

1 BEFORE THE STATE OF WASHINGTON  
2 ENERGY FACILITY SITE EVALUATION COUNCIL  
3

4 In the Matter of Application No. 2004-01:  
5 SAGEBRUSH POWER PARTNERS, LLC;  
6 WILD HORSE WIND POWER PROJECT  
7  
8

EXHIBIT 90 (SG-T)

9  
10 **ECONOMIC DEVELOPMENT GROUP OF KITTITAS COUNTY**  
11 **PREFILED DIRECT TESTIMONY**  
12 **WITNESS #1: STEPHEN GROVER**  
13

14  
15 Q Please state your name and business address.

16  
17 A My name is Stephen Grover and my business address is 888 SW 5<sup>th</sup> Avenue, Suite 1460,  
18 Portland, OR 97204

19  
20 Q What is your present occupation, profession; and what are your duties and responsibilities?

21  
22 A I am employed by ECONorthwest as a senior economist and project manager. I have been  
23 employed by ECONorthwest and worked in its Portland, OR office since March 2000.  
24 ECONorthwest is an economics consulting firm that analyzes the economic impacts of various  
25 public policies and programs. We have completed numerous projects and reports related to  
energy, including “Economic Impacts of Wind Power in Kittitas County” that was provided to

1 EFSEC in support of the Kittitas Valley wind project application. We are also currently  
2 working with the State of Washington Office of Community, Trade, and Economic  
3 Development (CTED) to develop a guidebook for rural communities in Washington to estimate  
4 the potential economic impacts of local wind projects.

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6 Q Would you please identify what has been marked for identification as Exhibit 90-1 (SG-1)?

7 A Exhibit 90-1 (SG-1) is a résumé of my educational background, expertise and project  
8 experience.

9  
10 Q Have you completed a study related to the Kittitas Valley Wind Power Project?

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12 A Yes. I have completed a study titled “Economic Impacts of Wind Power in Kittitas County”  
13 for which I was primarily responsible for the analysis and development. It is included with my  
14 testimony as Exhibit 90-2 (SG-2).

15  
16 Q Did you prepare this study, or, if not, did you direct and /or supervise their preparation?

17  
18 A Yes.

19  
20 Q Is the information in this study within your area of authority and /or expertise?

21  
22 A Yes

1 Q Are the contents of this study either based upon your own knowledge, or upon evidence,  
2 such as studies and reports as reasonably prudent persons in your field and expertise are  
3 accustomed to rely in the conduct of their affairs?  
4

5 A Yes.

6  
7 Q To the best of your knowledge, are the contents of this study true?  
8

9 A Yes.  
10

11 Q Do you incorporate the facts and content of this report as part of your testimony?  
12

13 A Yes.  
14

15 Q Are you able to answer questions under cross-examination regarding this report?  
16

17 A Yes  
18

19 Q. Would you please briefly describe your expertise and qualifications?  
20

21 A I have worked in the field of economics and energy for more than 10 years and I currently head  
22 the energy practice area at ECONorthwest. Prior to that I worked at Quantum Consulting in  
23 Berkeley, CA, a firm that specializes in energy efficiency program evaluation. Prior to that I  
24 worked at Battelle Pacific Northwest Laboratories in Richland, WA where I researched a variety  
25 of energy and environmental topics for the U.S. Department of Energy and the Environmental

1 Protection Agency. My expertise is in energy and quantifying the benefits of energy efficiency  
2 improvements and renewable energy technologies. I have testified as an expert in trial in  
3 Oregon and have been retained as an expert on several other matters that settled before trial. I  
4 am also an adjunct professor at Portland State University where I have taught graduate courses  
5 in econometric modeling and forecasting and in energy economics. I hold a Ph.D. in economics  
6 from the University of Wisconsin-Madison.

7  
8 Q Would you please summarize and briefly describe the study you conducted regarding the  
9 potential economic benefits and property value impacts of the proposed wind farm in  
10 Kittitas County.

11  
12 A. The Phoenix Economic Development Group (now known as the Economic Development  
13 Group of Kittitas County) hired ECONorthwest in 2002 to evaluate the potential economic  
14 impacts of constructing and operating the proposed wind plants in Kittitas County. Our  
15 analysis was based on three proposed wind projects with a total of 260 turbines with a  
16 potential generation capacity of 390 megawatts. Specifically, ECONorthwest was asked to  
17 analyze and help quantify impacts in three key areas of interest:

- 18  
19 • **Property Values.** Local residents have voiced concern that constructing numerous wind  
20 turbines in the valley will detract from views and ultimately reduce property values.  
21  
22 • **Economic Impacts.** The wind plants will create jobs and increase spending in the  
23 economy during the construction phase and during plant operations.  
24  
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- 1       • **Tax Revenues.** The increase in jobs and local spending will also increase tax revenues  
2       for Kittitas County.

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4       To research these issues, we utilized several different analysis techniques. We surveyed tax  
5       assessors in other counties with wind projects to determine the potential effects of wind farms on  
6       property values. We also conducted a review of the available academic literature for additional  
7       information on property value effects. Local economic impacts were estimated using an input-  
8       output model based on construction and operations data obtained from the two companies  
9       proposing wind projects in Kittitas County. Tax revenues were estimated from the input-output  
10      model results based on tax rate and spending information obtained from Kittitas County.

11  
12     Q       Can the results of the study you conducted for the Economic Development Group (“EDG  
13       study”) be applied to the Wild Horse project?

14  
15     A       Yes, provided that the study’s results are modified to take into account the differences between  
16       the cumulative three projects covered by the EDG study and the Wild Horse project.

17  
18     Q       Can you briefly summarize the economic benefits for the Wild Horse project that you derived  
19       using the EDG study results?

20  
21     A       The Wild Horse project is in the same county but with about half the turbines (136) as the  
22       three proposed projects combined. Also, Puget Sound Energy would own the private land  
23       where most of the turbines will be located so there will be no annual rental payments to  
24       private land owners for these turbines. In addition, 34 of the 136 turbines will be located on  
25       public DNR land. For those turbines located on public land, an annual fee will be paid to

1 the State, which then returns these funds to schools throughout the state based on district  
2 need.

3  
4 Incorporating these differences between the two projects, I have used the EDG study results  
5 to estimate the potential economic benefits for the Wild Horse project:

- 6  
7 • *Views of wind turbines will not negatively impact property values.* Based on a  
8 nation-wide survey conducted of tax assessors in other areas with wind power  
9 projects, we found no evidence supporting the claim that views of wind farms  
10 decrease property values. As an upper limit on the potential impact of wind  
11 turbines on property values, we also conducted a literature review of the impacts  
12 of transmission wires, as there is a much more consistent negative perception of  
13 transmission lines than with wind turbines. The literature indicates that the  
14 negative effect on home values due to transmission lines is 10 percent or less,  
15 with this impact diminishing over time. Any impact from views of wind turbines  
16 would certainly be lower as not all residents perceive wind turbines as  
17 unattractive. As mentioned above, there is no evidence that views of wind  
18 turbines have any negative impact on property values, either for the Kittitas  
19 Valley or Wild Horse projects.
- 20  
21 • *Wind plant construction will have significant economic benefits.* For the Kittitas  
22 Valley project, the construction of 260 turbines will create approximately 185 full  
23 and part time jobs in Kittitas County and will increase total income to the county  
24 by over \$12 million during the construction period. For the Wild Horse project,  
25 construction benefits will be roughly 48 percent of the total estimated for all three

1 projects in the EDG study combined due to the project size (136 turbines for Wild  
2 Horse relative to 260 for all three proposed projects). Taking the difference in  
3 project size into account, construction of the Wild Horse project will create  
4 approximately 96 full and part time jobs in Kittitas County and will increase total  
5 income within the county by approximately \$6.5 million during the construction  
6 period.

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- 8 • *Wind plant operation will provide additional annual economic benefits.* For all  
9 three projects in Kittitas County, it was estimated that the wind farm operations  
10 will require 53 additional jobs and will increase income to the county from  
11 salaries and operations expenses by over \$4 million annually. Since the Wild  
12 Horse project is about half the total estimated in the EDG study, and there are no  
13 annual rents to private landowners, operations impacts are reduced by more than  
14 50 percent. Taking these adjustments into account, during the operations phase  
15 the Wild Horse project will create 26 additional jobs and increase income to the  
16 county by about \$1.7 million annually.
  - 17
  - 18 • *The wind project will produce significant tax benefits for both Kittitas County and*  
19 *the State of Washington.* I have reviewed analysis done by Puget Sound Energy  
20 for this project and am incorporating some of these results into my testimony. For  
21 the Wild Horse project, annual property tax payments to the county are estimated  
22 to be about \$1.9 million annually. Approximately \$857,000 of the \$1.9 million  
23 would go to the Kittitas School District annually. Similarly, about \$523,000  
24 would go to state schools each year and \$189,000 annually would go to the  
25 Kittitas County general fund.

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In addition to property taxes, the Wild Horse project turbines located on DNR lands are expected to produce payments of approximately \$9.4 million to the State of Washington over the expected 25-year life of this project. These payments have historically been allocated by the State to school districts throughout the state based on need. The turbines located on DNR lands are also expected to produce \$1.1 million in excise tax payments over the 25-year project life, and these funds will go to the local taxing jurisdictions within Kittitas County. It is possible that an additional 9 turbines will be located on DFW lands, which would increase the rental payments to the State by 26 percent.