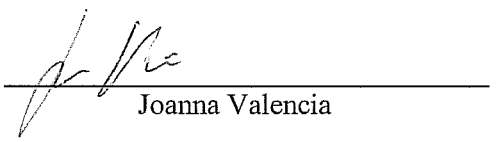
    - medical emergencies;
    - construction emergencies;
    - project evacuation;
    - fire protection and prevention;
    - floods;
    - extreme weather abnormalities;
    - earthquakes;
    - volcanic eruption;
    - facility blackout;
    - spill prevention, control, and countermeasures;
    - blade 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, 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 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 11, 2008. Aggrieved parties are encouraged to contact the Board at (509) 962-7508 for more information on appeal process.