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TCC
Pre-Filed Testimony
Rich Simon
EXH-5503_R

BEFORE THE STATE OF WASHINGTON
ENERGY FACILITY SITING EVALUATION COUNCIL

In the Matter of the Application of: Scout Clean Energy, LLC, for Horse Heaven Wind Farm, LLC, Applicant.	DOCKET NO. EF-210011 RICH SIMON REBUTTAL
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I am a witness in these proceedings for Tri-Cities C.A.R.E.S. (TCC) and submitted the following testimony:

- EXH-5500_T, Witness Statement and Exhibit List
- EXH-5501_T, Testimony
- EXH-5502_T, *Curriculum Vitae*

In applicant's EXH-1031_R, Greg Poulos, my former partner at V-Bar Consulting, makes several allegations regarding data used in my testimony. The information below refutes Mr. Poulos' allegations and unfounded accusations.

Page	Lines	Summary of Poulos testimony	Simon response
3	8-11	Poulos is very familiar with Horse Heaven, having sited the original met towers in 2007 and "subsequently after leaving Clipper Windpower doing reports for a technical consulting	V-Bar, LLC is a company that I founded. Poulos started working at V-Bar in May 2009. Prior to that time, I was the lead author on the projects. My name appears on all Columbia (Horse Heaven) technical reports submitted to Clipper. Poulos also did not mention that he and I were managing partners of V-Bar, LLC.

1		firm named V-Bar through 2012.”	
2	3	11-13	“the project was revived in 2016 by Scout...for whom I...have done technical consulting since that time.”
3			Those original wind data from 2007-2010 were collected by Clipper, who manufactured, sold and operated wind turbines, as well as having a project development arm. Clipper turbines did not perform well, and the company was sold to United Technologies in 2010 and then resold in 2012 to a successor company called Platinum Equities.
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5	5	12-19	Mr. Poulos states wind farm net capacity factors are generally or can be economical at a minimum 25%, with few exceptions.
6			Wind farms today generally have net capacity factors of 35-50%, so the threshold of 25% would only apply in extenuating circumstances. On lines 15-19 he lists various inputs to determine economic feasibility, including unspecified “other factors.” Three such other factors pertinent to Horse Heaven are competing wind projects, matching the transmission system, and the risks of “putting all one’s eggs in one big basket” wind farm.
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8	7	10-12	Mr. Poulos comments on my testimony that it would be unprecedented for permitting agencies to issue open-ended permits for a wind farm.
9			My testimony was clear that final permits (with approval to start construction) are ultimately granted for a specific turbine array plan.
10			
11	7	13-14	Mr. Poulos notes FAA has authorized a variety of wind turbine positions within a given project envelope.
12			His statement is correct, as FAA is concerned only with positions and maximum heights of the turbines. However, he fails to mention that FAA authorization alone is only one part of the permitting process.
13			
14	7	19-25	Mr. Poulos states that “a final decision regarding the purchase of wind turbines...depends on getting EFSEC approval.”
15			This language seems contradictory to his statement on lines 10-12 discussed above, wherein he states that open-ended permits can be granted.
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17	8	1-9	Poulos notes the project is “consistent with a trend towards larger wind farms..., and he points to the Shepards (sic) Flat wind farm
18			The Shepherds Flat project differs substantially from Horse Heaven in that (1) there is no population center near it, and (2) the turbines are not located along or adjacent to a single, topographically pronounced ridgeline. The visual
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		in Oregon as an example. He then points to other large wind farms being considered.	impact of Horse Heaven would dwarf that of Shepherds Flat.
8	10-13	Mr. Poulos notes that Altamont Pass in California overlooks the city of Livermore.	There are at most 15-20 wind turbines visible from the city of Livermore. I was physically present to observe this in April 2023.
8	13-16	Mr. Poulos notes that hundreds of wind turbines are located in San Geronio Pass, California, with a combined population of nearly 500,000 people near Palm Springs and North Palm Springs.	First, the population of the entire Coachella Valley is close to 500,000 persons, but the combined population of the two cities he mentions are only about 100,000. The vast majority of people in the Coachella Valley live in flat terrain and far from the wind farms. The flat terrain also means that most residents will not have a view of the wind farms, since adjacent buildings and vegetation restrict horizontal visibility distance. Also, there are tall mountains near the wind farms (exceeding 5000-ft elevation in all directions except southeast, two exceeding 10,000 ft elevation), which further minimizes the visual impact of the much smaller wind turbines, which then blend into the mountain scenery. According to the US Wind Turbine Data Base web site, the entire installed capacity at San Geronio Pass is 682 MW (across 27 projects), which is smaller than the proposed Horse Heaven wind farm. Finally, due to the unusual nature of winds in California, there are very few locations where wind turbines can be economically sited, whereas Washington has much more suitable land area.
9	5-8	Poulos concurs with my statement that the escarpment is a high wind resource location within the project footprint.	The question here is how much higher the wind resource would be; without the full data set I will estimate that it won't be more than 20% windier than sites southwest of the escarpment. And those upwind turbines will cause wake losses along the escarpment, which would reduce the premium of its wind resource.

1	9	9-14	Poulos comments that my projection of lower energy for Horse Heaven should not be compared to wind farms located in Montana and Wyoming, and that I neglect to mention costs for long-distance transmission.	My understanding is that Montana winds are currently a higher priority for Pacific Northwest Investor Owned Utilities than central Washington for adding to their energy portfolio. Presumably these utilities are considering all associated project development costs, including transmission.
2	9	14-20	Poulos notes many wind farms in Washington and Oregon have similar or lower capacity factors than Horse Heaven.	He does not mention that many of those wind farms are at least 10 years old and use much less efficient wind turbines. Also, he has not noted that energy prices have varied such that lower wind sites could have been economic in the past but perhaps less so today.
3	9	19-24	Poulos notes that wind farm economics are proprietary.	To some extent this is true, but it is my understanding that consideration of economics for new renewable energy projects is part of the formal regulatory review process; thus a new windfarm should demonstrate a "reasonable cost."
4	9-10	25-9	He notes my comments about grid availability, and states that this has been addressed by Scout.	My comments were based on my understanding of various studies that have been done, including by BPA. To the extent that all internally produced energy cannot be delivered into the grid, this downgrades the annual energy potential of an energy facility.
5	10	10-13	Poulos states that concerning Nine Canyon, it is not unusual for new wind farms to impact existing ones.	My comment was that, as part of the economic benefit review process, incremental wakes on Nine Canyon would seem an integral part of evaluating the overall benefit of Horse Heaven, and I merely asked if the wakes had been modeled. The Horse Heaven wind turbine filing with the FAA shows one proposed Horse Heaven turbine less than a mile upwind (to the southwest) of a Nine Canyon turbine, which would cause a significant wake loss.
6	10-11	23-3	Mr. Poulos comments that many people prefer wind turbines over smokestacks, followed by some political	It is not clear why someone whose expertise is in wind resource assessment should be offering these kinds of opinions. As I understand it, the issue at Horse Heaven is

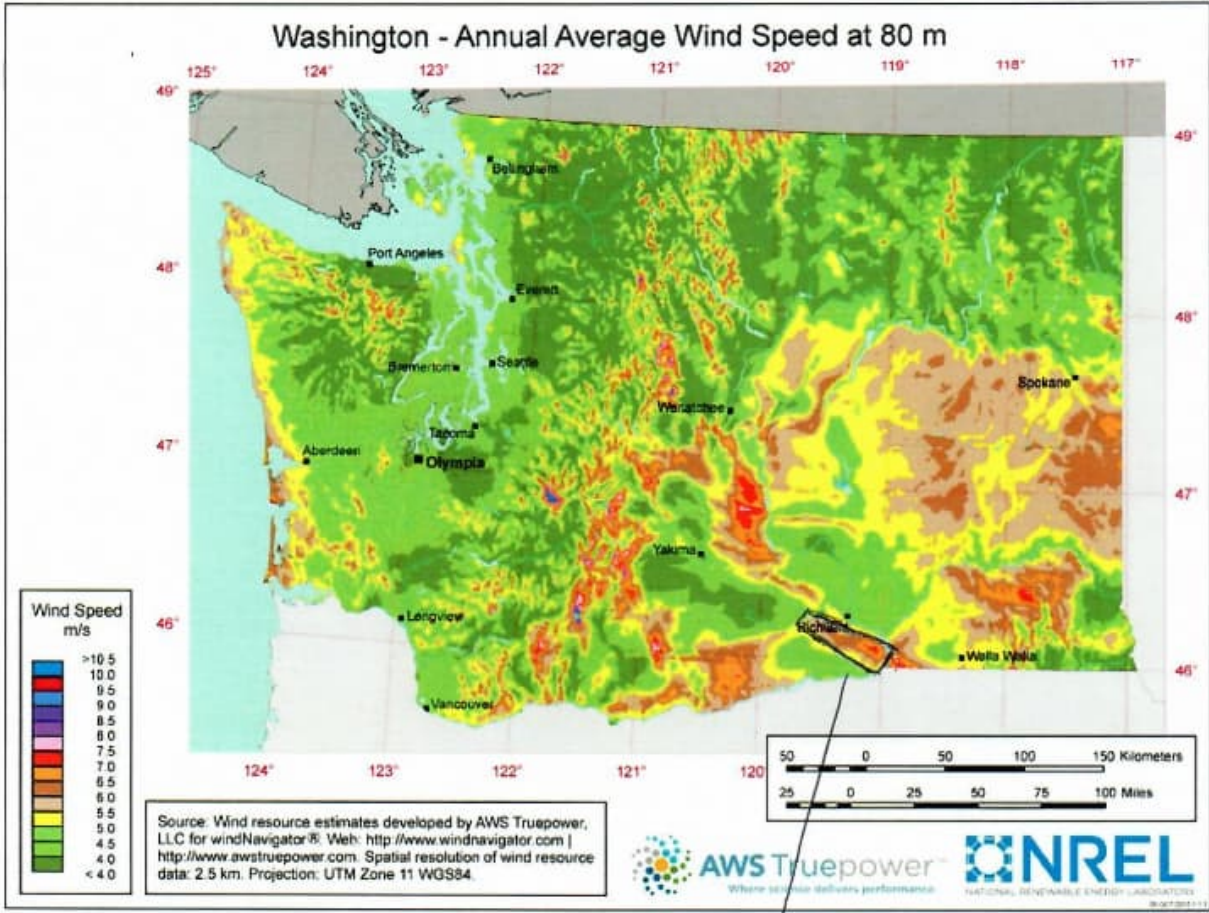
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		rhetoric extolling the virtues of wind farms as signs of progress and helping make the world a better place.	not that it is a renewable energy project per se, but its specific impacts on the community. Finally, given the choice of hundreds of wind turbines on a ridge or a few smokestacks, I suspect wind turbines would not be the choice.
11	4-15	He affirms that there will always be visual impacts, then compares Nine Canyon to Horse Heaven.	Nine Canyon turbines are smaller, with only a few of them standing atop the high ridgeline/escarpment in question. Further, Nine Canyon encompasses only a five-mile length (versus Horse Heaven's 25 miles) and its turbines are south of the easternmost part of the Tri Cities—thus with substantially less visual impact than Horse Heaven.
11	15-19	Poulos states that a "sole focus on visual impacts seems undue..."	This is factually incorrect and appears to be merely his personal opinion For something 25 miles long with a high visual impact, EFSEC would presumably consider that significant.
11	19-20	Poulos thinks EFSEC should not be considering economic viability.	How does that opinion set with the stated guidelines for reasonably priced economics? EFSEC guidelines under the statute call for consideration of whether a project produces "abundant power at reasonable cost."
12	4-10	Mr. Poulos restates that the best resource is along the escarpment, which is therefore the "heart of the project."	I addressed this comment above. I am not aware that Mr. Poulos has thoroughly considered wake losses from upstream turbines.
12	16-26	Further comments on Apostol's desire to reduce the turbine count and especially those on the escarpment.	I also addressed this comment above.
13 And 13- 14	9-13 13/24 14/5	The wind turbine array is optimized.	Per his own testimony, the array plan is only conceptual at this point, and there is no final array plan. And one must define "optimization," as that term can have several meanings. What is being optimized, and could a smaller project still maintain strong economics?

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14	8-11	Poulos says Sharp should not have revealed the met tower locations or data.	I know, as Mr. Sharp informed me, that he drove on public roads to identify the general locations of the current met towers, from which their exact positions were subsequently determined from Google Earth aerial imagery.
14	19-20	Horse Heaven meets the goal of generating clean energy.	Yes, but there are multiple goals and regulations to consider, not just simply that it is clean energy.
14-15	21-7	Poulos provides various justifications for Horse Heaven as economic.	Normally wind farms have to be more than just "economic." Regulators look at a multitude of attributes, pro and con in their balancing analysis.
15	8-16	Poulos notes that Sharp states very cold days are generally calm, based on Poulos's examination of the wind data.	The only way to confirm this is by having access to the data, such that one can independently evaluate Poulos's assertion.
17	1-15	Poulos critiques Sharp's concerns about fires and other matters.	I understand that there have been some significant fires on the northeast side of the long escarpment being proposed by Scout for wind turbines. By analogy, the US Forest Service has long been wary of placing wind turbines along ridges, because those ridges are key locations for staging firefighting operations, including air tankers..

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Horse Heaven