

APPENDIX B

Visual Quality Study



DAVID EVANS
AND ASSOCIATES INC.

TECHNICAL MEMORANDUM

DATE: June 30, 2008
TO: Scott Williams, Puget Sound Energy
FROM: Jon Gage, M.L.A., Landscape Architecture
SUBJECT: **Visual Quality Evaluation for Expansion of Wild Horse Wind Facility**
PROJECT: Wild Horse Expansion
PROJECT NO: PSEN00000134
COPIES: Ron Bockelman, Gray Rand, Jim Sammet

This memorandum is a visual quality evaluation of the proposed Expansion at the Wild Horse Wind Facility. The Expansion would add 1280 acres to the 8600 acres of the original site for a total of 9880 acres, and add 26 new turbines to the 127 turbines currently operating for a total of 153 turbines at Wild Horse.

The intent of this memorandum is to evaluate the visual impacts of the 26 Expansion turbines from the viewpoints used in Section 3.10 Visual Resources/Light and Glare in the draft and final environmental impact statements (EFSEC 2004, 2005), which are herein referred to collectively as the EIS. **Figure 3.10-1** from the EIS is attached to show the location of the viewpoints. The EIS concluded the impacts to visual quality from the Wild Horse Wind Facility would not be significant.

Affected Environment

The Expansion area is immediately north of the original Wild Horse boundary on property recently purchased by Puget Sound Energy. This area includes dry, rocky grasslands used for grazing, and areas covered with a mixture of sagebrush, bitterbrush, and bunchgrasses, with clusters of ponderosa pine. The existing condition for evaluating the visual effects of the Expansion is the operating facility with 127 turbines.

Construction Impacts

Construction activities for the Expansion (e.g., large earthmoving equipment, trucks, cranes, etc.) would be similar to those described in the EIS. They would be visible from a few nearby seasonal residences northwest of the site. However, it is anticipated that construction activities would be low to moderately visible elsewhere, including Kittitas and surrounding valley areas and the plateaus east of the Columbia River.

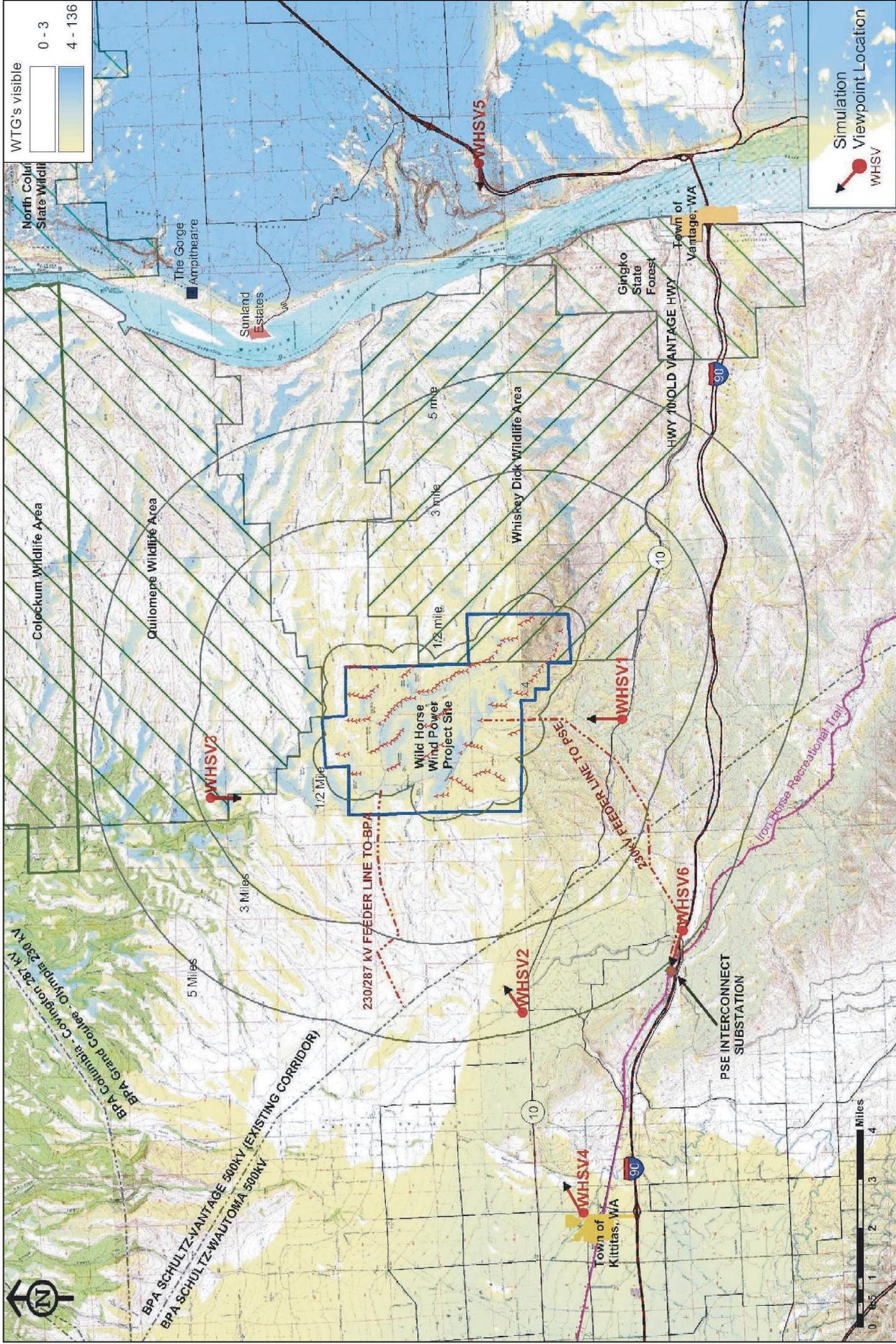
Operational Impacts

The facilities for the Expansion area would include 26 new turbines, roads, one overhead collector line (the remaining electrical collecting lines are underground), and expansion of the existing substation footprint. Mitigation measures for impacts to visual quality would be as described in the EIS.

To determine impacts to visual quality from the expansion area, representative viewpoints from the EIS were evaluated. The evaluation was based on: 1) Site reconnaissance conducted on June 24, 2008; and 2) Visual simulations for three key viewpoints where new turbines would be visible. The viewpoint locations for this evaluation have been approximated from the EIS. Visual changes to the viewpoints are as follows:

- **WHSV1** was not simulated because a ridge blocks the view north toward the Expansion area from this viewpoint along Vantage Highway. Thus there is no change to the existing view.
- **WHSV2** was not simulated because the ridge extending west from Whiskey Dick Mountain blocks the view northeast toward the Expansion area from this viewpoint along Vantage Highway. Thus there is no change to the existing view.
- **WHSV3** was simulated because the Expansion turbines would be visible from this viewpoint. New turbines would extend north from Wild Horse along the upland plateau. These new turbines would be 2.8 miles away from (or 1.7 miles closer to) this viewpoint which looks south from Beacon Ridge Road (**Exhibit 1**). The increased proximity and quantity of turbines would introduce more vertical elements and reduce the intactness of the landscape. The larger apparent scale of the facilities would increase vividness of the landscape. Overall visual impacts would be small as this viewpoint does not have many viewers. The degree of visual change caused by the Expansion would be minor and it is not anticipated to change the potential level of visual impact from “Moderate” described in the EIS.
- **WHSV4** was simulated because new turbines would be visible to the northeast from this viewpoint which is located near the intersection of Patrick Avenue, No. 81 Road, and Clerf Road at the eastern edge of the city of Kittitas (**Exhibit 2**). The Expansion turbines would be visible along ridges. The visual impacts would be greatly attenuated by the fact that these turbines are 8 to 11 miles away. Additional vertical elements would reduce intactness of the landscape. However, the degree of visual effect is minor and it is not anticipated to change the potential level of visual effect from “Low” described in the EIS.
- **WHSV5** was simulated because new turbines would be visible on the the ridgeline while looking west from this viewpoint on the I-90 on-ramp from Silica Road (**Exhibit 3**). The Expansion turbines appear north of the operating Wild Horse turbines. Additional vertical elements would reduce intactness in the landscape. However, these turbines would be partially obscured behind the ridge, silhouetted against the sky, and would be greatly attenuated by the fact that they are located 9 to 13 miles away. The degree of visual effect from the Expansion is minor and it is not anticipated to change the potential level of visual impact from “Low” as described in the EIS.
- **WHSV6** was not simulated because the Expansion area is not visible to the northeast from this viewpoint along I-90. Thus there is no change to the existing view. This viewpoint was included in the EIS to evaluate visual impacts of the new electrical substation to the west.

In conclusion, the Expansion would continue the change in visual character that resulted when the operating turbines at Wild Horse were added to the viewshed. The visual effect of the Expansion turbines is greatest for the viewpoint from the north because it is much closer than the other viewpoints. However, this location is much less frequently traveled than the other viewpoints. Thus the Expansion is not anticipated to change the findings in the EIS of no significant impacts to visual quality.



Source: Wind Ridge Power Partners, LLC 2004.



Figure 3.10-1
Zone of Visual Influence (ZVI)
 WILD HORSE WIND POWER PROJECT

9323.03-03-010 E13



EXISTING



PROPOSED

Viewpoint WHSV3 - Existing View.

Viewpoint WHSV3 - Proposed: View simulation looking south from Beacon Ridge Road.

Selected Viewpoints Showing Existing and Proposed Conditions

Wild Horse Wind Facility Expansion

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Exhibit 1



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EXISTING



PROPOSED

Viewpoint WHSV4 - Existing View.

Viewpoint WHSV4 - Proposed: View simulation looking east from the edge of the city of Kittitas.

Selected Viewpoints Showing Existing and Proposed Conditions

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Exhibit 2



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EXISTING



PROPOSED

Viewpoint WHSV5 - Existing View.

Viewpoint WHSV5 - Proposed: View simulation looking west from I-90 on-ramp from Silica Road.

Selected Viewpoints Showing Existing and Proposed Conditions

Wild Horse Wind Facility Expansion

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Exhibit 3



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