

Testimony of Barton DeLacy

Exhibit 36-2 (PBD-2) to the Testimony of Barton DeLacy



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Technical Memorandum

Impacts of The Kittitas Valley Wind Power Project on Local Property Values

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Statement of Qualifications

I am a real estate appraiser and consultant. I am presently Director of Valuation Services at Cushman & Wakefield of Oregon, Inc. I perform and review fee engagements relating to the evaluation of real property. I also prepare analyses to support litigation regarding real estate values, land uses impacts and for eminent domain proceedings. Attached to this report as **Exhibit A** is a résumé of my educational background and employment experience.

My personal experience with the siting of obtrusive structures or controversial land uses in rural areas spans over 25 years. This experience includes evaluations of property value impacts for the placement of transmission towers, power lines, substations, underground pipelines, the extension of gravel mines, siting of prisons, power plants, land fills and evaluation of air emissions from a cement kiln. I recently chaired a Committee of the Consulting Corps of the Counselors of Real Estate to help advise the City of Orlando, Florida on whether or not to re-site a homeless shelter, also considered an undesirable land use in its location.

In 2004, a peer-reviewed article I authored, "A LULU of a case: Gauging Property Value Impacts in Rural Areas" was published in *Real Estate Issues*, published by the Counselors of Real Estate.

I have been a licensed or certified appraiser since 1979 and am certified in the State of Washington, as well as Oregon, Montana, Idaho, California, Colorado and Kansas. My professional credentials include the MAI designation (Appraisal Institute), the CRE designation (awarded by the Counselors of Real Estate) and a Masters Degree in Urban and Regional Planning (see my accompanying CV). I was recently elected a Fellow in the Royal Institution of Chartered

Surveyors, an international professional society of valuers and real estate professionals who advise governments and global organizations. One of their studies is reviewed here.

I previously served five years on a city planning commission and was appointed to a statewide emergency siting authority to site four youth prisons in 1995.

I have qualified as an expert witness before the State of Washington Energy Facility Site Evaluation Council ("EFSEC") giving written and oral testimony regarding the Wild Horse Wind Power Project. I have also qualified as an expert witness for real estate valuation and land use impacts in both State and Federal Courts in Oregon and California.

Purpose of Report and Testimony

I am providing this report as a summary of my testimony relating to an analysis completed by my company to address whether the proposed Kittitas Valley (KV) Wind Power Project might affect property values in the vicinity of the wind turbine generators.

The contents of this analysis are based upon my own knowledge, or upon evidence, such as studies and reports as persons in my field and expertise are accustomed to rely on in conducting the type of analysis included in this report.

Information and Data Collected for this Report; Methodology of Analysis

The scope of our analysis included field inspections of the affected areas in Kittitas County in 2004 and late 2005. I also investigated property impacts for the proposed Wild Horse Wind Project, located about 20 miles to east, north of the Vantage Highway. In this case, I have analyzed a comprehensive compilation of properties which abut, or may be in sight of, the proposed KV project.

I have reviewed available literature regarding land use impacts of energy facilities, and studied carefully a May 2003 analytical report, *The Effect of Wind Development on Local Property Values*, by George Sterzinger for the Renewable Energy Policy Project ("REPP"). We have collected, updated and analyzed multiple listing and county assessor records on property sales in the area, and have undertaken several interviews with local Kittitas County real estate brokers and appraisers regarding specific transactions and the anticipated effect of the Project on the area.

I also reviewed additional technical memoranda prepared by Dr. Tom Priestley of CH2M Hill, a modeling study on shadow-flicker, and a survey of valuers published by the RICS in England which suggested wind farm developments had adverse impacts in England.

In 2005, Horizon Wind Energy, the successor to Zilkha, reconfigured the KV project, eliminating nearly half the turbines originally planned. I had prepared a study in 2004 based on a 150 turbine layout and have now updated my research in light of the proposed reconfiguration with a maximum of 80 turbines.

Our work included an analysis of the transactional data we compiled for Kittitas County, going back over ten years. Since the Project was announced almost four years ago, we were able to track paired sales where the rate of appreciation could be calculated between a transaction made after the announcement and one some time before. These statistics have been incorporated in our analysis. Further, we collected anecdotal observations from local brokers regarding property-specific reactions, reflected in sale price, when parties were informed about the proposed wind turbines.

Since the turbines have yet to be constructed, actual impacts may be difficult to assess. However, a field poll taken by Evergreen Research Corp. between September 5-9, 2002 on behalf of enXco (another wind power development company) showed that 92% of all respondents (from a statistically significant random sampling of Kittitas County residents) were aware of the wind farm issue in the county.

Personal preference, it should be noted, does not necessarily affect property values. In addition to evidence of the potential property owner preferences (i.e. perceptions and biases regarding the impacts of wind power projects on daily life and property ownership in the county), this survey indicated a very high level of awareness of the pending projects. This awareness could tend to influence property purchase decisions in areas with views of the wind power project sites. However, as described below, the analysis we conducted showed no negative impacts on property values and sales based upon knowledge of the pending Kittitas Valley Wind Power project.

The RICS survey, for instance, did not test transactional data, but merely queried professional valuers on their preferences. It was little better than an opinion poll. Notwithstanding reported apprehensions that people may have regarding how nearby wind farms may impact property values, this poll lacks any statistical data demonstrating such an effect.

Our statistical analysis of the Kittitas Valley view shed closely paralleled the methodology used by the REPP. We selected as comparable areas lower Kittitas County, which includes affected areas of the Valley, and the City of Ellensburg, the nearby community, which lies beyond the view shed. We looked at changes in property values over a 6 year period; 4 years before the announcement, and the two years hence. If property values were to be adversely impacted by the wind farm, then value trends post announcement of the Project should have been negative compared with comparable areas unaffected by the turbine placement. The REPP study showed that in most communities tested, property values increased post installation at the same rate or at faster rates than the control community. We found the same trends to be true here in the Kittitas Valley.

We obtained historical sales data for both the City of Ellensburg and Lower Kittitas County. These two data sets could be considered "control" communities, in that, in aggregate, they were unaffected by the wind power project.

This home sale information has been compiled and published on a monthly basis in the "REAL REVIEW" since 1988 by Betsy Billeter of Central Washington Real Estate Services. Similar information for the Upper County area, centered around Cle Elum, had not been similarly collected. However, the upper county would be less useful as a control area because of the

influence from Bellevue and the pending development of the Suncadia (formerly Trend West) resort.

Our data shows that residential property values appreciated within the affected area (where we tabulated 21 sets of paired sales) at significantly higher annual appreciation rates compared with the two control data sets. In fact, property values appreciated across the board. While the pace of appreciation slowed somewhat in 2001, before the announcement, we attribute the apparent slowdown to the impact of the dot.com bust which affected much of Northwest Washington State and the Eastside of Seattle. By 2002 it appeared markets had recovered.

The REPP study showed that in most communities tested, property values increased post installation at the same rate or at faster rates than the control community. Our analysis confirmed this premise at the local Kittitas County level.

Local Land Use Patterns and Attributes Affecting Property Values Analysis

The overall population density in the Project area is low. There are approximately 65 dwellings within one mile of the proposed Project. Many of these are little more than seasonal cabins. However, in the two years the area has been under study, at least two new residences have been built.

As set forth in the Applicant's application materials, a summary of land uses and structures in the area include:

- A commercial gravel quarry on Highway 97 just south of the northern junction with Bettas Road operated by Ellensburg Cement Products;
- An inactive gravel quarry on Bettas Road north of the junction with Hayward Road owned by the Washington Department of Transportation;
- Five sets of BPA electric transmission lines running east to west across the Project area, divided into one group of four near the middle of the Project and one to the north;
- One set of Puget Sound Energy electric transmission lines running east to west across the Project area just north of the southern set of BPA lines;
- Three communication towers;
- Two state highways: Highway 97, running through the middle of the Project area, and Highway 10 south of the Project area;
- Two county roads: Bettas Road, a paved, two lane road near the western edge of the Project area and Hayward Road, an unpaved road toward the south of the Project area;

- Five parcels of land are owned by the Washington Department of Natural Resources, located in T 19 N R 17 E, Sections 2, 10, 16 and 22; and
- Agricultural lands are located south of Highway 10 along the Yakima River. The Project would be located on privately owned land except for the parcels owned by the DNR.

We first noted that the proposed Project will be located in a well established energy transmission corridor. In the 3 mile by 5 mile area where the project is proposed, 170 foot tall transmission towers already dominate the skyline, traversing a wide corridor running from northwest to southeast through the valley. While there are some sites within the wind project affected area that have unobstructed views, the hand of man is very evident and long established. Most of the affected sites already have views of transmission towers.

The exception to this observation is Highway 97 corridor which parallels Bettas Road. Here, some potential homesites will have their views impacted by turbine placement. However, Horizon no longer plans to extend towers as far north as had been originally planned. Further, we found that land sale and subdivision activity in this location continues notwithstanding knowledge that the KV siting procedure is moving forward.

Whereas, two years ago the Henley Group assembled 152 acres at a cost of about \$7,000 per acre (according to County Assessor records) for future homesite development, The Ranch on Swauk Creek, a 620 acre tract, immediately north, has been acquired for over \$9,100 per acre. Meanwhile, the Henley Group resold 30 acres, facing the proposed F and G strings for over \$10,000 per acre, a 45% increase in value per acre realized in just over two years.

The general study area includes central Kittitas County, northwest of the City of Ellensburg. The surrounding landscape is characterized by hills barren of trees and rangeland with some scattered residences. Forest cover exists to the north of the Project but we did not observe any commercial forestry operations taking place in the immediate vicinity of the Project. Aside from tracts which might be best described as suburban sprawl emanating from Ellensburg, one finds more intensive rural settlement further north within wooded areas lying to the northwest toward Cle Elum. Those residences have no views of this transmission corridor, either because of orientation or tree cover.

Ultimately, after creating an inventory of all properties which would have a view of the Project, we found only a handful of sites that might be construed to have unobstructed views that will be impaired when the turbines are constructed. This analysis addresses indirect impacts to properties merely affected within the view shed.

Potential Impacts of the Kittitas Valley Wind Power Project on Property Values for Undeveloped Properties

Many of the sites near the proposed project that might be affected are vacant and undeveloped. Some appear to be used for livestock grazing. We have found that mere orientation of improvements constructed on undeveloped properties can mitigate or improve views. In other words, where property is vacant, future residential development, including home design and orientation, can and will be based upon subjective personal preferences for views. One builder may choose a view which excludes the wind turbines from primary viewpoints in a home, while another builder may choose to orient the home so as to face the turbines.

Another related issue is the availability of access and utilities to some of the now vacant parcels that might someday be improved with homes. Particularly in this location, costs are high to extend electricity, dig domestic wells, create septic systems and build roads suitable for year round access. These costs tend to reduce the likelihood of imminent or near-term development of many of the properties in the vicinity of the project. If a site is selected for home construction, the parcels are large enough (generally 20 to 40 acres or more) to provide a builder great flexibility in siting and orienting the improvements so as to be unaffected by a view of the turbines, if so desired.

Therefore, it is my professional opinion that it cannot be said that future utility of given sites will be adversely affected by the Project.

It should be noted that every property is unique and fixed in place. Many human factors involving personal preferences come in to play when property is purchased, particularly for residential use. And, of all types of property use, residential properties are most sensitive to personal preference. Thus the fact that one party likes shade and another sun does not mean that a particular parcel without trees is worth more or less. We found that some people like the idea of wind turbines, and some do not. However, we did not find that there is empirical support for the claim that wind turbines will adversely affect property values.

Other studies, including a seminal analysis of how a closed lead smelter (and designated EPA Superfund site) affected property values in the Dallas area, suggest that value impacts become negligible outside a two mile radius from the "undesirable" land use. Further, since no contamination or emission concerns are at issue with wind turbines, only potential impacts on the view shed itself can have a value impact. Other studies underscore the relative resiliency of property values to indirect impacts when offsetting amenities or macro-economic factors are present.

Potential Impacts of the Kittitas Valley Wind Power Project on Property Values for Developed Properties

We analyzed appreciation rates extracted from paired sales and multiple listing records reporting the average prices for homes sold. A paired sale is an observation of the sale and re-sale of the same property, over time. So long as there have been no changes in the property during the interim, the difference between the sale prices can be extracted as an indicator of passive appreciation. Ultimately each pair must be analyzed for site specific changes or the circumstances

of the parties involved. However, with a high frequency of transactions, aggregated trends become more reliable.

What was remarkable about the study area was the relative high number of paired sales which were reported since announcement of the Project (12, or nearly 20% of the parcel inventory, a very high rate for a rural area). In virtually every case, robust appreciation rates were indicated. This suggests that the marketability of the sites was unaffected by the proposed Project and that land values were unaffected as indicated by the rates of value appreciation.

We found that paired sales in the area surrounding the KV Project were appreciating at rates well above that of the county in general and the city of Ellensburg. This holds true for the four-year PRE-Announcement period and the 2-year POST-Announcement period with rates above the 10% range in the vicinity of the Project versus rates below 10% in Ellensburg and Lower Kittitas County.

Earlier this year, I interviewed Charles Bugni, the broker for Town and Country Properties in Cle Elum. He reported that as of March, 9 of 12 parcels on Bettas Road, ranging in size from 3 to 20 acres had sold out within a year of subdivision at asking prices with full disclosure of the pending placement of turbines in close proximity to these parcels. He described the rolling hills as windswept treeless and full of sage brush. Lot prices have ranged from \$20,000 up to \$47,000. He anticipated modest site built or modular homes to be located here. As broker, he simply did not think the Project would affect values one way or the other.

Overall we find that the influence of the Seattle-Bellevue area, only 90 minutes to the west, may have much to do with evident demand for homesites in Kittitas County, including the Project vicinity. Second, the local economy is influenced by agricultural activities to the east and the emergence of Central Washington University as a regional center for research and culture. Third, the Kittitas Valley must be recognized as a major power transmission corridor which is why the confluence of access to the power grid coupled with presence of the wind resource makes this an attractive site for wind turbines. Given these factors and considering more general trends in real estate prices, post announcement of the Project, we find no evidence that the Project will adversely affect local property values.

Summary of Property Value Impacts

As indicated above, we would expect that most impacts on property values and sales would occur within two miles of the Project site. However, our analysis extended beyond this area. For both undeveloped and developed properties, the visual landscape of the Project area is dominated by substantial electric transmission corridors. Undeveloped properties tend to be large parcels, which will typically be very costly to develop due to the absence of utilities and services, including electricity. Orientation of future improvements on these properties will mitigate impacts, if any. The Project will have no impact upon property values for undeveloped properties. Developed properties, on the aggregate, have appreciated in value since the announcement of the Project. We find that the Project will have no impact upon the future sales or values of developed properties.

CERTIFICATION OF CONSULTING ENGAGEMENT

I certify that, to the best of my knowledge and belief:

1. The statements of fact contained in this report are true and correct.
2. The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, impartial, and unbiased professional analyses, opinions, and conclusions.
3. I have no present or prospective interest in the property that is the subject of this report, and no personal interest with respect to the parties involved.
4. I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
5. My engagement in this assignment was not contingent upon developing or reporting predetermined results.
6. My compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
7. The reported analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of professional Ethics and Standards of Professional Practice of the Appraisal Institute which include the *Uniform Standards of Professional Appraisal Practice*.
8. I have made a personal inspection of the property that is the subject of this report. No one provided significant consulting assistance to the persons signing this report.
9. The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
10. As of the date of this report, I have completed the continuing education program for the Appraisal Institute.



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Parties Interviewed

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